

Morris, John R.

From: Chuck Jett [cjett@scpw.org]
Sent: Monday, November 29, 2004 3:29 AM
To: Morris, John R.
Cc: Petro, Stephanie; Pelz, Susan; Morgan, Steve; jmillar@pbsj.com; 'Miriam Zimms'; envirosvcs4you@aol.com; 'Jose Rivera'
Subject: Landfill gas monitoring report

Hi John-

Thank you for this deatailed response and clarification. We really appreciate it.

I wanted to let you know on behalf ot Sumter County that Air Spec Inc. will be performing the analysis listed below in your Email. Should exceedances occur, the County will make sure that all documents are sealed by a P.E.

Once again, thank you.

Chuck

Chuck Jett
Solid Waste Superintendent
Sumter County Solid Waste
cjett@scpw.org
(352) 793-3368 phone
(352) 568-0166 fax

DISCLAIMER: The information transmitted is intended only for the person or entity to which it is addressed and may contain confidential, proprietary, and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited. If you received this in error, please contact the sender and delete the material from all computers.
[References: Florida State Constitution I.24 and Florida State Statutes Chapter 119]

11/29/2004

Morris, John R.

From: Morris, John R.
Sent: Monday, November 22, 2004 1:40 PM
To: 'Jose Rivera'
Cc: Petro, Stephanie; Miriam Zimms; Chuck Jett (E-mail); Joe Miller (E-mail); Pelz, Susan; Morgan, Steve
Subject: RE: Landfill Gas Monitoring Report

Jose:

I agree with your summary of our telephone conversation regarding the annual gas monitoring report (due to be submitted annually by December 15 of each year). In the case of the Sumter County Closed Class I Landfill, routine gas monitoring is required by Specific Condition #10 of permit #22926-003-SF at an annual frequency and the results of routine gas monitoring events are NOT required to be signed and sealed by a P.E.

Please note that the gas monitoring locations to be included in the report due by December 15, 2004 follow:

- Specific Condition #10.a. -- new gas probes GP-1 through GP-4
- Specific Condition #10.b. -- existing gas probes M-1 through M-29
- Specific Condition #10.c. -- ambient gas monitoring locations in buildings/offices

Please note that Specific Condition #10.d. requires monitoring of the existing gas vents (installed in the final cover of the closed landfill phases) in the report of the annual gas monitoring event that is due to be submitted by December 15, 2008. While not required for the upcoming annual gas monitoring event, the County may wish to include the gas vents to provide additional information regarding the biological activity within the closed landfill phases.

Please also note that if landfill gas concentrations exceed the limits listed in Specific Condition #11 a landfill gas remediation plan needs to be submitted. In the event that a gas remediation plan must be prepared, it DOES need to be signed and sealed by a P.E.

Your assistance to the County in maintaining compliance with their permit conditions is appreciated. Please contact me if you have questions about this message.

John

John R. Morris, P.G.
Solid Waste Section, Southwest District Office
Telephone: 813-744-6100, ext. 336 (suncom 512-1042, ext. 336)
Facsimile: 813-744-6125
E-mail: john.r.morris@dep.state.fl.us

-----Original Message-----

From: Jose Rivera [mailto:jrivera@kesconsult.com]
Sent: Monday, November 22, 2004 10:00 AM
To: Morris, John R.
Cc: Petro, Stephanie; Miriam Zimms; Chuck Jett (E-mail); Joe Miller (E-mail)
Subject: Landfill Gas Monitoring Report

Hi John,

Thank you for your help in clarifying certain aspects of the Long-Term Care Permit conditions related to the annual gas monitoring report at the closed Sumter County Landfill. From our discussions on Friday November 19th, I understand that there is no need for a P.E. signature or certification to submit the annual gas monitoring report, in reference to specific condition 10 of the Sumter County closed landfill long-term permit.

Please let me know if I have misunderstood this condition. Kessler Consulting, Inc. looks forward to helping Sumter

11/22/2004

- County maintain compliance with their permit conditions. Thank you for your assistance. Any questions or concerns, please contact Miriam Zimms or myself at (813) 971-8333.

Jose A. Rivera
Kessler Consulting, Inc.
email: jrivera@kesconsult.com
www.kesconsult.com
(813) 971-8333, x16

Celebrating 16 Years of Quality Service
EPA WasteWise Small Business Program Champion

Sum Gen 0607 Permits

LTC permit

Pelz, Susan

From: Miriam Zimms [mzimms@kesconsult.com]
Sent: Tuesday, October 26, 2004 1:22 PM
To: Pelz, Susan
Cc: Jose Rivera; Petro, Stephanie; Rick Potts (E-mail); Bernard Dew (E-mail); Chuck Jett (E-mail); john.morris@dep.state.fl.us; Mitch Kessler
Subject: NOTICE: Sumter County Closed Landfill - New well construction

Hi Susan:

Please see the notification from The Colinas Group below regarding the test drilling and well installation for Sumter County. [Miriam Zimms] Kessler Consulting, Inc. (KCI) would like to notify you that the installation of the three new wells included in the PCAP will take place on November 15-17, 2004. We are complying with Exhibit B, item 9 on the Model Consent Order. Please let me know if you need further details.

Regards,

Miriam Zimms
Kessler Consulting, Inc.
www.kesconsult.com
(813) 971-8333

Celebrating 16 Years of Quality Service
EPA WasteWise Small Business Program Champion

Sum Gen 0607 Permits

-----Original Message-----

From: rick potts [mailto:rickpotts@cfl.rr.com]
Sent: Monday, October 25, 2004 3:28 PM
To: Miriam Zimms
Cc: Jose Rivera; Chuck Jett
Subject: Sumter County Landfill - New well construction

Pre-construction test drilling and installation of the three (3) new wells called for in the PCAP is scheduled for November 15 -17, 2004 at the Sumter County Landfill. We will be onsite at 0900 hrs. on Monday, November 15 to begin.

If you have any questions, please let me know.

Richard L. Potts, Jr. P.G.
THE COLINAS GROUP, INC.
509 N. Virginia Avenue
Winter Park, Florida 32789
Voice: (407) 622-8176
Fax: (407) 622-8196
Cell: (407) 620-5779

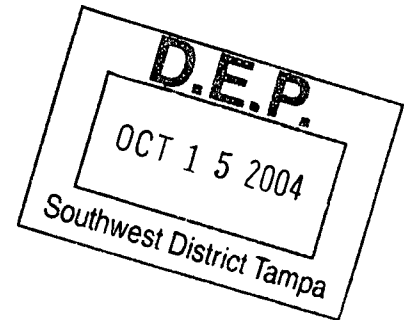
1/31/2005



An employee-owned company

October 14, 2004

Stephanie Petro, Environmental Coordinator
Southwest District
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619



RE: Sumter County Closed Class I Landfill
Long-Term Care Permit No. 22926-003-SF

Dear Ms. Petro:

On Friday October 1, 2004, PBS&J monitored the installation of the four-landfill gas migration monitoring probes GP-1 through GP-4 required by Specific Condition 10a of the above referenced Landfill Long-term Care Permit. ATI-Drilling, Inc. installed the gas probes, and a copy of their well completion report are included with this letter. Figure 1 also included with this letter shows the locations of the four gas monitoring probes.

On Friday October 8, 2004, PBS&J returned to the landfill and using a Gas Analyzer and Extraction Monitor GEM 2000 checked the combustible gas concentrations in each of the four probes. No combustible gas was detected in GP-1, GP-2, GP-3 or GP-4.

If you have any questions, please call me at 407-647-7275 Ext. 4153.

Sincerely,

Chuck Jett, Sumter County
Miriam Zimms, Kessler Consulting Inc.

U:\OldG\WASTEMAN\SUMTER\Repair Plan\Oct 14, 2004 ltr to FDEP.doc

ATI-DRILLING, INC.
A SUBSIDIARY OF AMBIENT TECHNOLOGIES, INC.



An Earth of Experience

October 4, 2004

Mr. Joe Miller
PBS&J
482 South Keller Rd.
Orlando, FL 32810-6101

Dear Mr. Miller,

Enclosed is a copy(s) of the required permitting documents for noted site.

Site: Sumter County Landfill, CR-529, Bushnell, FL
Date: 10/1/04
ATI project #20417106

Please note the enclosed postage paid ATI quality control card, we would appreciate any feedback and or comments concerning the completed project.

Please contact me at (813) 620-1778 if you have any questions or comments.

Sincerely,

ATI Drilling, Inc.

Jamie Ray
Office Manager

WELL COMPLETION REPORT (Please complete in black ink or type.)

PERMIT # 707578 CUP/WUP # _____ DID # _____

If permit is for multiple wells, indicate the number of wells drilled 4

Indicate remaining wells to be cancelled 0

WATER WELL CONTRACTOR'S

SIGNATURE Digitally Signed License # 9232

I certify that the information provided in this report is accurate and true.

Grout	No. of Bags	From (Ft.)	To (Ft.)
Neat Cement:	0.85	0	5
Bentonite:			

WELL LOCATION: County Sumter

4 1/4 of 4 1/4 of Section 15 Twp: 20 Rge: 22

Latitude _____ Longitude _____

DATE STAMP
Official Use Only

Sketch of well location on property N
A

Give distances from septic tank and house or other reference points

CHEMICAL ANALYSIS WHEN REQUIRED

Iron: _____ ppm Sulfate: _____ ppm

Chlorides: _____ ppm

☐ Lab Test ☐ Field Test Kit

Pump Type

☐ Centrifugal ☐ Jet ☐ Submersible ☐ Turbine

Horsepower _____ Capacity _____ G.P.M. _____

Pump Depth _____ Ft. Intake Depth _____ Ft.

Form 4T.TD-410(2) Rev. 8/96

OWNER'S NAME Sumter County

COMPLETION DATE 10/01/2004 Florida Unique I.D. _____

WELL USE: DEP/Public: _____ Irrigation _____ Domestic _____

Monitor ☒ HRS Limited _____ 62-524 _____ Other _____

DRILL METHOD ☐ Rotary ☐ Cable Tool ☐ Combination

☐ Jet ☒ Auger Other _____

Measured Static Water Level <u>18</u>		Measured Pumping Water Level _____	
After _____ Hours at _____ G.P.M. Measuring Pt. (Describe): _____			
Which is _____ Ft. <input type="checkbox"/> Above <input type="checkbox"/> Below Land Surface			
Casing: <input type="checkbox"/> Black Steel <input type="checkbox"/> Galv. <input checked="" type="checkbox"/> PVC Other _____			
<input type="checkbox"/> Open Hole	Depth (Ft.)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities, depth to producing zones. Color Grain Size Type of Material
<input checked="" type="checkbox"/> Screen	From	To	
Casing Diameter & Depth (Ft.)			
Diameter <u>2</u>	0	6	Tan Fine Sand
From <u>0</u>	6	11	Brown Sand
To <u>5</u>	11	25	Tan Silty Sand
Screen			
Diameter <u>1</u>			
From <u>5</u>			
To <u>25</u>			
Liner <input type="checkbox"/> or Casing <input type="checkbox"/>			
Diameter _____			
From _____			
To _____			

Driller's Name: (print or type) Mark Murray



STATE OF FLORIDA PERMIT APPLICATION TO CONSTRUCT,
REPAIR, MODIFY, OR ABANDON A WELL

- ☒ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☐ Suwannee River

THIS FORM MUST BE FILLED OUT COMPLETELY.

The water well contractor is responsible for completing this form and forwarding the permit to the appropriate delegated county where applicable.

CHECK BOX FOR APPROPRIATE DISTRICT. ADDRESS ON BACK OF PERMIT FORM.

Permit No. **707578.04**
Florida Unique I.D. _____
Permit Stipulations Required (See attached)
23 & 39
62-524 well ☐
CUPW Application No. _____
WUP _____
ABOVE THIS LINE FOR OFFICIAL USE ONLY

Fold at this line in order that address is visible through envelope window

1. **Sumter County** **209 N. Florida St.** **Bushnell** **FL** **33513**
Owner, Legal Name of Entity if Corporation Address City State Zip Telephone Number

2. **825 CR-529**
Well Location — Address, Road Name or Number, City

3. **Patrick Thomsen** **9232** **8136201778**
Well Drilling Contractor License No. Telephone No.
6501 E. Broadway Ave. 4. **4** 1/4 of **4** 1/4 of Section **15**
Address (smallest) (biggest) (Indicate Well on Chart)
Tampa **FL** **33819** 5. Township **20** Range **22**
City State Zip

6. **Sumter** _____
County Subdivision Name Lot Block Unit

7. Number of proposed wells **4** Well Use: **OBSERVATION OR MONITOR WELL**
Distance from septic system **1000** ft. Description of facility **landfill**
Estimated start of construction date **10/01/2004**

8. Application for: ☒ New Construction ☐ Repair/Modify ☐ Abandonment (Reason for Abandonment) _____
Date Stamp

9. Estimated Well Depth **25** Casing Depth _____ Screen Interval from _____ to _____
Casing Material: **PVC** Casing Diameter **1** Seal Material _____

10. If applicable: Proposed From _____ to _____ Seal Material _____
Grouting Interval From _____ to _____ Seal Material _____
From _____ to _____ Seal Material _____

11. Telescope Casing _____ or Liner _____ (check one) Diameter _____
Casing Material _____

12. Method of Construction: _____ Rotary _____ Cable Tool _____ Combination _____
☒ Auger _____ Other (specify): _____

13. Indicate total No. of wells on site **0** List number of unused wells on site **0**

14. Is this well or any other well or water withdrawal on the owner's contiguous property covered under a Consumptive/Water Use Permit (CUP/WUP) or CUP/WUP Application? ☒ No ☐ Yes
(If yes, complete the following) CUP/WUP No. _____
District well I.D. No. _____
Latitude _____ Longitude _____
Data obtained from GPS _____ or map _____ or survey _____ (map datum NAD 83 _____)

15. I hereby certify that I will comply with the applicable rules of Title 40, Florida Administrative Code, and that a water use permit or artificial recharge permit, if needed, has been or will be obtained prior to commencement of well construction. I further certify that all information provided on this application is accurate and that I will obtain necessary approval from other federal, state, or local governments, if applicable. I agree to provide a well completion report to the District within 30 days after drilling or the permit expiration, whichever occurs first.

I certify that I am the owner of the property, that the information provided is accurate, and that I am aware of my responsibilities under Chapter 373, Florida Statutes, to maintain or properly abandon this well; or, I certify that I am the agent for the owner, that the information provided is accurate, and that I have informed the owner of his responsibilities as stated above. Owner consents to personnel of the WMD or a representative access to the well site.

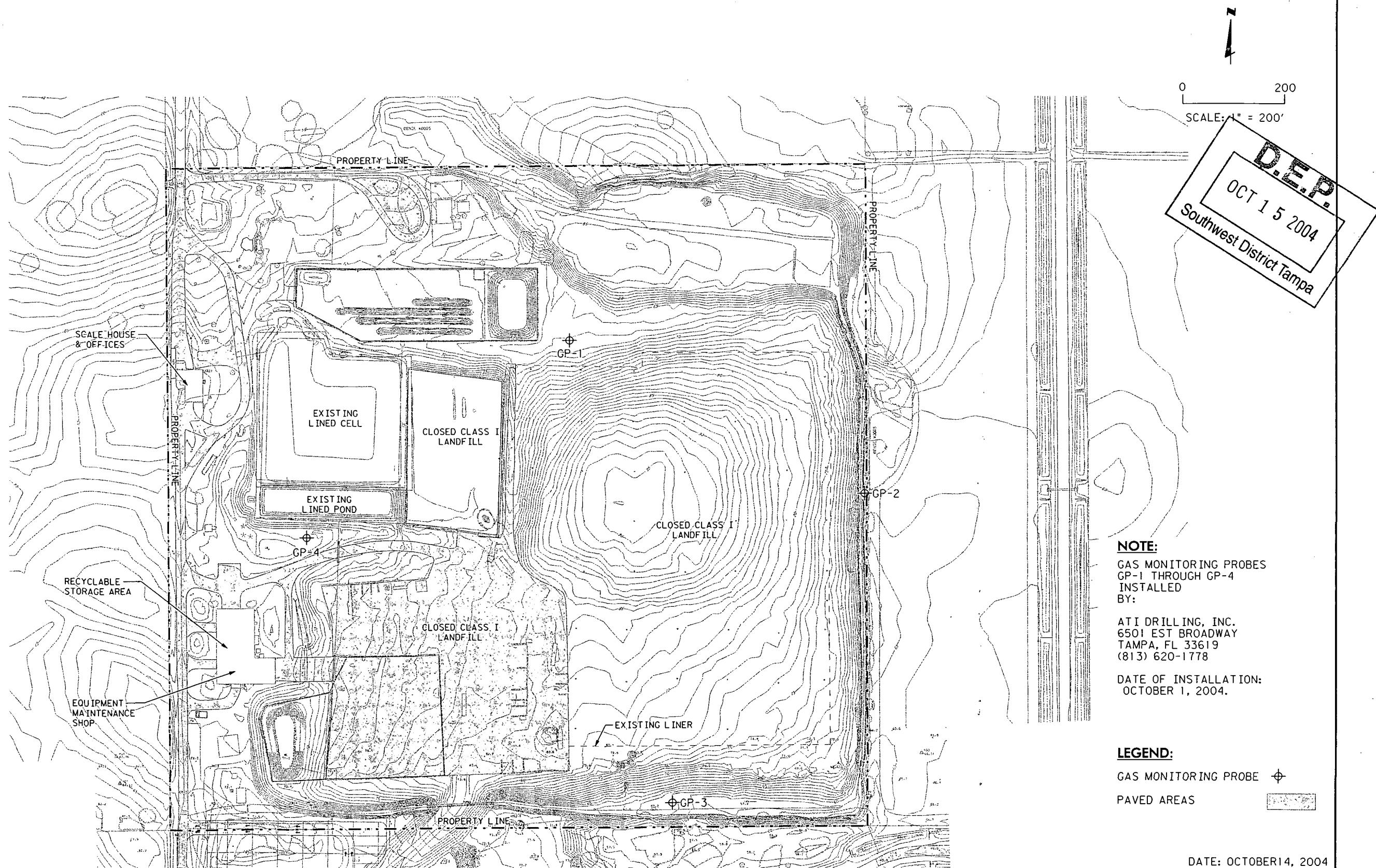
Digitally Signed **9232** Digitally Signed _____
Signature of Contractor License No. Owner's or Agent's Signature Date

DO NOT WRITE BELOW THIS LINE — FOR OFFICIAL USE ONLY

Approval Granted By: **Shirley E. Evers** Issue Date: **09-30-04** Hydrologist Approval _____
Owner Number: **218448** Fee Received: \$ **50.00** Receipt No.: **569080** Check No.: _____

THIS PERMIT NOT VALID UNTIL PROPERLY SIGNED BY AN AUTHORIZED OFFICER OR REPRESENTATIVE OF THE WMD. IT SHALL BE AVAILABLE AT THE WELL SITE DURING ALL DRILLING OPERATIONS. **This permit is valid for 90 days from date of issue.**

U:\OLD\SVEN\CADD\WASTEMAN\SUMTER\CON\F-CAP-REPAIR\SC\F_GAS-PROBE-FIG.1.DGN



SUMTER COUNTY
BOARD OF COUNTY COMMISSIONERS

SOLID WASTE FACILITY
GAS MONITORING PROBE LOCATIONS (GP-1 TO GP-4)

FIG. 1

Morris, John R.

From: Morris, John R.
Sent: Wednesday, August 18, 2004 9:47 AM
To: Petro, Stephanie
Cc: Pelz, Susan
Subject: Telecoms with Rick Potts -- Sumter County Landfill, New Monitor Well Installation

8/11/04

I returned a call to Rick Potts (The Colinas Group @407-622-8176) @ 1610 to discuss the installation of the new monitor wells at the Sumter County closed Class I landfill. We discussed the following:

- R.P. reviewed the County's files at the landfill and found them to be very incomplete regarding technical information regarding the existing monitoring plan with little supporting information available (site plans, boring logs, well construction details)
- new wells required by the Consent Order/preliminary CAP document were to be located in the vicinity of MW-2 and MW-4
- new wells required by the new long-term care permit were to be located closer to the edge of the landfill (detection wells to be within 50 feet of the landfill edge) in the vicinity of MW-1, MW-7 and MW-9
- I informed R.P. that the information provided in the response to comments regarding the PCAP document that were received 8/2/04 was not sufficient to allow the Department to approve the PCAP; additional information was required regarding the locations, identification numbers and construction details/justification of construction details for the proposed wells; specifically needed to understand the rationale to be used to develop proposed well locations to address the potential impacts from the septic tank drain fields in the vicinity of well MW-4

8/17/04

I returned a call to R.P. W 1010 to discuss the installation of the new wells required by the long-term care permit. We discussed the following:

- New wells MW-9A, MW-10 and MW-11 may be installed tomorrow (8/18/04), he is trying to confirm the schedule with the driller
- R.P. asked about the construction details of the new wells; I referred him to the long-term care permit to discuss the locations shown on the site map attached to the permit and oriented him to the locations of the wells relative to the edge of the landfill phases; I indicated that R.P. needed to observe the facility to determine where the edge of disposal had occurred to allow him to select appropriate well locations and that the new detection wells were intended to meet the rule requirement of being within 50 feet of the edge of the landfill phase
- I confirmed with R.P. that wells MW-9A, MW-10 and MW-11 were required to be installed within 60 days of permit issuance (by 8/27/04) as indicated in Specific Condition #15 of permit #22926-003-SF.
- I referred R.P. to the detail provided in Specific Condition #15 that referenced the construction details provided by Central Testing Laboratory as part of the permit renewal submittals
- R.P. asked if I could fax the information regarding well construction details to him at 407-622-8196
- I faxed to R.P. 11 pages from the supporting information for the permit renewal that presented the proposed changes to the monitoring plan and the justification for the construction details of wells MW-9A, MW-10 and MW-11

8/18/04

R.P. called at 0835 and we discussed the following:

- R.P. confirmed that drilling was intended to start today and would likely take 2 or 3 days to complete for the installation of new wells MW-9A, MW-10 and MW-11; he confirmed that he received the faxed materials regarding the proposed construction details
- R.P. asked if it was acceptable to construct the wells with 15 feet of screen (instead of 10 feet) with the bottom of the wells set 2 feet deeper (at about +36 feet NGVD) to allow for additional water column during dry season conditions; I indicated that I had no objection to the proposed changes
- R.P. indicated that two items were required to be submitted to DEP by 8/20/04 regarding the PCAP; the Quality Assurance information regarding the analytical laboratory was included in the submittal that was received 8/2/04, did he need to resend it? I asked if there was any additional information that he intended to submit regarding the laboratory, R.P. indicated no, and I indicated that we would not need a duplicate submittal and would refer to the submittal received 8/2/04; R.P. indicated that the supplemental construction details and locations for the new monitor wells in the vicinity of wells MW-2 and MW-4 would be sent via FedEx to Stephanie Petro for delivery by 8/20/04; I indicated that the Department would review the submittal received 8/2/04 and the supplemental information to be received on 8/20/04 together.

John R. Morris, P.G.

Solid Waste Section, Southwest District Office

Telephone: 813-744-6100, ext. 336 (suncom 512-1042, ext. 336)

Facsimile: 813-744-6125

E-mail: john.r.morris@dep.state.fl.us



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
3804 COCONUT PALM DRIVE
TAMPA, FL 33619-1352**

FAXED

FAX

Date: 8/17/04
Number of pages including cover sheet: 11

TO:	FROM:
<u>RICK POTTS</u>	<u>JOHN MORRIS</u>
PHONE:	PHONE: (813) 744-6100, EXT. 336
FAX #: <u>407-622-8196</u>	FAX #: (813) 744-6125
CC:	
REMARKS:	<input checked="" type="checkbox"/> Urgent <input checked="" type="checkbox"/> For your review <input type="checkbox"/> Reply ASAP <input type="checkbox"/> Please comment
<u>RICK -</u>	
<u>HERE ARE SOME PAGES I EXCLUDED FROM THE PERMIT RENEWAL DOCUMENTS THAT</u>	
<u>SUMMARIZED THE PROPOSED CHANGES TO THE MONITORING PLAN AT SUMTER COUNTY LANDFILL.</u>	
<u>WELLS MW-9A, MW-10 & MW-11 WERE PROPOSED W/ 10 FEET OF SCREEN,</u>	
<u>HEAD SET AT ELEVATIONS +38 TO +48 FT NGVD. THE W/L ELEVATIONS &</u>	
<u>LITHOLOGY IN THE SUMMARY TABLE WILL PROBABLY BE OF INTEREST TO YOU.</u>	

I HOPE THIS IS HELPFUL. CALL IF YOU HAVE QUESTIONS.

John

~~subgrade soils. The excavation resulted in a grade change on the order of six feet by removing surficial sands. It is CTL's opinion that the excavation has removed approximately six feet of the natural sand filter and exposed subgrade soils to a higher degree of saturation. The saturation and infiltration of runoff water may be the cause of the increase in values at this location.~~

Response to RAI dated 3/25/03 Comment 23.e.4

That the Department may require Evaluation Monitoring per Rule 62-701.510(7) in regard to Nitrate & TDS at MW 2 is noted. However, both parameters have been trending downward. TDS was below MCL for the 1st & 2nd Quarters of 2003. Nitrate was lower for the 1st quarter of 2003, but above MCL. It fell below MCL for the 2nd Quarter of 2003.

6.0 Evaluations and Recommendations

~~Based on this review it is CTL's opinion that the current Groundwater Monitoring Plan is effective in monitoring groundwater flowing beneath the landfill site. The plan is following the guidelines of the permit and is providing the necessary information with respect to groundwater flow and groundwater quality.~~

Through the period in review it is evident that the groundwater flow is generally in a westerly direction as was presented in the plan. The well locations and the flow rates calculated indicate that the sampling frequencies are currently adequate to identify contaminants before reaching the limits of the zone of discharge.

While individual results have been reported above the MCL in several parameters, often the exceedance was a single event and the preceding and subsequent sampling events were below MCL. In these cases it is our opinion that the single exceedances do not reflect a trend or an

accurate reflection of the impact to the groundwater quality.

The metal parameters that are exceeding MCL are believed to be due to natural background concentrations of these parameters in the groundwater for this area. This would account for the similar trends observed in Turbidity and the metal parameters in the background wells. It is evident that equipment upgrades as well as changes in sampling procedure as discussed in the response dated November 30, 2001 to the RAI dated November 5, 2001 over the past two years have had a significant impact to the values of turbidity and metals as well as the overall effectiveness of the groundwater monitoring. The downward trends in these parameters indicate that the results above the MCL do not appear to be related to effects on the groundwater quality by the landfill. If the landfill was causing these elevated results an upward trend would be expected.

~~The additional testing of MW 4 has indicated that this well is being effected by septic tank systems in place near the well. Since these systems are still active it is expected that this condition will continue.~~

~~The increase in Nitrate and TDS of MW 2 is believed to be related to the excavations in the area of the well and should be reviewed in subsequent sampling events.~~

~~Given the noted improvement of the consistency in results over the past two years, CTL recommends continuing the current Groundwater Monitoring Plan with quarterly and annual testing. If the current downward trends continue with consistency, the county may provide a bi-annual review of the plan with the possibility of reducing the frequency from~~

~~quarterly to semi-annual.~~

CTL recommends the following changes to the Groundwater Monitoring Plan:

Response to RAI dated 3/25/03 Comment 20 M.1.f(3)

1. Changing the quarterly and annual testing per Section 2.0, Groundwater Monitoring Plan (revised 5/27/03) of this report.
2. Per Rule 62-701.510(10)(b), the Groundwater Monitoring Plan Evaluation shall be done biannually.

Response to RAI dated 3/25/03 Comment 21 M.1.g

3. Per Rule 62-701.510(7)(a) & 62-701.510(7)(b), Evaluation Monitoring, Preventive Measures and Corrective Action shall be added to the plan. A copy of Rule 62-701.510(7)(a & b) is presented in Appendix VIII.

Response to RAI dated 12/07/03 Comment 19 M.1.e(6)

1. An evaluation of monitor well conditions and the construction details of each well as presented in table A of appendix IX the following recommendations are offered: MW 2A is currently located in a high traffic area. Central Testing Laboratory believes that this traffic is affecting the well. Central Testing Laboratory recommends a new well to replace MW 2A be relocated ten to fifteen feet to the north of the existing well. This well will be constructed with ten feet of screen allowing for sampling in the dry season.

Central Testing Laboratory recommends that a secondary well be installed at MW 7 and MW 9 with ten foot screens to accommodate the saturated thickness of the uppermost aquifer. The new screen intervals will be at elevation of approximately thirty eight to forty eight feet. This will accommodate sampling the upper most portion of the aquifer during seasonal fluctuation in water levels.

MW 2A, MW 7, and MA 9 will no longer be sampled. The new wells will now be sampled.

Due to the distance from the indicated leachate of waste Central Testing Laboratory recommends that two new wells MW-10 and MW-11 be installed closer to the area of barrier waste in line with MW-7 and MW-1 respectively. In addition a secondary well (MW-9A) should be installed at MW-9 with a ten foot screen to accommodate the saturated thickness of the uppermost aquifer. The new screen intervals for all wells will be at elevation of approximately thirty eight to forty eight feet. This will accommodate sampling the upper most portion of the aquifer during seasonal fluctuation in water levels as shown in Table A of Appendix X.

MW-1, MW-7, and MW-9 will no longer be sampled, but will be used to obtain ground water elevations. The new wells will be sampled.

Sumter County Public Works
Sumter County Ground Water Monitoring Plan Evaluation

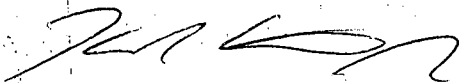
February 28, 2003
Page No. 14
Revised May 28, 2003
Revised March 2, 2004
Revised April 8, 2004

Closure

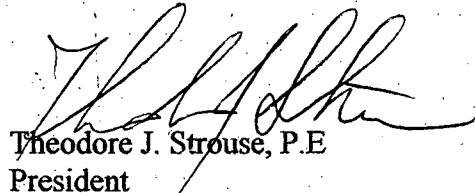
CTL appreciates the opportunity to be of assistance on this project. Should you have additional questions please contact our office at 352-787-1268.

Respectfully submitted,

CENTRAL TESTING LABORATORY, INC.



Karl Retherford Jr.
Environmental Technician



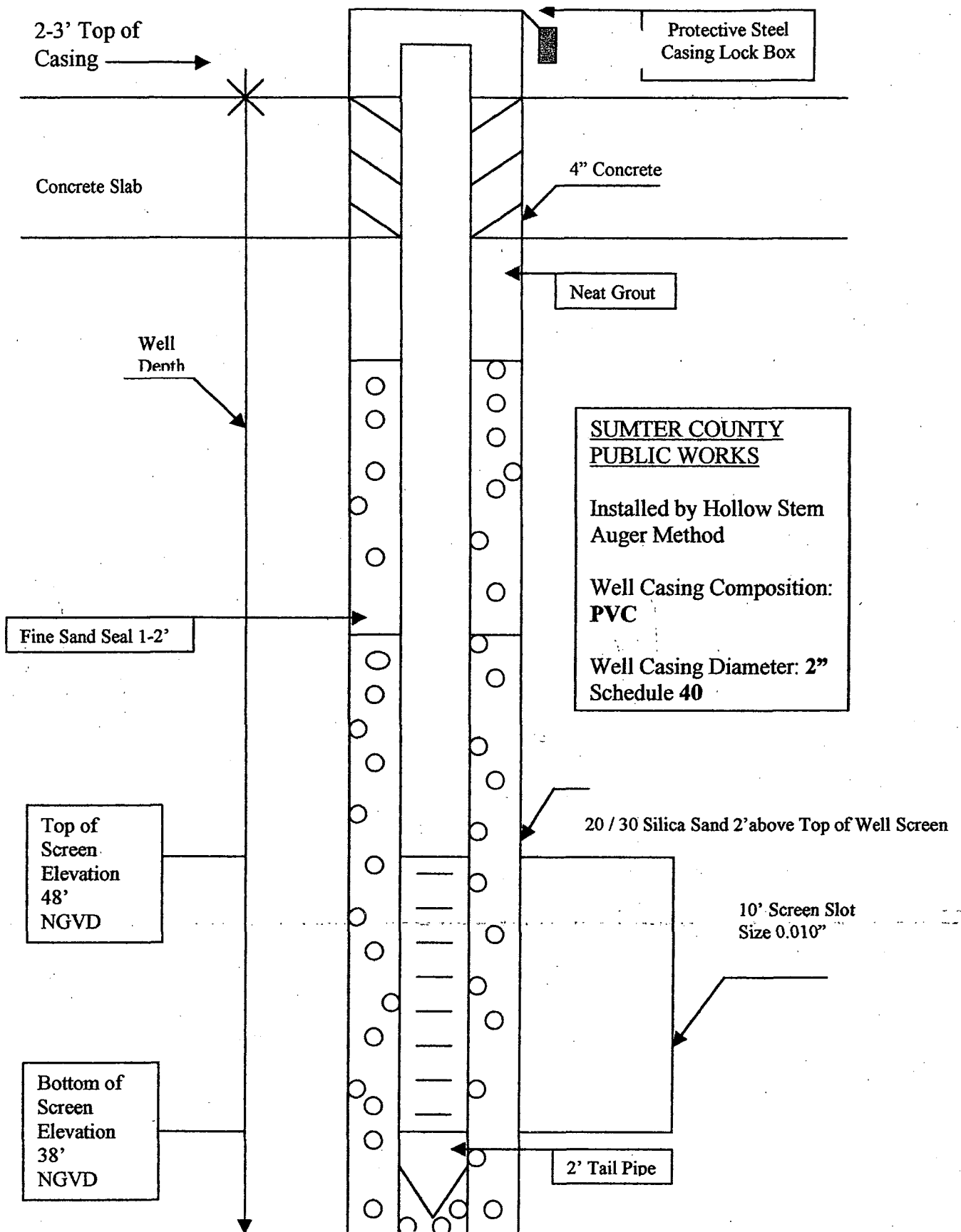
Theodore J. Strouse, P.E.
President

Florida Registration No 48220. 4/12/04

Revised April 8, 2004

APPENDIX IX

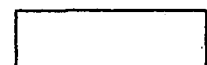
CENTRAL TESTING LABORATORY

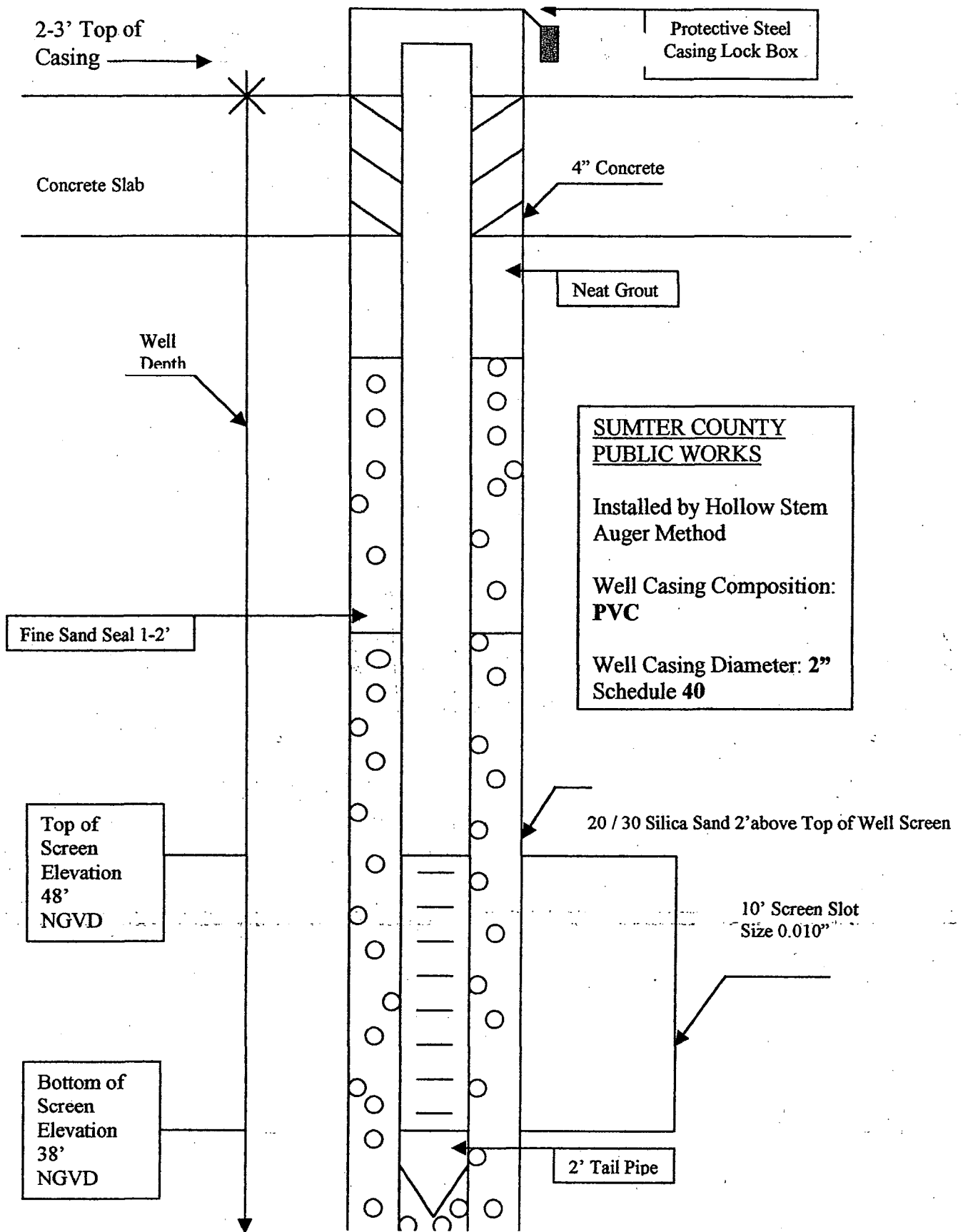


**Monitoring Well Construction
NTS**

**Proposed Monitor Wells
MW-9A**

**Development consists of
high-speed pumping until
water is clear.**





**Monitoring Well Construction
NTS**

**Proposed Monitor Wells
MW-10 and MW-11
Development consists of
high-speed pumping until
water is clear.**



Revised April 8, 2004

APPENDIX X

CENTRAL TESTING LABORATORY

TABLE A (Revised 03/02/04) Monitor Well Construction Details, Sumter County Closed Class I Landfill

Well#	Elevation (feet NGVD)						Screen	Total	Lithology Encountered (feet) below land surface
	Top of Casing	Ground Surface	Top of Screen	Bottom of Screen	Maximum Water Level	Minimum Water Level	Length (ft)	Depth (ft)	
MW-1	70.17	69.58	42.67	37.67	48.19	41.17	5	32.5	0 - 10 Sand
									10 - 15 Sandy clay
									15 - 22 Clay
									22 - 32 Limestone
MW-2	74.14	72.53	41.49	36.49	48.83	36.64	5	37.65	0 - 10 Sand
	69.13*	N/A**	41.49	36.49	48.83	36.64	5	32.64*	10 - 18 Sandy clay
									18 - 30 Clay
									30 - 37 Limestone
MW-4	70.36	N/A**	42.69	37.69	48.41	41.28	5	37.69	0 - 10 Sand
									10 - 20 Sandy clay
									20 - 30 Clay
									30 - 37 Limestone
MW-6A	77.54	75.71	32.54	27.54	49.17	41.12	5	50	0 - 20 Sand
									20 - 29 Clay with limestone fragments
									29 - 51 Limestone
MW-7	73.14	71.49	28.74	23.74	48.84	41.47	5	49.4	0 - 20 Sand
									20 - 25 Sand and clay
									25 - 28 Clay and sand
									28 - 31 Limestone
									31 - 34 Clay
									34 - 51 Limestone
MW-8	69.26	68.09	30.41	25.41	50.24	42.06	5	43.85	0 - 24 Sand
									24 - 34 Sandy clay
									34 - 41 Limestone
MW-9	71.95	70.37	29.15	24.15	49.68	41.55	5	47.8	0 - 26 Sand
									26 - 32 Sandy clay
									32 - 46 Limestone

TABLE A (Revised 3/02/04) Monitor Well Construction Details, Sumter County Closed Class I Landfill

footnotes

- Top of Casing Elevations and Screen Lengths from Central Testing Laboratory GWMPE dated 3/3/03 (Section 2.0, Table 1 – Revised 5/27/03)
- Total Depth and Ground Surface Elevations from Central Testing Laboratory field measurements 1/22/02
- Top/Bottom of Screen elevations for all wells calculated using Total Depth measurements from Central Testing Laboratory field measurements 1/22/02 and Top of Casing Elevations
- Maximum/Minimum Water Elevations measured during sampling events conducted between 1st Quarter of 1998 and 4th Quarter of 2002, from Central Testing Laboratory GWMPE dated 3/3/03 (Section 3.0 Table 1 – Revised 5/27/03)
- Screen Length for MW-1, MW-2, MW-4, MW-6A and MW-7 from “Second Response to Request for Additional Information” prepared by Springstead Engineering Inc. dated 7/29/92, Appendix B.
- Screen Length for MW-8 and MW-9 from Central Testing Laboratory GWMPE dated 3/3/03, (Section 2.0, Table 1 – Revised 5/27/03)
- Lithology Encountered from Central Testing Laboratory GWMPE dated 3/3/03 (Appendix I)
- *New Top of Casing Elevation for MW-2 following excavation activities: Top of Casing and Total Depth adjusted reflect the new well configuration
- **Ground Surface is slightly above Top of Casing – No Survey available with Ground Surface Elevations

** Transmit Conf. Report **

P.1

Aug 17 2004 11:24

Telephone Number	Mode	Start	Time	Pages	Result	Note
814076228196	NORMAL	17,11:20	3'20"	11	* O K.	



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
3804 COCONUT PALM DRIVE
TAMPA, FL 33619-1352**

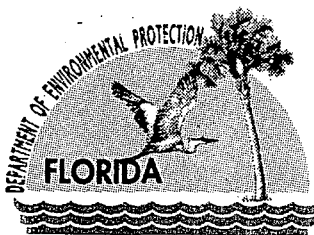
FAX

Date:

8/17/04

Number of pages including cover sheet: 11

TO:	FROM:
RICK POTTS	JOHN MORRIS
PHONE:	PHONE: (813) 744-6100, EXT. 334
FAX #: 407-622-8194	FAX #: (813) 744-6125
CC:	
REMARKS:	Urgent <input checked="" type="checkbox"/> For your review Reply ASAP Please comment
Rick -	
HERE ARE SOME PAGES I EXCLUDED FROM THE PERMIT REVIEWAL DOCUMENTS THAT	
SUMMARIZED THE PROPOSED CHANGES TO THE MONITORING PLAN AT SUNGER COUNTY LANDFILL.	



Jeb Bush
Governor

Department of Environmental Protection

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Colleen M. Castille
Secretary

July 13, 2004

CERTIFIED MAIL 7002 3150 0003 8459 5965
RETURN RECEIPT REQUESTED

Mr. Bernard Dew, County Administrator
Sumter County Board of County Commissioners
209 North Florida Street
Bushnell, Florida 33513

RE: Sumter County Solid Waste Management Facility
OGC Case No. 04-0131
FDEP Review Comments Regarding "Preliminary Contamination Assessment Plan"

Dear Mr. Dew:

Paragraph No. 9 of the above-referenced Consent Order required the implementation of the Department document "Preliminary Contamination Assessment Actions" (PCAA). Paragraph No. 2 of the PCAA required the submittal of a Preliminary Contamination Assessment Plan (PCAP) within 30 days of the effective date of the Consent Order. The Consent Order was executed on March 17, 2004; the PCAP submittal was due on April 15, 2004. The Department received the PCAP, dated April 12, 2004, on April 15, 2004.

The Department has reviewed the PCAP. Pursuant to Paragraph No. 6 of the PCAA, this letter and the enclosed memorandum serve as the Department's written request for additional information. The PCAA requires that the Respondent (Sumter County Board of County Commissioners) provide the requested information within 20 days from receipt of this request. It also requires that the PCAP shall incorporate all required modifications to the PCAP identified by the Department. In the event that you have not received all four pages of the PCAA, it has been enclosed for your convenience.

The Department appreciates your cooperation in this matter. If you have any questions, you may contact Ms. Stephanie Petro at telephone number (813) 744-6100, extension 451, or Mr. John Morris at extension 336.

Sincerely,

Stephanie Petro

Stephanie Petro
Environmental Coordinator
Southwest District

Enclosures

msh

cc:

Susan Pelz, P.E., FDEP Tampa
Stephanie Petro, FDEP Tampa
Steve Morgan, FDEP Tampa
John Morris, P.G., FDEP Tampa
Lisa London, OGC Tallahassee
Richard L. Potts, Jr., P.G., The Colinas Group, 515 N. Virginia Ave., Winter Park, FL, 32789
Mitch Kessler, Kessler Consulting, Inc., 14620 N. Nebraska Ave, Bldg. D, Tampa, FL 33613

"More Protection, Less Process"

Printed on recycled paper.

Memorandum

Florida Department of Environmental Protection

TO: Stephanie Petro *usp 6/17/04*
FROM: John R. Morris, P.G. *JRM*
DATE: June 15, 2004
SUBJECT: Sumter County Solid Waste Management Facility
OGC Case No. 04-0131
Review Comments Regarding "Preliminary Contamination Assessment Plan"
cc: Susan Pelz, P.E. *SP*

Paragraph No. 9 of the referenced Consent Order required the implementation of the Department document entitled "Preliminary Contamination Assessment Actions" (PCAA), provided as Exhibit B of the Consent Order. Paragraph No. 2 of the PCAA required the submittal of a Preliminary Contamination Assessment Plan (PCAP) within 30 days of the effective date of the Consent Order. As the Consent Order was executed on March 17, 2004, submittal of the PCAP was due by April 15, 2004.

The document entitled "Proposed Preliminary Contamination Assessment Plan, Sumter County Closed Class I Landfill, Sumter County, Florida", dated April 2004, prepared by The Colinas Group, Inc. (TCG), was transmitted via a letter from Sumter County dated April 12, 2004, received April 15, 2004. This memorandum provides review comments regarding the adequacy of the submitted PCAP to meet the requirements of the PCAA.

Please have the Respondent submit revisions to the PCAP to address the following comments. Please have the applicant provide revisions 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 or replacement pages (text, figures, tables and appendices).

Section 1.3 – Project QA/QC

1. It is noted that Paragraph 1 of the PCAA refers to sample collection and analysis in accordance with Department-approved Comprehensive Quality Assurance Plans, however these activities must be conducted in accordance to the revisions to Chapter 62-160, F.A.C., that were effective on April 9, 2002 with modifications effective on June 8, 2004. As such, sample collection must be conducted in accordance with the Department's Standard Operating Procedures (SOPs), and sample analyses must be conducted by firms that are certified by the Department of Health's Environmental Laboratory Certification Program. Please submit revisions to this section of the PCAP to indicate that TCG shall collect samples in accordance with the SOPs. Please submit additional revisions to this section of the PCAP to verify that certification No. E86240 has been maintained by U.S. Biosystems and it addresses the proposed analytical parameters.

Section 2.3.1 – Zone of Discharge Confirmation

2. It is indicated that the lateral limits of the Class I waste will be physically located in the vicinity of the affected wells (MW-2 and MW-4) using standard surveying techniques. Please submit revisions to this section of the PCAP to indicate the source of data that will be used to determine the edge of waste.

Section 2.4.1 – New Monitoring Well Installation

3. It is indicated that one proposed monitor well will be installed downgradient from well MW-2 and one proposed monitor well will also be installed downgradient from well MW-4, however the lateral distances are not described in relation to the zone of discharge. Please submit revisions to this section of the PCAP to provide a more complete description of these two proposed monitor well locations.

Review Comments Regarding “Preliminary Contamination Assessment Plan”

4. It is indicated that one proposed monitor well will be installed between existing well MW-4 and the known septic tanks used at separate County facilities located immediately north of the well. Review of Figure 1 indicates that septic tank/drain field facilities are located west (scale house and offices), northwest (office building), north-northwest (animal control) and north-northeast (kennel) of well MW-4. Please submit revisions to this section of the PCAP to provide a more complete description of this proposed well location and the rationale describing the adequacy of installing one well to characterize potential ground water impacts from these four septic tank/drain field areas. In the event that additional wells are proposed to be installed between well MW-4 and these septic tank/drain field areas, please submit revisions to this section of the PCAP, as appropriate.

5. It indicated that the three proposed monitor wells will be designed and constructed to sample ground water at the same depth intervals as respective existing wells, and that SPT borings will be completed at each well location to identify geologic conditions prior to final well design and construction. Please submit revisions to this section of the PCAP to indicate the proposed screen length for each new monitor well. Please submit additional revisions to this section of the PCAP to describe how the integrity of the clay sediments will be restored if the wells are screened at depth intervals below the confining unit. Please note that the new wells should be constructed to monitor a discrete zone in the uppermost water-bearing unit and special attention should be provided during the installation of the SPT borings to investigate the occurrence of saturated sands, clayey sands and sandy clays above the confining unit.

Section 2.4.2 – Soil/Sediment Sampling and Analysis

6. It is indicated that unconsolidated sediment samples will be collected at and near the water table surface within the depth intervals screened in nearby existing monitoring wells at each SPT boring for the new wells. Please note that the information provided to the Department regarding the construction of wells MW-2 and MW-4 indicate that both wells were described to be screened in limestone sediments. Please review this information and re-evaluate the need to conduct the proposed soil sampling and analysis, and submit revisions to this section of the PCAP, as appropriate.

Section 2.4.3 – Ground Water Measurements, Sampling and Analysis

7. Please submit revisions to this section of the PCAP to indicate what equipment and sampling procedures will be used to collect the ground water samples from the existing wells (MW-2, MW-4 and MW-6A) and the three new wells.

8. The list of analyses proposed for the ground water sampling event does not address the requirements of items 3.C(1) through 3.C(4) of the PCAA. As no demonstration was provided in the PCAP to justify the reduced list of parameters, it cannot be approved. Please submit revisions to this section of the PCAP to be consistent with the referenced items of the PCAA.

Section 3.0 – Preliminary Contamination Assessment Report

9. It is indicated that the Preliminary Contamination Assessment Report (PCAR) will present the information required by items 7.A. through 7.E. of the PCAA. Please submit revisions to this section of the PCAP to also reference the requirements of item 7.F of the PCAA.

Review Comments Regarding “Preliminary Contamination Assessment Plan”

10. It is indicated that cross-section descriptions of site geology will be included in the PCAR. Please submit revisions to this section of the PCAP to indicate that the cross-sections will include the following details:

- Property boundary, limits of Class I waste, edge of the zone of discharge, surface topography and features (septic tank/drain field areas, structures, compost handling/storage areas, stormwater ponds);
- Depth of Class I waste disposal phases; and,
- Monitor well screen intervals (background well, wells MW-2 and MW-4, and new wells) and the ground water surface elevation at the time of sampling.

Items From the PCAA Not Included in the PCAP

11. Please review the following activities referenced to item number in the PCAA that do not appear to be included in the PCAP, appear to have been partially addressed by the proposed activities in the PCAP, or were not specifically addressed by review comment Nos. 1 through 10, above. Please submit revisions to the appropriate sections of the PCAP to include a description of how these activities will be implemented or present the rationale why these activities do not apply to the Sumter County facility.

- a. PCAA Item 4.E. – Presence of surface waters within 0.5 miles of the Sumter County property. Please specifically address the existing stormwater management system at the facility and describe the point(s) of discharge from the property
- b. PCAA Item 4.F. – Potential for movement of contaminants both horizontally and vertically, zones that are likely to be affected, and actual and potential uses of ground water as a resource
- c. PCAA Item 5.C. – Description of ground water sampling methods, procedures and equipment
- d. PCAA Item 5.E. – Analytical parameters to be used and the detection limits of those methods
- e. PCAA Item 5.G. – Description of past and present property owners; description of past and present operations including those which involve the storage, use, processing or manufacture of materials which may be potential pollution sources; description of all products used or manufactured and of all by-products and waste generated during the life of the facility; summary of current and past environmental permits and enforcement actions; and, summary of known spills or releases of materials which may be potential pollution sources. (It is unclear if Section 2.3.3 of the PCAP limited the identification of potential pollution sources within the County-owned facility to preparation of a new site map.)

I can be contacted at (813) 744-6100, extension 336, to discuss these review comments.

jrm

PRELIMINARY CONTAMINATION ASSESSMENT ACTIONS

1. Within 20 days of entry to this Order, Respondent shall submit to the Department documents certifying that the organization(s) and laboratory(s) performing the sampling and analysis have a DEPARTMENT APPROVED Comprehensive Quality Assurance Plan (Comp QAP) in which they are approved for the sampling and analysis intended to be used for the assessment of the site. The documentation shall, at a minimum, contain the TITLE PAGE and TABLE OF CONTENTS of the approved Comp QAP meeting the requirements of Rule 62-160, F.A.C. If the organization(s) or laboratory(s) performing the sampling and analysis change at any time during the assessment, documentation of their DEPARTMENT APPROVED Comp QAP will be required. If at any time sampling and analysis are to be conducted which are not in the Approved Comp QAP, documentation of amendments and approvals pursuant to Rule 62-160.210, F.A.C., shall be required.

2. Within 30 days of the effective date of the Order incorporating these Preliminary Contamination Assessment Actions, Respondent shall submit a Preliminary Contamination Assessment Plan ("PCAP") to the Department. Applicable portions of the PCAP shall be signed and sealed by an appropriate professional. The PCAP shall describe the tasks that Respondent proposes to perform in order to determine whether the soil, sediment, surface water or ground water are contaminated at Respondent's facility; and, if so, whether such contamination has resulted in a violation of the water quality standards and minimum criteria established in Florida Administrative Code Chapter 62-520 and 62-302 or constitutes a risk to the public health, the environment or the public welfare. The PCAP shall include a time schedule for each task so that all tasks can be completed and a Preliminary Contamination Assessment Report ("PCAR") can be submitted to the Department within 90 days of approval of the PCAP by the Department.

3. The PCAP shall include provisions for the installation and sampling of, in most cases, a minimum of four monitor wells to determine the groundwater quality and flow direction at the site. Proposal of fewer wells or an alternate well configuration is subject to Department approval. Provision to sample surface waters, sediments and soils shall be included as necessary.

A. One of the wells shall be located in the area suspected of greatest contamination and two wells shall be located downgradient of the area suspected of highest contamination.

B. One of the wells shall be an unaffected background well.

C. The wells, surface waters, sediments and soils, as applicable, shall be sampled and analyzed for the following parameters with the listed method;

(1) priority pollutant metals using DEP approved Methods;

(2) priority pollutant organic chemicals using EPA methods 624/8240 and 625/8250 or 8270;

(3) all non-priority pollutant organic chemicals with peaks greater than 10 micrograms per liter (ug/l) using EPA methods 624/8240 and 625/8250 or 8270;

(4) pesticides and herbicides using EPA methods 8080, 8140, 8150 or 625/8250 or 8270, if applicable, or other Department approved methods for pesticides and herbicides for which the listed methods are not applicable; and

(5) others, as applicable.

Proposal of alternate analytical methods is subject to Department approval. The number of contaminants to be analyzed may be reduced if Respondent can demonstrate to the Department's satisfaction that the contaminants proposed to be deleted from the list cannot be attributed to any activities that have taken place at Respondent's facility. The Department shall submit written notification to the Respondent if the number can be reduced.

4. The PCAP shall include provisions for investigation of the following conditions, as applicable, at the contamination site and the area surrounding the contamination site:

A. The presence and thickness of any free product at the site;

B. The presence of soil contamination at the site;

C. The aquifers present beneath the site and their Chapter 62-502, F.A.C., groundwater classification;

D. The number and locations of all public and private potable supply wells within a 1/2 mile radius of the site;

E. The presence of surface waters of the State within a 1/2 mile radius of the site and, if applicable, their Rule 62-302, F.A.C., classification; and

F. The geology and hydrogeology of the site focusing on aquifers and confining units which are present, the potential for movement of contaminants both horizontally and vertically, zones that are likely to be affected, and actual and potential uses of the groundwater as a resource.

5. The PCAP shall contain the following site specific information;

A. Proposed well construction details including methods and materials, well installation depths and screened intervals and well development procedures;

B. A description of methods and equipment to be used to quantify soil and sediment contamination;

C. A description of water sampling methods, including names of sampling personnel, procedures and equipment;

D. Name of laboratory to be used for analytical work;

E. The parameters to be analyzed for, the analytical methods to be used and the detection limits of these analytical methods;

F. Site map depicting monitoring well locations and other proposed sampling sites and justification for their selection; and

G. A detailed site history including: a description of past and present property and/or facility owners; a description of past and present operations including those which involve the storage, use, processing or manufacture of materials which may be potential pollution sources; a description of all products used or manufactured and of all by-products and wastes (including waste constituents) generated during the life of the facility; a summary of current and past environmental permits and enforcement actions; a summary of known spills or releases of

materials which may be potential pollution sources; and an inventory of potential pollution sources within 0.25 (one quarter) mile.

6. The Department shall review the PCAP and provide Respondent with a written response to the proposal. In the event that additional information is necessary for the Department to evaluate the PCAP, the Department shall make a written request to Respondent for the information and Respondent shall provide the requested information within 20 days from receipt of said request. The PCAP shall incorporate all required modifications to the PCAP identified by the Department. Any action taken by Respondent with regard to the implementation of the PCAP prior to the Respondent receiving written notification from the Department that the PCAP has been approved shall be at Respondent's risk.

7. Within (60) days of the Department's approval of the PCAP (unless a written time extension is granted by the Department), Respondent shall submit a written Preliminary Contamination Assessment Report ("PCAR") to the Department. Applicable portions of the PCAR shall be signed and sealed by an appropriate professional. The PCAR shall:

- A. Summarize and analyze all "PCAP" tasks;
- B. Include, but not be limited to, the following tables and figures:
 - (1) A table with well construction details, top of casing elevation, depth to water measurements, and water elevations;
 - (2) A site map showing water elevations, water table contours and the groundwater flow direction for each aquifer monitored for each sampling period;
 - (3) A table with water quality information for all monitor wells;
 - (4) Site maps showing contaminant concentrations and contours of the contaminants; and
 - (5) Cross sections depicting the geology of the site at least to the top of the confining unit. In general there should be at least one north to south cross section and one east to west cross section.
- C. Include copies of field notes pertaining to field procedures, particularly of data collection procedures; and
- D. Specify results and conclusions regarding the objectives of the Preliminary Contamination Assessment;
- E. Provide the following quality assurance data along with the analytical data from all media;
 - (1) dates of sample collection, sample preparation including extraction and sample analysis;
 - (2) the detection limits for these analyses;
 - (3) the results from the analyses of field quality control samples; including field equipments, trip blanks and duplicates;
 - (4) the results from reagent water blanks run on that day (5% of samples run, minimum);
 - (5) the spike and surrogate percent recoveries for the data set;
 - (6) the actual chromatograms, if requested by the Department.
 - (7) any other QA/QC information Department deems necessary to evaluate validity of the submitted data.

F. Identify, to the extent possible, the source(s), extent, and concentrations of contaminants, and the existence of any imminent hazards.

8. The Department shall review the PCAR and determine whether it is adequate to meet the objectives of the PCAP. In the event that additional information is necessary to evaluate the PCAR, the Department shall make a written request and Respondent shall provide all requested information within 20 days of receipt of said request.

9. Respondent shall provide notification to the Department at least twenty (20) days prior to the installation or sampling of any monitoring wells, and shall allow Department personnel the opportunity to observe installation and sampling and to take split samples. All necessary approvals must be obtained from the appropriate water management district before any wells are installed. Raw data shall be exchanged between Respondent and the Department as soon as the data is available.

10. The Respondent is required to comply with all local, state and federal regulations and to obtain any necessary approvals from local, state and federal authorities in carrying out these assessment actions.

11. If the Department's review of the PCAR indicates that the soil, sediments, surface water or ground water is contaminated, or constitutes a risk to the public health, the environment or the public welfare, or if the Department rejects the PCAP or PCAR for not meeting the objectives of analyzing or reporting on the analysis of the contaminants that are the subject of the assessment, the Department reserves the right to do any or all of the following:

A. Seek further administrative relief through the filing of a Notice of Violation or entry of a Consent Order which requires Respondent to conduct further assessment and clean-up at its facility;

B. File suit for injunctive relief, civil penalties, damages and expenses; or

C. Perform the necessary corrective actions at Respondent's facility and recover the costs of such actions from Respondent.

12. If the Department's review of the PCAR indicates that the site is not contaminated and does not constitute a risk to the public health, the environment or the public welfare, the Department will so notify the Respondent in writing.

Is your RETURN ADDRESS completed on the reverse side?

SENDER: ISSUED PERMIT 22926-003-SF
Sumter County BCC 1 LFLTC

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to: 7002 3150 0003 8459 5927

Mr. Bernard Dew, County Adm.
Sumter County BCC
209 North Florida Street
Bushnell, FL 33513

4b. Service Type

<input type="checkbox"/> Registered	<input checked="" type="checkbox"/> Certified
<input type="checkbox"/> Express Mail	<input type="checkbox"/> Insured
<input checked="" type="checkbox"/> Return Receipt for Merchandise	<input type="checkbox"/> COD

7. Date of Delivery
JUN 29 2004

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X. Amanda Taylor

PS Form 3811, December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

7002 3150 0003 8459 5927

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	

Mailed
6-28-04
Postmark Here

Total Postage

Sent To

Street, Apt. No.
or PO Box No.
City, State, ZIP

Mr. Bernard Dew, County Adm.
Sumter County BCC
209 North Florida Street
Bushnell, FL 33513



- Print your name, address, and ZIP Code in this box •

State of Florida
Department of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619-1352

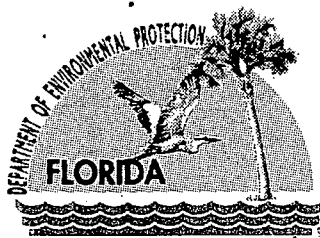
D.E.P.

JUL 01 2004

John Morris - solid waste Southwest District Tampa

60





Jeb Bush
Governor

Department of Environmental Protection

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Colleen M. Castille
Secretary

June 28, 2004

CERTIFIED MAIL 7002 3150 0003 8459 5927
RETURN RECEIPT REQUESTED

Sumter County Board of County Commissioners
209 North Florida Street
Bushnell, FL 33513

Attention: Mr. Bernard Dew, County Administrator

NOTICE OF PERMIT

Dear Mr. Dew:

Attached is **Permit No. 22926-003-SF** for long-term care (monitoring and maintenance) of the Sumter County closed Class I landfill, Sumter County, Florida, issued pursuant to Section(s) 403.087(1), Florida Statutes.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel, 3900 Commonwealth Blvd., Mail Station 35, Tallahassee, 32399-3000, within fourteen (14) days of receipt of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within fourteen (14) days shall constitute a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, Florida Statutes.

The petition shall contain the following information;

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of Department's action, or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

"More Protection, Less Process"

- (f) A statement of which rules or statutes petitioner contends warrant reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C. Mediation is not available in this proceeding.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rules 62-110 and 28-106, F.A.C. Upon timely filing of a petition or a request for an extension of time this transfer of permit will not be effective until further Order of the Department.

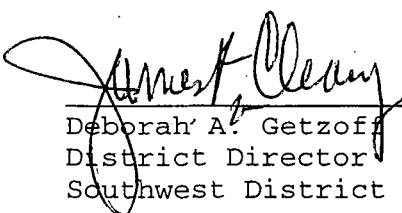
When the Order is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Blvd., Mail Station 35, Tallahassee, 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Mr. Bernard Dew
Sumter County Public Works Department
Sumter County Landfill, Long-Term Care Permit

PERMIT NO.: 22926-003-SF
Page 3 of 3

Executed in Tampa, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


Deborah A. Getzoff
District Director
Southwest District

DAG/jrm
Attachment

CERTIFICATE OF SERVICE

This undersigned duly designated deputy clerk hereby certifies that this **NOTICE OF PERMIT** and all copies were mailed before the close of business on June 28, 2004 to the listed persons.
(date stamp)

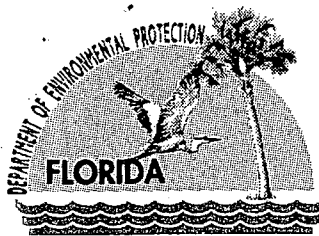
FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to Section 120.52(10), Florida Statutes, with the designated Department, Clerk, receipt of which is hereby acknowledged.


Clerk

6/28/04
Date

Copies furnished to:

Sumter County Board of County Commissioners
Sumter County Notification List
Chuck Jett, Sumter County, 319 E. Anderson Ave., Bushnell, FL 33513
Virginia Watson, Sumter County, 209 No. Florida St., Bushnell, FL 33513
David Springstead, P.E., Springstead Engineering, Inc., 727 So. 14th St., Leesburg, FL 34748
Mitch Kessler, Kessler Consulting, Inc., 14620 No. Nebraska Ave, Bldg. D, Tampa, FL 33613
Douglas Beason, FDEP OGC Tallahassee
Richard Tedder, P.E., FDEP Tallahassee
Fred Wick, FDEP Tallahassee
Susan Pelz, P.E., FDEP Tampa (Permit Notebook)



Department of Environmental Protection

Jeb Bush
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Colleen M. Castille
Secretary

PERMITTEE

Sumter County Public Works Department
209 North Florida Street
Bushnell, FL 33513

Attention: Bernard Dew,
County Administrator

PERMIT/CERTIFICATION

WACS ID No.: SWD/60/53008
Permit No.: 22926-003-SF
Date of Issue: 06/28/2004
Expiration Date: 06/15/2009
County: Sumter
Lat/Long: 28° 44' 36" N
82° 05' 19" W
Sec/Town/Rge: 15/20S/22E
Project: Sumter County Closed
Class I Landfill,
Long-Term Care Permit

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Chapters 62-4, 62-330, 62-520, 62-522 and 62-701, Florida Administrative Code (F.A.C.). The above named permittee is hereby authorized to conduct long-term care, maintenance, and monitoring at the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Florida Department of Environmental Protection (Department), made a part hereof, and specifically described as follows:

For long-term care, monitoring and maintenance of a closed Class I landfill (approximately 30 acres), referred to as the Sumter County Landfill, subject to the specific and general conditions attached. The Sumter County Landfill is located approximately 1 mile east of I-75, south of C.R. 470, north of Bushnell, Sumter County, Florida.

Landfill details are summarized in the following table:

<u>Long Term Care Item</u>	<u>Description</u>
Final Survey Report	Updated site topography to be submitted within 90 days of completion of leveling and repaving the asphalt cover in accordance with Consent Order No. 04-0131 (see Specific Condition No. 8.e.)
Cert. of Closure Const. Completion (see Attachment 1)	Phase I - Inspection Dec. 6, 1989; DEP letter Dec. 11, 1989 Phase II - Inspection May 20, 1990; DEP letter May 24, 1990 Phase III - Inspection Feb. 22, 1990; DEP letter Mar. 5, 1990
Declaration to the Public	Recorded Feb. 25, 1998 (see Attachment 2)
Official Date of Closing	May 24, 1990
Date of Solid Waste Rule in Effect at Closing	Rule Date: Nov. 28, 1989
Long Term Care Period	Rule Citation: 17-701.075(1), F.A.C. Specified Duration: 20 years, minimum
<u>Landfill Feature</u>	<u>Description</u>
Bottom Liner Type	None
Leachate Collection	None
Final Cover/Cap	Phases I and II - synthetic cap, soil and vegetative cover Phase III - asphalt cap
Landfill Gas Venting	Passive vents

Replaces Permit No.: 22926-002-SF

This permit contains a summary of compliance items (see Attachment 3) that shall be submitted to the Department by the dates noted. If the compliance dates are not met and submittals are not received by the Department on the specified dates, enforcement actions may be initiated.

"More Protection, Less Process"

GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

GENERAL CONDITIONS:

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- (a) Determination of Best Available Control Technology (BACT)
- (b) Determination of Prevention of Significant Deterioration (PSD)
- (c) Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- (d) Compliance with New Source Performance Standards

GENERAL CONDITIONS:

14. The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

1. Facility Designation. This landfill shall be classified as a Class I closed landfill and shall be monitored and maintained in accordance with all applicable requirements of the Florida Administrative Code. Requirements for closure (Rule 17-701.070 through 17-701.074, F.A.C.), long-term care monitoring and maintenance (Rule 17-701.075, F.A.C.), and financial responsibility (Rule 17-701.076, F.A.C.) that are included in the Solid Waste Management Facilities rule with an effective date of November 28, 1989 remain in effect for the Sumter County landfill. Otherwise, the requirements in the current Solid Waste Management Facilities rule (Chapter 62-701, F.A.C., effective May 27, 2001) are in effect, except as identified by the Specific Conditions of this permit. In the event that the regulations governing this permitted operation are revised, the Department shall notify the permittee, and the permittee shall request modification of those Specific Conditions that are affected by the revision of regulations to incorporate those revisions.

2. Facility Stabilization. Rule 17-701.075(1), F.A.C. (effective date November 28, 1989) requires monitoring and maintenance of the facility in accordance with an approved closure plan for a minimum of 20 years from the date of closing. Any request for approval of a reduced long-term care period for the Sumter County Landfill shall provide reasonable assurance to the Department that the facility poses no significant threat to human health or the environment. Such a request must demonstrate that the facility has "stabilized" as indicated in Rule 17-701.020(61), F.A.C. (effective date November 28, 1989), as follows: the facility was closed with appropriate final cover, a good vegetative cover was established, and a good monitoring system was installed; and, there is a 10-year history of no leachate detected in the monitoring system, no detrimental erosion of cover has occurred, and subsidence of waste has ceased. Prior to the expiration of the long-term care monitoring and maintenance period the Department may extend the time period if the closure design or closure operations plan has been found to be ineffective.

3. Permit Application Documents. This permit is valid for long term care, monitoring and maintenance of approximately 30 acres of the landfill site in accordance with all applicable requirements of Department rules, and the reports, plans and other information, submitted as follow:

- Permit renewal application and supporting information, including:
 - Application fee for permit renewal, received February 24, 2003 (small county waiver)
 - Supporting information prepared by Springstead Engineering, Inc. (SEI), received February 24, 2003, including:
 - Section 1 -- DEP Form No. 62-701.900(1), Solid Waste Management Facility
 - Section 2 - DEP Form No. 62-701.900(4), Waste Processing Facility
 - Section 3 - DEP Form No. 62-701.900(10), Production of Compost
 - Section 4 - Engineering Report
 - Section 5 - Operations Manual
 - Section 6 - Water Quality Reports
 - Section 7 - Waste Quantity Reports
 - Section 8 - Financial Assurance Cost Estimates
 - Ground Water Monitoring Plan Evaluation, 1998 - 2002 (GWMPE), prepared by Central Testing Laboratory (CTL), dated March 3, 2003, received March 5, 2003

SPECIFIC CONDITIONS:

3. Permit Application Documents. (continued)

- Responses to the Department's first request for additional information dated March 25, 2003, were received October 9, 2003, including:
 - Transmittal letter from SEI dated October 7, 2003 (14 pages, to Steven Morgan)
 - Transmittal letter from SEI dated October 7, 2003 (9 pages, to John Morris)
 - Section 1 - DEP Form No. 62-701.900(1), Solid Waste Management Facility, revised
 - Section 4 - *Engineering Report*, revised
 - Subsection entitled "Requirements of Section M"
 - Subsection entitled "Requirements of Section P"
 - Subsection entitled "Requirements of Section R"
 - Subsection entitled "Supplemental Information for Long Term Care"
 - Subsection entitled "Report of Effectiveness of Landfill Design"
 - Subsection entitled "General Maintenance for the Covered Areas of the Closed Class I Landfill"
 - Proof of Publication of Declaration to the Public dated February 12, 1998
 - Section 5 - *Sumter County Solid Waste Facility, Operations Manual*, revised
 - Subsection entitled "Section 5.0 - Long Term Care"
 - App. F - Monitoring Well Location Map, prepared by SEI, dated October 2003
 - App. F - Overall Site Plan, Sheet 1 of 1, prepared by SEI, dated October 8, 2003
 - Section 6 - Transmittal letter from CTL, dated July 24, 2003:
 - Responses to selected review comments from the Department's letter dated March 25, 2003, including comment Nos., 16, 17, 19, 20, 21, 23.c.1) through 23.c.4), 23.d.1) and 23.d.2), 23.e.1), 23.e.3), and 25.d.
 - Table A - Monitor Well Construction Details, Sumter County Closed Class I Landfill, revised May 27, 2003
 - Revisions to the GWMPE prepared by CTL, dated May 28, 2003 (page 11 of 12 of the GWMPE, received via facsimile November 6, 2003)
 - Section 7 - Copies of closure documents and record drawings provided for Phases I, II and III
- Responses to the Department's second request for additional information dated November 7, 2003, were received January 14, February 2, and March 4, 2004, including:
 - Report entitled "Gas Migration Study Report", prepared by CTL, dated January 13, 2004, received January 14, 2004
 - Submittal from SEI, dated Jan. 30, 2004, received Feb. 2, 2004, including:
 - Section 1 -- Transmittal letter from SEI dated January 30, 2004 (15 pages, addressed to Steven Morgan);
 - Section 2 - DEP Form No. 62-701.900(1), Solid Waste Management Facility, revised pages 4, 5, 32, 33, 39;
 - Section 3 -- *Engineering Report*, revised December 30, 2003;
 - Subsection entitled "Requirements of Section M"
 - Subsection entitled "Supplemental Information for Long Term Care"
 - Subsection entitled "Report of Effectiveness of Landfill Design"
 - Subsection entitled "General Maintenance for the Covered Areas of the Closed Class I Landfill"
 - Section 4 -- *Sumter County Solid Waste Facility, Operations Manual*, revised January 30, 2004;
 - Subsection entitled "Section 5.0 - Long Term Care"
 - App. F - Monitoring Well Location Map, prepared by SEI, revised Jan. 12, 2004
 - App. F - Overall Site Plan, Sheet 1 of 1, prepared by SEI, revised Jan. 12, 2004
 - Section 5 - Transmittal letter from SEI dated January 30, 2004 (6 pages, addressed to John Morris);
 - Section 6 - Transmittal letter from SEI dated January 14, 2004 (3 pages, addressed to Steven Morgan)
 - Submittal from CTL dated March 2, 2004, received March 4, 2004, transmitting revisions to the GWMPE

SPECIFIC CONDITIONS:

3. Permit Application Documents. (Continued)

- Responses to the Department's letter dated April 6, 2004 which listed insufficiency items, including:
 - Submittal entitled "Proposed Preliminary Contamination Assessment Plan, Sumter County Closed Class I Landfill, Sumter County, Florida", dated April 2004, prepared by The Colinas Group, Inc., was transmitted via a letter from Sumter County dated April 12, 2004, received April 15, 2004
 - Letter from SEI dated April 19, 2004, received April 20, 2004 transmitting revisions to page 5 of the application form
 - Revisions to the GWMPE prepared by CTL, dated April 8, 2004, received April 28, 2004
 - Figure entitled "Monitoring Well Map", prepared by SEI, revised June 23, 2004, received June 24, 2004.

4. Permit Modifications. Any activities not previously approved as part of this permit may require a separate permit unless the Department determines a permit modification to be more appropriate. Permits shall be modified in accordance with the requirements of Rule 62-4.080, F.A.C. A modification which is reasonably expected to lead to substantially different environmental impacts and which requires a detailed review by the Department is considered to be a substantial modification.

5. Control of Access. Access to, and use of, the facility shall be controlled to prevent unauthorized dumping, or use of the facility by unauthorized persons as required by Rule 62-701.600(5)(i), F.A.C., and to protect the monitoring devices and general landfill condition.

6. Control of Nuisance Conditions. The operating authority shall be responsible for the control of odors and fugitive particulates arising from this facility. Such control shall minimize the creation of nuisance conditions on adjoining property. Complaints received from the general public and confirmed by Department personnel upon site inspection shall constitute a nuisance condition and the permittee must take immediate corrective action to abate the nuisance.

7. Stormwater System Management. The existing surface water management system shall be designed, constructed, operated and maintained to prevent surface water from running on to waste-filled areas. The existing surface water management system shall also include a stormwater runoff control system designed, constructed, operated, and maintained to collect and control stormwater to meet the requirements of Rule 62-330, F.A.C., and the requirements for management and storage of surface water in accordance with Rule 62-701.500(10) to meet applicable standards of Chapters 62-25, 62-302 and 62-330, F.A.C.

8. Facility Maintenance and Repair.

a. The site shall be properly maintained, including erosion control, maintenance of final cover (soil and vegetative cover and asphalt cover), maintenance of the monitor wells, maintenance of the gas probes, maintenance of the stormwater management system, and prevention of ponding over filled areas.

b. In the event of damage to any portion of the landfill site facilities, failure of any portion of the landfill systems (including dry or damaged wells), fire or explosion, the permittee shall **immediately (within 24 hours of discovery by the permittee or permittee's representative)** notify the Department explaining such occurrence, remedial measures to be taken, and time needed for repairs. Written detailed notification shall be submitted to the Department within **seven (7) days** following the occurrence outlining the cause of the failure and action taken to prevent such failures from recurring.

SPECIFIC CONDITIONS:

8. Facility Maintenance and Repair. (Continued)

c. In the event that any portion of the ground water monitoring system or gas probes are damaged, remedial measures shall be completed **within sixty (60) days** of the written notification required in Specific Condition No. 8.b., above, unless the Department determines that a minor permit modification is required, in which case the requirements of Specific Condition No. 17, below, shall apply.

d. In the event that the stormwater system is damaged or is not operating effectively, corrective actions shall be implemented **within thirty (30) days** of the written notification required in Specific Condition No. 8.b., above, unless otherwise approved by the Department.

e. The permittee shall inspect the previously closed portions of the landfill, at a minimum, **quarterly**. Repairs to the asphalt cover of the landfill shall be completed in accordance with Consent Order No. 04-0131. An updated site survey shall be provided within 90 days of completion of the required corrective actions to demonstrate the landfill cover has been adequately sloped to drain stormwater. Following completion of these repairs, any future instances where the asphalt final cover is found to be cracked, gouged, or otherwise damaged such that stormwater may infiltrate into the landfill below, the Department shall be notified as required by Specific Condition No. 8.b., above, and shall be repaired **within two (2) weeks** of the Department's approval of the corrective action plan.

f. Closed areas which are not covered by asphalt shall be inspected for erosion **within 48 hours** of each significant rainfall event. Areas with significant erosion shall be repaired **within two (2) weeks** of discovery.

g. Use of closed landfill areas requires consultation with and approval by the Department prior to conducting these activities in accordance with Rule 62-701.610(7), F.A.C.

9. Financial Assurance/Cost Estimates. The permittee shall provide adequate financial assurance for this facility and related appurtenances in accordance with Rule 17-701.076, F.A.C. (rule effective date November 28, 1989).

a. All costs for long-term care, monitoring and maintenance shall be adjusted and submitted **annually, by September 1st each year** to: Solid Waste Manager, Solid Waste Section, Department of Environmental Protection, 3804 Coconut Palm Drive, Tampa, Florida 33619-1352.

b. Proof that the financial mechanism has been adequately funded shall be submitted **annually** to: Financial Coordinator, Solid Waste Section, Department of Environmental Protection, 2600 Blair Stone Road, MS#4565, Tallahassee, Florida 32399-2400.

10. Gas Migration Monitoring. Landfill gas migration monitoring shall be conducted **annually** to ensure that combustible gas concentrations remain below 25% of the Lower Explosive Limit (LEL) calibrated to methane in all enclosed structures and below 100% of the LEL at the property boundary. Results of the annual landfill gas monitoring events shall be submitted **by December 15th** of each year, as follow:

a. Installation of gas probes GP-1 through GP-4 as shown on Figure 1 entitled "Monitoring Well Map", prepared by SEI, received June 24, 2004, (attached) shall be completed **within 90 days of permit issuance** in accordance with the construction details provided on the figure entitled "Typical Gas Monitoring Probe", prepared by SEI, received Feb. 2, 2004 (attached). An initial monitoring of gas probes GP-1 through GP-4 shall be conducted **within seven (7) days of installation** and the results shall be submitted to the Department **within seven (7) days of monitoring**. New gas probes GP-1 through GP-4 shall also be included in the annual monitoring events.

SPECIFIC CONDITIONS:

10. Gas Migration Monitoring. (continued)

b. Existing gas probes M-1 through M-29 as shown on the aerial photograph prepared by CTL (**attached**) shall be included in the annual monitoring events.

c. Ambient gas monitoring locations shall be sampled before the buildings are opened and in enclosed areas (i.e., electrical boxes, closets and restrooms, etc.), and included in the annual monitoring events at the following structures:

- "old" materials recovery building
- "new" materials recovery facility tipping area
- scale house/office building
- kennel for animal control
- Sheriff Department building

d. The annual gas monitoring event conducted prior to permit renewal shall also include the gas vents located within the closed landfill to determine if the buried wastes remain biologically active and continue to generate significant concentrations of landfill gasses.

e. The Department may require the installation of additional gas probes and/or ambient monitoring locations within any structures that may be associated with future uses of the property.

11. Gas Remediation. Gas concentrations exceeding 100% LEL in perimeter locations (GP-1 through GP-4, and M-1 through M-29) or 25% LEL in any on-site structure shall be reported to the Department **within 7 days of detection**, and shall be accompanied by a remediation plan describing the nature and extent of the gas migration problem and the proposed remedy. The remedy shall be completed **within 60 days of detection** unless otherwise approved by the Department.

12. Water Quality Requirements. The landfill shall be monitored throughout its design period (which includes long-term care) to control the movement of waste and waste constituents into the environment so that ground water and surface water quality standards and criteria of Chapters 62-4, 62-302, and 62-520, F.A.C., will not be violated beyond the zone of discharge specified for the landfill.

13. Water Quality Monitoring Quality Assurance.

a. All field work done in connection with the facility's Water Quality Monitoring Plan shall be conducted in accordance with the Standard Operating Procedures (SOPs) described in DEP-SOP-001/01 (February 2004), as referenced in Rule 62-160.210(1), F.A.C. All laboratory analyses done in connection with the facility's Water Quality Monitoring Plan shall be conducted by firms that hold certificates from the Department of Health Environmental Laboratory Certification Program under Chapter 64E-1, F.A.C., as referenced in Rule 62-160.300(1), F.A.C. The SOPs utilized and the laboratory's list of certified test methods and analytes must specifically address the types of sampling and analytical work that are required by the permit and shall be implemented by all persons performing sample collection or analysis related to this permit. Alternate field procedures and laboratory methods may be used if approved according to the requirements of Rules 62-160.220 and 62-160.330, F.A.C., respectively.

b. The field testing, sample collection and preservation, and laboratory testing, including the collection of quality control samples, shall be in accordance with the requirements of and methods approved by the Department in accordance with Rule 62-4.246 and Chapter 62-160, F.A.C. Approved methods published by the Department or as published in Standard Methods, or by A.S.T.M., or EPA methods shall be used.

SPECIFIC CONDITIONS:

14. Zone of Discharge.

a. The zone of discharge for this facility shall extend horizontally 100 feet from the limits of the landfill phase edges or to the property boundary, whichever is less, and shall extend vertically through the surficial aquifer to the bottom of the first confining unit.

b. The permittee shall ensure that the water quality standards and minimum criteria for Class G-II ground waters will not be exceeded at the boundary of the zone of discharge according to Rule 62-520.420, F.A.C., and that the minimum criteria listed in Rule 62-520.400, F.A.C., will not be exceeded outside the footprint of the landfill.

15. Ground Water Monitor Well Locations. The ground water monitor wells shall be located as shown on Figure 1 entitled "Monitoring Well Map", prepared by SEI, received June 24, 2004 (**attached**), as follow:

<u>Well No.</u>	<u>WACS Testsite No.</u>	<u>Aquifer</u>	<u>Designation</u>	<u>Location</u>
MW-2	4535	Floridan	Lateral detection/ Vertical compliance	See Figure 1
MW-4	4537	Floridan	Lateral detection/ Vertical compliance	↓
MW-6A	4557	Floridan	Background	↓
MW-8	4592	Floridan	Lateral detection/ Vertical compliance	↓
MW-9A *	21211	Floridan	Lateral detection/ Vertical compliance	↓
MW-10 *	21212	Floridan	Lateral detection/ Vertical compliance	↓
MW-11 *	21213	Floridan	Lateral detection/ Vertical compliance	↓
MW-1	4534	Floridan	Piezometer	↓
MW-7	4564	Floridan	Piezometer	↓
MW-9	4593	Floridan	Piezometer	↓

* = to be installed **within 60 days of permit issuance** in accordance with the construction details provided in Section 6.0 and Appendix IX of the document entitled "Ground Water Monitoring Plan Evaluation, 1998-2002", prepared by CTL, revised April 8, 2004, received April 28, 2004; documentation of well construction details as indicated in Specific Condition Nos. 17.a. and 17.c. shall be submitted **within 30 days of well installation**; an initial sampling event as indicated in Specific Condition No. 16.b. shall be conducted **within 7 days of well installation and development**; results of initial sampling event shall be submitted to the Department **within 60 days of sample collection**.

All monitor wells are to be clearly labeled and easily visible at all times. The permittee should keep all wells locked to minimize unauthorized access.

16. Ground Water Sampling. The locations, parameters, and frequencies specified herein represent the minimum requirements for ground water monitoring. Additional samples, wells, and parameters may be required based upon subsequent analysis. Method Detection Limits must be reported at or below the Maximum Contaminant Levels established for the individual parameters to demonstrate compliance with Class G-II ground water standards referenced in Chapter 62-520, F.A.C. Compliance with ground water standards will be based on analysis of unfiltered samples.

a. Ground water levels shall be measured for all sampling events described in Specific Condition Nos. 16.b., 16.c., and 16.d., at all active wells and piezometers listed in Specific Condition No. 15 to a precision of 0.01 foot. Ground water surface contour maps prepared for each sampling event shall include water elevations (feet NGVD) calculated for each well and piezometer.

SPECIFIC CONDITIONS:

16. Ground Water Sampling. (continued)

b. An initial sampling event shall be conducted at wells MW-9A, MW-10 and MW-11 **within 7 days of well installation and development** for analysis of the following parameters:

Field Parameters

Static water levels
before purging
Specific conductivity
pH
Temperature
Turbidity
Dissolved oxygen
Colors & sheens (by observation)

Laboratory Parameters

Total ammonia
Chlorides
Nitrate
Total dissolved solids (TDS)
Parameters listed in 40 CFR
Part 258, Appendix II

Iron
Mercury
Sodium

c. Wells MW-2, MW-4, MW-6A, MW-8, MW-9A, MW-10 and MW-11 shall be sampled **quarterly** for analysis of the following parameters:

Field Parameters

Static water levels
before purging
Specific conductivity
pH
Temperature
Turbidity
Dissolved oxygen
Colors & sheens
(by observation)

Laboratory Parameters

Chlorides
Fluoride
Nitrate
Total ammonia
Gross alpha
Radium 226 + 228
Total dissolved solids (TDS)

Aluminum
Antimony
Cadmium
Chromium
Iron
Lead

Manganese
Mercury
Silver
Sodium
Thallium

d. To demonstrate that the reduced list of parameters listed in Specific Condition No. 16.c. remains appropriate, wells MW-2, MW-4, MW-6A, MW-8, MW-9A, MW-10 and MW-11 shall be sampled **during the fourth quarter of each year** for analysis of the parameters listed in Rule 62-701.510(8)(a), F.A.C., as follows:

Field Parameters

Static water levels
before purging
Specific conductivity
pH
Temperature
Turbidity
Dissolved oxygen
Colors & sheens
(by observation)

Laboratory Parameters

Chlorides
Fluoride
Nitrate
Total ammonia
Total dissolved solids (TDS)
Parameters listed in 40 CFR
Part 258, Appendix I
Gross alpha
Radium 226 + 228

Aluminum
Iron
Manganese
Mercury
Sodium

17. Ground Water Monitor Well Construction. Prior to construction of any new or replacement wells (excluding wells MW-9A, MW-10 and MW-11), the permittee shall request and receive Department approval of a minor permit modification. The following information is required to be submitted within 90 days of new or replacement well installation, or as stated below:

a. Construction details for all new or replacement wells shall be provided to the Department's Southwest District Office on Department Form No. 62-522.900(3), Monitor Well Completion Form (**see Attachment 4**).

b. **Within one week of well completion and development**, each new or replacement well shall be sampled for the parameters listed in Rules 62-701.510(8)(a), and 62-701.510(8)(d), F.A.C.

c. A surveyed drawing shall be submitted in accordance with Rule 62-701.510(3)(d)(1), F.A.C., showing the location of all monitoring wells (active and abandoned) horizontally located in degrees, minutes and seconds of latitude and longitude, and the elevation of the top of the well casing to the nearest 0.01 foot, National Geodetic Vertical Datum. The surveyed drawing shall include the monitor well identification number, locations and elevations of all permanent benchmarks and/or corner monument markers at the site. The survey shall be conducted by a Florida Registered Surveyor.

SPECIFIC CONDITIONS:

18. Well Abandonment. All wells not a part of the approved Water Quality Monitoring Plan shall be plugged and abandoned in accordance with Rule 62-532.440, F.A.C., and the Southwest Florida Water Management District. The permittee shall submit a written report to the Department within 90 days of well abandonment documenting verification of the well abandonment. A written request for exemption to the abandonment of a well must be submitted to the Department's Solid Waste Section for approval.

19. Verification/Evaluation Monitoring. If at any time monitoring parameters are detected at concentrations significantly above background water quality, or exceed the Department's water quality standards or criteria at the edge of the zone of discharge, the permittee has 30 days within receipt of the laboratory data to resample the monitor well(s) to verify the original analysis. Should the permittee choose not to resample, the Department will consider the water quality analysis to be representative of current ground water conditions at the facility. If the data is confirmed, or if the permittee chooses not to resample, the permittee shall notify the Department within 14 days of this finding. Upon notification by the Department, the permittee shall initiate evaluation monitoring, prevention measures and corrective action as described in Rule 62-701.510(7), F.A.C.

20. Water Quality Reporting Requirements. All ground water quality monitoring shall be reported on Department Form 62-522.900(2), Groundwater Monitoring Report (see Attachment 5). The permittee shall submit to the Department the results of the water quality analyses required by Specific Condition Nos. 16.c. and 16.d. quarterly by January 15th, April 15th, July 15th and October 15th of each year. Each report shall contain the information listed in Rule 62-701.510(9)(a), F.A.C., including a ground water contour map representing conditions at the time of sampling and a summary of any water quality standards or criteria that are exceeded. The results shall be sent to: Solid Waste Section, Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-1352.

21. Ground Water Monitoring Plan Evaluation.

a. An evaluation of the adequacy of existing wells MW-2 and MW-4 shall be submitted to the Department **within 30 days of receipt of Department approval** of the Preliminary Contamination Assessment Report (PCAR) prepared in accordance with Consent Order No. 04-0131. This evaluation shall be the basis for determining the need to install additional detection and/or compliance wells in the vicinity of wells MW-2 and MW-4. In the event that additional wells are required and upon receipt of Department approval of the recommendations of the PCAR, the permittee shall submit a request for minor permit modification to revise the approved monitoring plan (Specific Condition Nos. 15 and 16) and establish the routine list of parameters and sampling frequency at the additional wells.

b. By June 15, 2006 and no later than one hundred and eighty (180) days before permit expiration (by December 15, 2008), the permittee shall submit an evaluation of the water quality monitoring data. The due dates and time periods to be covered by the evaluations are summarized below:

Ground Water Monitoring <u>Evaluation Due Date</u>	Starting <u>Sampling Event</u>	Ending <u>Sampling Event</u>
June 15, 2006	First quarter 2003	First quarter 2006
December 15, 2008	Second quarter 2006	Third quarter 2008

The evaluations shall include the applicable information as listed in Rule 62-701.510(9)(b), F.A.C., and shall include assessment of the effectiveness of the existing landfill design and operation as related to the prevention of ground water contamination. Any ground water contamination that may exist shall be addressed as part of a ground water investigation for the landfill assessment.

SPECIFIC CONDITIONS:

22. Permit Renewal Requirements. No later than one hundred eighty (180) days prior to permit expiration (by December 15, 2008), the permittee shall apply for renewal of this long-term care permit on forms and in a manner prescribed by the Department, to assure conformance with all applicable Department rules. Applicants for permit renewal shall demonstrate how they will comply with any applicable new or revised laws or rules relating to construction, operation, or closure, monitoring, and maintenance of landfills. Long-term care plans shall be updated at the time of permit renewal to reflect changes in closure design and long-term care requirements. The application must include an engineering report that evaluates the landfill cover, subsidence, gas generation and migration, stormwater control, and the status of other landfill systems. Alternately, the permittee may submit a Stabilization Assessment Report to demonstrate that the facility has "stabilized" as defined in Rule 17-701.020(61), F.A.C. (described in Specific Condition No. 2, above), and request that the Department authorize the termination of long-term care, monitoring and maintenance activities at the Sumter County Landfill. In the event that the provided data does not demonstrate that the facility has met the definition of "stabilized", renewal of the long-term care permit shall be required.

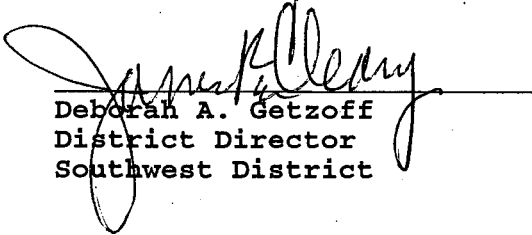
23. Professional Certification. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.), Florida Statutes, applicable portions of permit applications, permit modifications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.

24. General Conditions. The permittee shall be aware of and operate under the "General Conditions." General Conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes.

25. Permit Acceptance. By acceptance of this Permit, the permittee certifies that he/she has read and understands the obligations imposed by the Specific and General Conditions contained herein, including the dates of permit expiration and renewal deadlines. It is a violation of this permit to fail to comply with all permit conditions and deadlines.

Executed in Tampa, Florida

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Deborah A. Getzoff
District Director
Southwest District

ATTACHMENT 3

SPECIFIC CONDITION	SUBMITTAL DUE DATE	REQUIRED ITEM
9.a.	Annually by September 1 st of each year	Submit financial assurance cost estimate updates
9.b.	Annually	Submit proof of funding
10.	Annually, by December 15 th of each year	Submit results of landfill gas migration monitoring
20.	Quarterly, by January 15 th , April 15 th , July 15 th , and October 15 th of each year	Submit results of ground water sample analysis
21.b.	June 15, 2006, and December 15, 2008	Submit an evaluation of the ground water monitoring plan
22.	180 days prior to permit expiration (by December 15, 2008)	Submit permit renewal application or stabilization assessment report

D.E.P.
JUN 24 2004
Southwest District Tampa

CLIENT:	SUMTER COUNTY BOARD OF COUNTY COMMISSIONERS				
PROJECT:	SUMTER COUNTY COMPOST FACILITY				
DRAWING:					
		1 of 1			
		MONITORING WELL MAP			

Springstead Engineering, Inc.

Consulting Engineers
Architects, Planners
Surveyors

1400 WILSON ST. SE. SUITE 100
KNOXVILLE, TN 37918
423-596-1111

NAME	DATE	BY	DATE
REVISION	1	DATE	DATE
DATE	DATE	DATE	DATE
DATE	DATE	DATE	DATE

ADDITIONAL WELL MAP

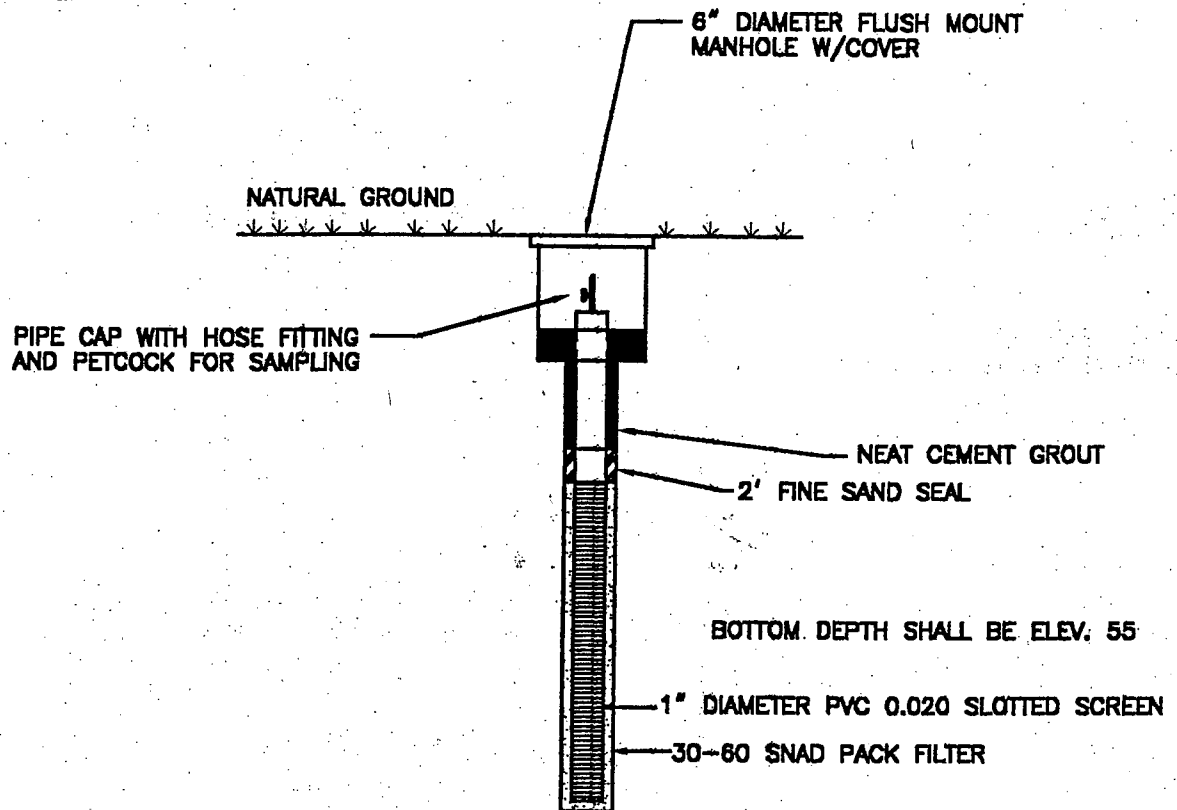
PROJECT NO. 2000-0000

2000-0000

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

FEB 02 2004

SOUTHWEST DISTRICT
TAMPA



TYPICAL GAS MONITORING PROBE
NTS

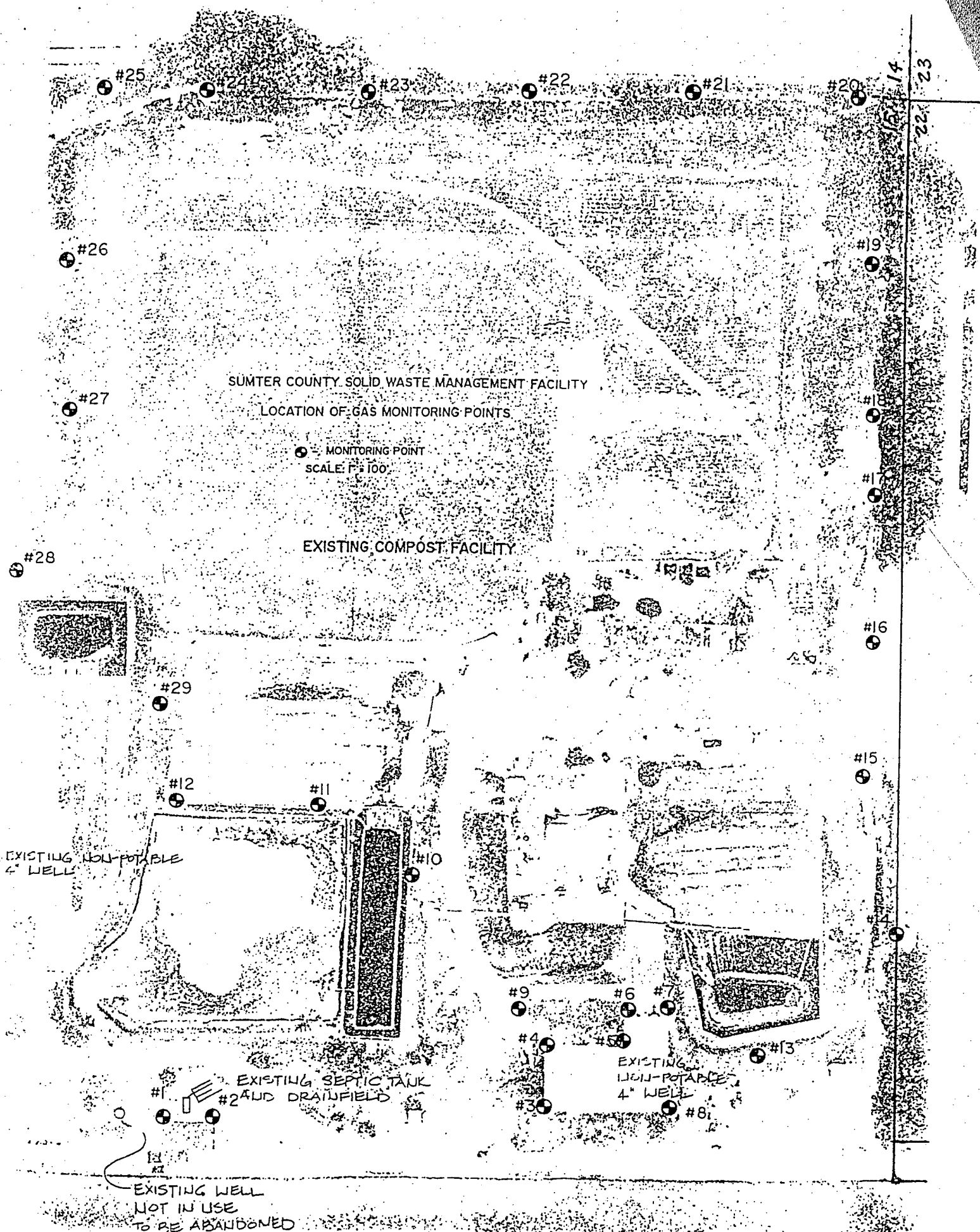


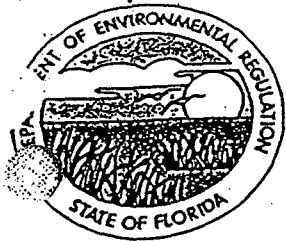
**Springstead
Engineering, Inc.**
Consulting Engineers
Planners
Surveyors

**TYPICAL GAS
MONITORING PROBE**

921100.020

1/8/04





Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

Dr. Richard Garrity, Deputy Assistant Secretary

December 11, 1989

Mr. Garry Breeden, Director
Sumter County Public Works
222 East McCollum Avenue
Bushnell, Florida 33513

Re: Certification of Phase I Cell Closure
Permit No.: SC60-146475
Inspection of New Lined Cell
Sumter County Class I Sanitary Landfill

Dear Mr. Breeden:

On December 6, 1989, the Department of Environmental Regulation inspected the Sumter County Class I Sanitary Landfill Phase I Closure to ensure its development in accordance with the approved permit. Certification of Construction Completion was received on October 25, 1989. The Department determines that the Phase I closure is developed in accordance with the approved permit.

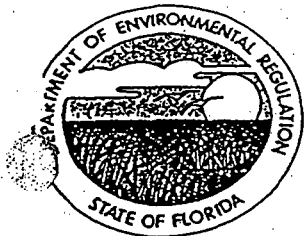
Regarding the new lined cell on site, we are concerned over the siting of the lift station inside the lined area of the new cell. This is a major deviation from the approved plans and we have no record drawings showing this change. Please submit an explanation for this deviation along with record drawings and a description of the measures taken to ensure that the lift station will not cause leakage through the newly installed liner. The Department does not approve the use of the new lined cell.

Sincerely,

Ernest G. Weeks
Engineer I
Solid Waste Section
Division of Waste Management

EGW/ab

cc: Paul Bradley, P.E., Springstead Engineering



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary
Dr. Richard Garrity, Deputy Assistant Secretary

May 24, 1990

Mr. Garry Breeden, Director
Sumter County Public Works
222 East McCollum Avenue
Bushnell, Florida 33513

Re: Certification of Phase II Cell Closure
Permit No.: SF60-146475
Sumter County Class I Sanitary Landfill

Dear Mr. Breeden:

On May 22, 1990, the Department of Environmental Regulation inspected the Sumter County Class I Sanitary Landfill Phase II Closure to ensure its development in accordance with the approved permit. Certification of Construction Completion was received on May 10, 1990.

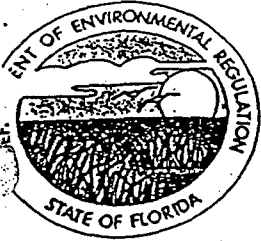
Present at the May 22, 1990, inspection were Garry Breeden, Tommy Hurst, Ralph Warnock, Matt Tala, Sandra Sequeira and Ernest Weeks. The Department determines that the Phase II closure is developed in accordance with the approved permit.

Sincerely,

Ernest G. Weeks
Engineer I
Solid Waste Section
Division of Waste Management

EGW/ab

cc: Paul Bradley, P.E., Springstead Engineering



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

Dr. Richard Garity, Deputy Assistant Secretary

March 5, 1990

Mr. Garry Breeden, Director
Sumter County Public Works
222 East McCollum Avenue
Bushnell, Florida 33513

Re: Certification of Phase III Cell Closure
Permit No.: SF60-146475
Sumter County Class I Sanitary Landfill

Dear Mr. Breeden:

On February 22, 1990, the Department of Environmental Regulation inspected the Sumter County Class I Sanitary Landfill Phase III Closure to ensure its development in accordance with the approved permit. Certification of Construction Completion was received on February 7, 1990.

Present at the February 22, 1990, inspection were Kim Ford and Ernest Weeks. The Department determines that the Phase III closure is developed in accordance with the approved permit.

Sincerely,

Ernest G. Weeks
Engineer I
Solid Waste Section
Division of Waste Management

EGW/ab

cc: Paul Bradley, P.E., Springstead Engineering

DECLARATION TO THE PUBLIC

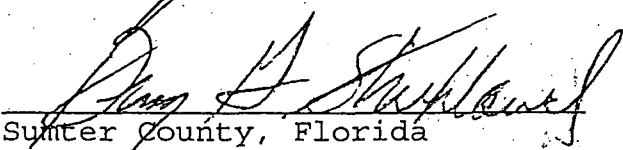
Sumter County, Florida, political subdivision of the State of Florida, does hereby declare that the following described real property is filled with solid waste and has been utilized as a land fill site. Any and all future owners or users of the following described real property should consult with the Florida Department of Environmental Protection prior to planning or initiating any activity involving the disturbance of the land fill cover, monitoring system or other control structures.

Legal Description:

The South 990.00 feet of the SE 1/4 of the SE 1/4 of Section 15, Township 20 South, Range 22 East, Sumter County, Florida.

Map of area filled with solid waste attached hereto.

DATED this 10th day of February, 1998.

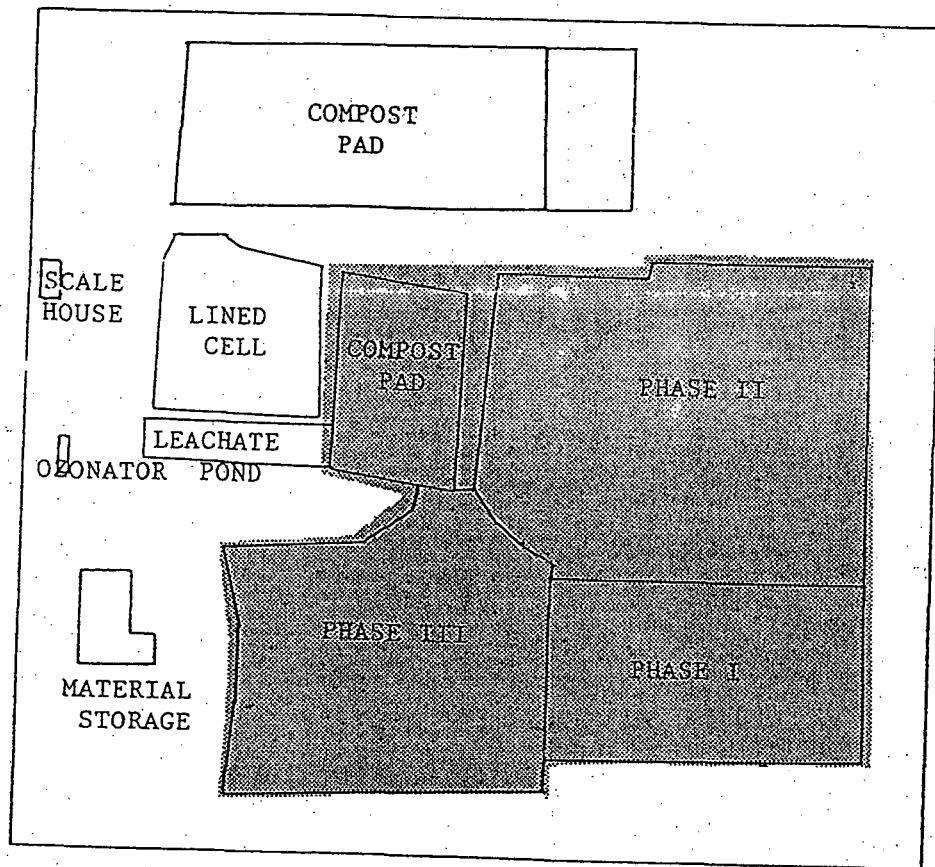

Sumter County, Florida
By: Benny Strickland, Chairman


RECORDED IN
PUBLIC RECORDS
SUMTER COUNTY, FLA.

'98 FEB 25 PM 1 45

CLERK OF CIRCUIT COURT
GLORIA R. HAYWARD
B. J. HAYWARD, C.

32477H



 = AREA FILLED WITH SOLID WASTE

ATTACHMENT 4

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522,900(3)
Form Title <u>MONITOR WELL COMPLETION REPORT</u>
Effective Date _____
DEP Application No. _____ (Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: _____

INSTALLATION NAME: _____

DEP PERMIT NUMBER: _____ GMS NUMBER: _____

WELL NUMBER: _____ WELL NAME: _____

DESIGNATION: Background _____ Immediate _____ Compliance _____

LATITUDE/LONGITUDE: _____

AQUIFER MONITORED: _____

INSTALLATION METHOD: _____

INSTALLED BY: _____

TOTAL DEPTH: _____ (bls) DEPTH OF SCREEN: _____ (bls)

SCREEN LENGTH: _____ SCREEN SLOT SIZE: _____ SCREEN TYPE: _____

CASING DIAMETER: _____ CASING TYPE: _____

LENGTH OF CASING: _____ FILTER PACK MATERIAL: _____

TOP OF CASING ELEVATION (MSL): _____

GROUND SURFACE ELEVATION (MSL): _____

COMPLETION DATE: _____

DESCRIBE WELL DEVELOPMENT: _____

POST DEVELOPMENT WATER LEVEL ELEVATION (MSL): _____

DATE AND TIME MEASURED: _____

REMARKS: (soils information, stratigraphy, etc.): _____

REPORT PREPARED BY: _____

(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

ATTACHMENT 5

Florida Department of Environmental Protection

Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522.900(2)

Form Title Ground Water Monitoring Report

Effective Date _____

DEP Application No. _____

GROUND WATER MONITORING REPORT

Rule 62-522.600(11)

PART I GENERAL INFORMATION

- (1) Facility Name _____
Address _____
City _____ Zip _____
Telephone Number () _____
- (2) The GMS Identification Number _____
- (3) DEP Permit Number _____
- (4) Authorized Representative Name _____
Address _____
City _____ Zip _____
Telephone Number () _____
- (5) Type of Discharge _____
- (6) Method of Discharge _____

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Date: _____

Signature of Owner or Authorized Representative

PART II QUALITY ASSURANCE REQUIREMENTS

Sample Organization _____ Comp QAP # _____

Analytical Lab _____ Comp QAP # /HRS Certification # _____

*Comp QAP # /HRS Certification.# _____

Lab Name _____

Address _____

Phone Number () _____

ATTACHMENT 5

PART III ANALYTICAL RESULTS

Facility GMS #: _____ Sampling Date/Time: _____

Test Site ID #: _____ Report Period: _____
(year/quarter)

Well Name: _____ Well Purged (Y/N): _____

Classification of Ground Water: _____

Well Type: () Background

Ground Water Elevation (NGVD): _____

() Intermediate

() Compliance

() Other

or (MSL): _____

Storet Code	Parameter Monitored	Sampling Method	Field Filtered Y/N	Analysis Method	Analysis Date/Time	* Analysis Results/Units	Detection Limits/Units

* Attach Laboratory Reports

Memorandum

Florida Department of Environmental Protection

PERMIT COVER MEMO

TO: Deborah A. Getzoff, District Director

FROM/THROUGH:

William Kutash, Environmental Administrator
Susan Pelz, Section Supervisor 6/23/04
John Morris, Professional Geologist 6/24/04

DATE: June 24, 2004

FILE NAME: Sumter County Closed Class I Landfill
Long-Term Care Permit Renewal

PERMIT No.: 22926-003-SF PROGRAM: Solid Waste COUNTY: Sumter

TYPE OF PERMIT ACTION:

<input checked="" type="checkbox"/> Issue	<input type="checkbox"/> Deny	<input type="checkbox"/> Modify
<input type="checkbox"/> Transfer Owner	<input type="checkbox"/> NOD	
<input type="checkbox"/> Public Notice	<input type="checkbox"/> Intent to Issue	

PUBLIC NOTICE PERIOD CLOSED? N/A PETITION FILED? N/A

PERMIT SUMMARY: This represents the third renewal of the long-term care permit for the Sumter County Class I landfill that was certified closed and began long-term care on May 24, 1990. The solid waste rule in effect at the time of closure (Chapter 17-701, effective date November 28, 1989) required at least 20 years of monitoring and maintenance following closure of the facility. This permit has been renewed for a 5-year duration and covers years 14 through 19 from the date of closure.

Sumter County operates materials recovery and volume reduction (digester/compost) facilities that are co-located with the closed landfill, and portions of the closed landfill had been used for the storage of materials associated with compost production. The Department entered into Consent Order No. 04-0131 with Sumter County to address several non-compliance issues, including ground water quality exceedances at several monitor wells around the landfill and the condition of the asphalt pavement that serves as the final cover of a portion of the landfill footprint. The submittal entitled "Preliminary Contamination Assessment Plan" (PCAP) was received on April 15, 2004 as required by the Consent Order and it provided a plan to further investigate ground water conditions at selected areas adjacent to the landfill. The conditions of the new permit and the implementation of the Consent Order will provide an improved monitoring plan related to ground water and landfill gas monitoring, and a schedule for repairing the asphalt cover of the landfill.

PROFESSIONAL RECOMMENDATION: ☒ Approve ☐ Deny

EVALUATION SUMMARY: The permit application was received on February 24, 2003. Two requests for additional information were provided in correspondence dated March 25, 2003 and November 7, 2003. The permit was deemed complete on April 15, 2004.

Day 90 is July 13, 2004.

As of June 24, 2004: TIH - 487 days; TTP - 167 days

s_w/jrm/sumter/pmt/22926-003-sf.mem

SUMTER COUNTY CLOSED CLASS I LF - LONG TERM CARE PERMIT RENEWAL

2003

JANUARY

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

FEBRUARY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

$$T_{IH} = 5$$

$$T_{TP} = 5$$

MARCH

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

$$T_{IH} = 31$$

$$T_{TP} = 25$$

APRIL

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

$$T_{IH} = 30$$

$$T_{TP} = \phi$$

MAY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

$$T_{IH} = 31$$

$$T_{TP} = \phi$$

JUNE

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

$$T_{IH} = 30$$

$$T_{TP} = \phi$$

JULY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

$$T_{IH} = 31$$

$$T_{TP} = \phi$$

AUGUST

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

$$T_{IH} = 31$$

$$T_{TP} = \phi$$

SEPTEMBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

$$T_{IH} = 30$$

$$T_{TP} = \phi$$

OCTOBER

S	M	T	W	T	F	S
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

$$T_{IH} = 31$$

$$T_{TP} = 23$$

NOVEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

$$T_{IH} = 30$$

$$T_{TP} = 7$$

DECEMBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

$$T_{IH} = 31$$

$$T_{TP} = \phi$$

$$T_{IH} = 5 + 31 + 30 + 31 + 30 + 31 + 31 + 30 + 31 + 30 + 31 + 31 + 29 + 31 + 30 + 31 + 24 = 487 \text{ DAYS}$$

$$T_{TP} = 5 + 25 + \phi + \phi + \phi + \phi + \phi + \phi + 23 + 7 + \phi + \phi + \phi + 30 + 22 + 31 + 24 = 167 \text{ DAYS}$$

2004

JANUARY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

TIH = 31
TTP = 0

MAY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

TIH = 31
TTP = 31

SEPTEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

FEBRUARY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29						

TIH = 29
TTP = 0

JUNE

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

TIH = 24
TTP = 24

OCTOBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

MARCH

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

TIH = 31
TTP = 30

JULY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

DAY 90

NOVEMBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

APRIL

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

TIH = 30
TTP = 22

AUGUST

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

DECEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

**Southwest District
Permitting Application**

New Site

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

Existing Site

Site ID: 22926 - 003		
Project Name: SUMTER COUNTY CLASS I LTC		
Type/Subcode: SF/09 14		
Fee submitted: \$100	<input checked="" type="checkbox"/> correct SMALL COUNTY FEE	() incorrect
Total Fee Required \$ _____ Need \$ _____ Refund \$ _____		

Applicant Information

Name: GARRY BREEDEN	
Role: DIRECTOR OF PUBLIC WORKS	
Company:	
Address: ON-FILE	
City:	Zip Code:
Phone:	

Fee verified by: S. MORGAN

Application Assigned To: ~~_____~~ Date: _____

THIS CHECK IS VOID WITHOUT A COLORED BACKGROUND AND AN ARTIFICIAL FINGERPRINT & CERTIFICATION SEAL WATERMARK ON THE BACK - HOLD AT ANGLE TO VIEW



Springstead Engineering, Inc.
Consulting Engineers Planners Surveyors Architects
727 South 14th Street, Leesburg, Florida 34748
Lake (352) 787-1414 Sumter (352) 793-3639 Fax (352) 787-7221

FIRST FEDERAL SAVINGS BANK
OF LAKE CO
LEESBURG, FL 34748
63-8445/2631

5337

2/21/2003

PAY TO THE
ORDER OF

FL DEPT OF ENVIRONMENTAL PROTECTION

\$ **100.00

One Hundred and 00/100

DOLLARS

FL DEPT OF ENVIRONMENTAL PROTECTION
3804 COCONUT PALM DRIVE
TAMPA, FL 33619

MEMO

921100.020 - PERMIT OPR OF COMP FAC

SIGNATURE HAS A COLORED BACKGROUND - BORDER CONTAINS MICROPRINTING

⑈005337⑈ ⑆263184459⑆ 1520000327298⑈

SEE ENDORSEMENT AREA ON BACK FOR U.S. PATENT 5538290; 5575508; 5641183 PERMANENT SECURITY

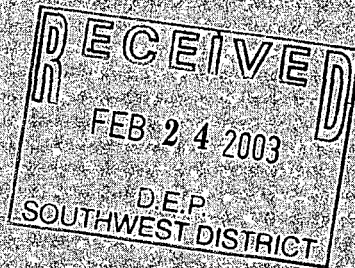
Springstead Engineering, Inc.

FL DEPT OF ENVIRONMENTAL PROTECTION

2/21/2003

5337

Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
02/21/2003	Bill	3157	100.00	100.00		100.00
					Check Amount	100.00



FIRST FEDERAL SAVIN 921100.020 - PERMIT OPR OF COMP FAC

100.00

SW fee check
2/24/03



**Springstead
Engineering, Inc.**

Consulting Engineers – Architects – Planners – Surveyors

EB - 0001723

AA - 0002820

LB - 0001723

727 South 14th Street
Leesburg, Florida 34748

Lake (352) 787-1414

Sumter (352) 793-3639

Fax (352) 787-7221

TO: *Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 34604-6899*

Date: June 23, 2004

Job No.: 921100.020

Attention: Mr. John Morris

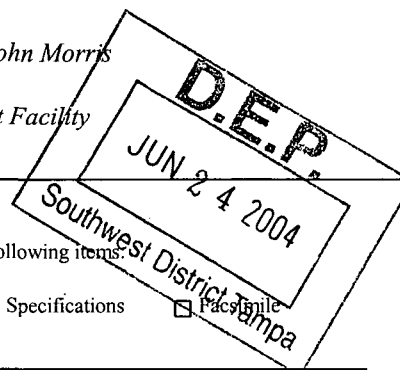
RE: SC Compost Facility

GENTLEMEN:

WE ARE SENDING YOU ☒ Enclosed ☐ under separate cover via _____ the following items:

☐ Shop Drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications ☐ Facsimile

☐ Copy of Letter ☐ Change Order ☐ _____



Copies	Date	No.	Description
1			Monitoring Well Map - Sheet 1 of 1

THESE ARE TRANSMITTED as checked below:

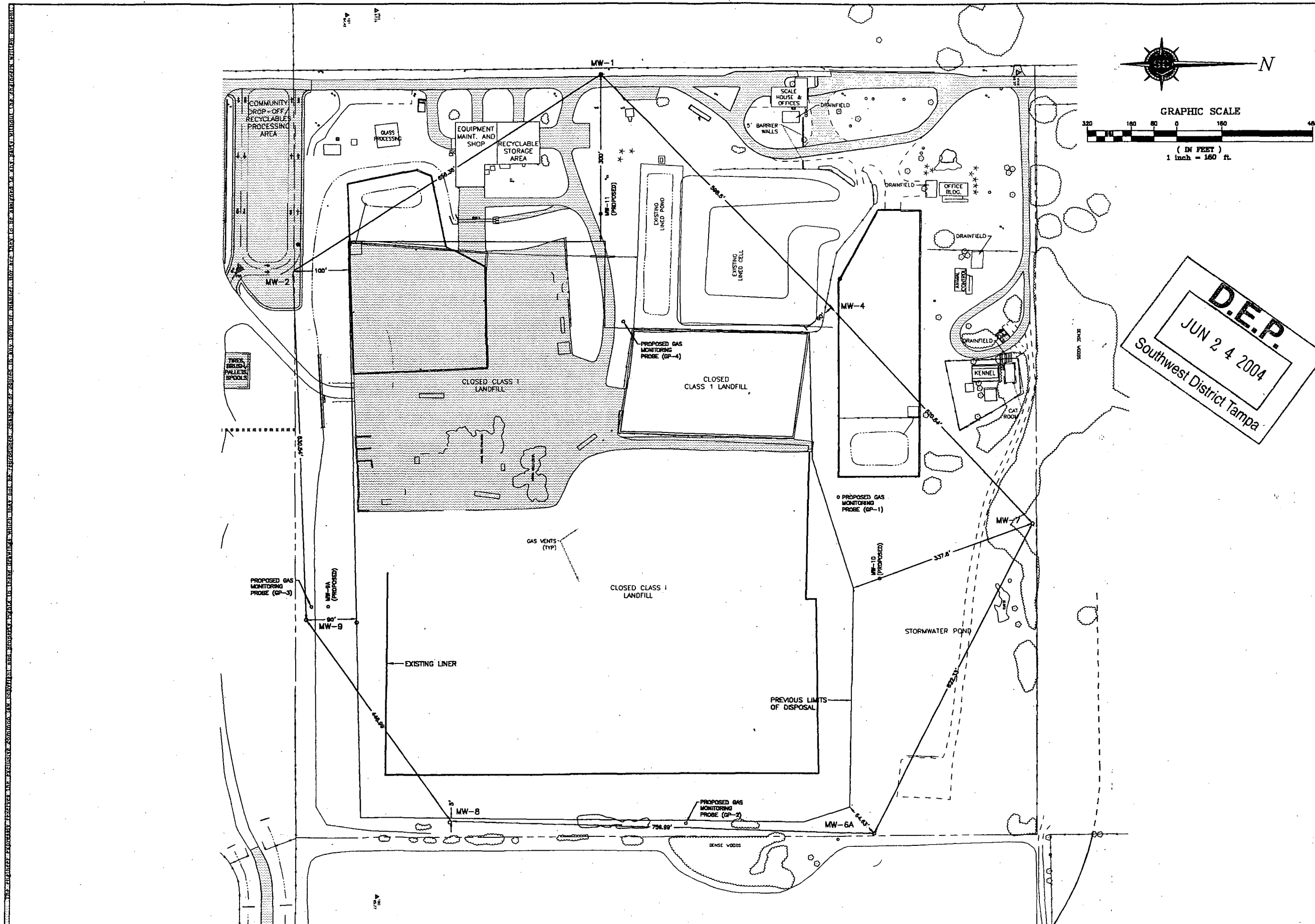
- | | | |
|---|---|---|
| <input type="checkbox"/> For Approval | <input type="checkbox"/> Approved as submitted | <input type="checkbox"/> Approved for payment |
| <input checked="" type="checkbox"/> For your use | <input type="checkbox"/> Approved as noted | <input type="checkbox"/> Resubmit ___ copies for approval |
| <input checked="" type="checkbox"/> As Requested | <input type="checkbox"/> Returned for corrections | |
| <input type="checkbox"/> For Review and Comment | <input type="checkbox"/> _____ | |
| <input type="checkbox"/> Material and/or prints returned after loan to us | | |

REMARKS:

COPY TO:

SIGNED:

Joy Lomberg for pws
David W. Springstead, P.E.



D.E.P.
JUN 24 2004
Southwest District Tampa

CLIENT:		SUMTER COUNTY BOARD OF COUNTY COMMISSIONERS	
PROJECT:		SUMTER COUNTY COMPOST FACILITY	
DRAWING:		MONITORING WELL MAP	
DATE:		1 of 1	
DRAWN BY:		JRH	
CHECKED BY:		JRH	
DATE:		6/23/04	
PROJECT NO.:		021100.020	
SHEET NO.:		01	

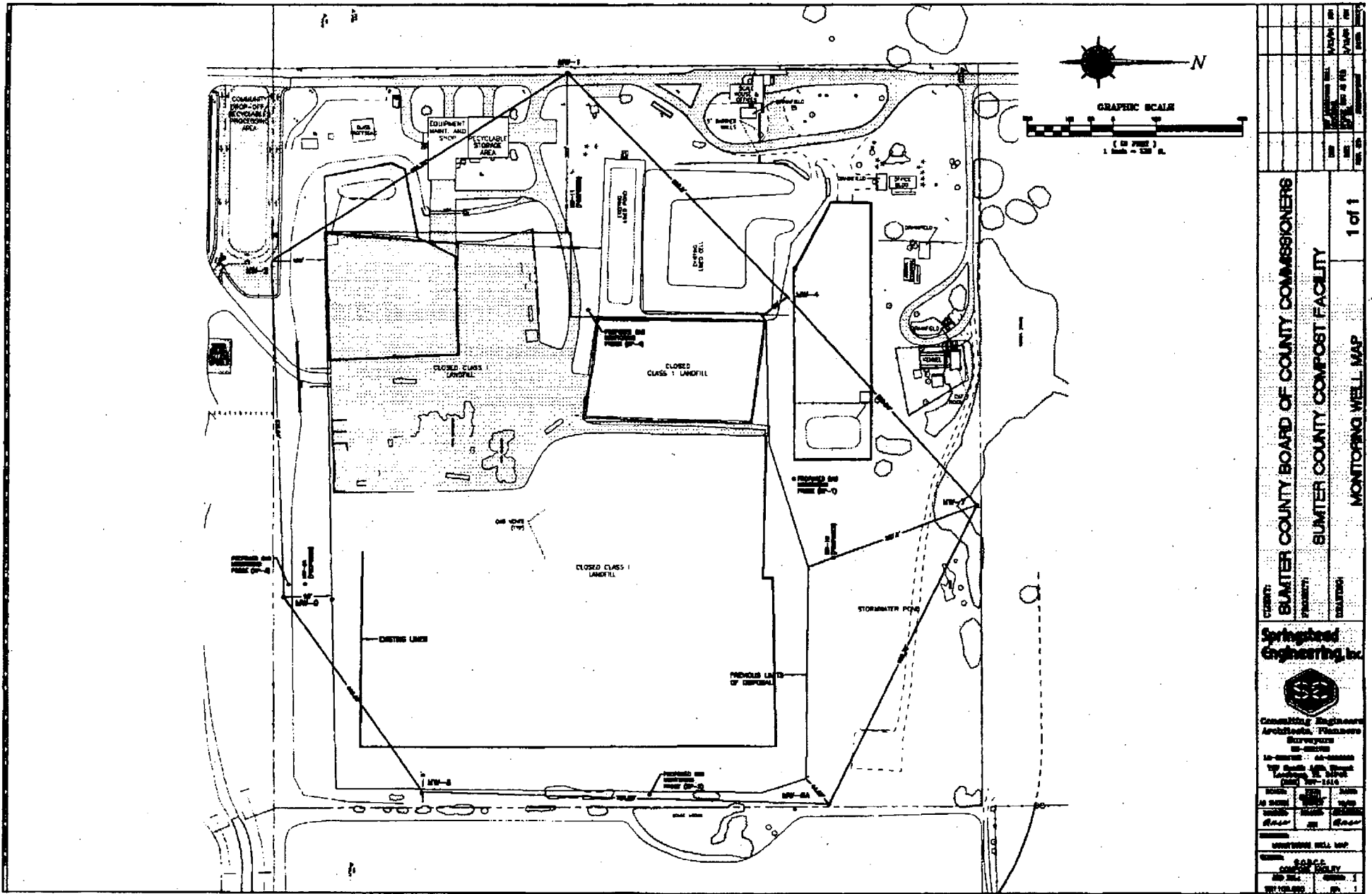
Springstead Engineering, Inc.

Consulting Engineers
Architects, Planners
Surveyors
KB-0001728
LB-0001728 AA-0002820
727 South 14th Street
Leesburg, FL 34748
(352) 787-1414

SCALE: AS SHOWN
FILE: OVERALL MASTER
DATE: 10/03
DESIGN: JRH
DRAWN: JRH
CHECKED: JRH

DRAWING: MONITORING WELL MAP
CLIENT: S.C.B.C.C.
COMPOST FACILITY
FOR NO.: 021100.020
SHEET: 01

ATTN: JOHN MORRIS; ORIGINAL TO BE OVERNIGHTED. DAVID



FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

3804 Coconut Palm Drive
Tampa, FL 33619-8318

FAX

FAXED
FAXED

Date: 6/21/04

Number of pages including cover sheet: 12

To:

BERNARD DEW @ 352-793-0207

DAVID SPRINGSTEAD @ 352-787-7221

Phone:

Fax phone:

CC:

From:

JOHN MORRIS

Phone: (813) 744-6100, EXT. 336

Fax phone: (813) 744-6125

REMARKS:

☐ Urgent

☒ For your review

☒ Reply ASAP

☐ Please comment

GENTLEMEN:

- ATTACHED IS THE DRAFT LONG-TERM CARE PERMIT FOR THE CLOSED SUMTER COUNTY LANDFILL FOR YOUR REVIEW, INCLUDING THE FOLLOWING ITEMS:

- PERMIT COVER PAGE (1 PAGE)

- SPECIFIC CONDITIONS (9 PAGES)

- SUMMARY OF COMPLIANCE DUE DATES (1 PAGE)

- BASED ON THE RECEIPT OF THE "PRELIMINARY CONTAMINATION ASSESSMENT PLAN" ON APRIL 15, 2004, THE PERMIT MUST BE ISSUED NO LATER THAN JULY 13, 2004.

- I'M TRYING TO GET THE PERMIT PULLED TOGETHER BY WEDNESDAY (6/23/04) SO I CAN GET IT ROUTED FOR SIGNATURES BY THE END OF THE WEEK; PLEASE PROVIDE ANY COMMENTS TO ME BY THE END OF TUESDAY (6/22/04); PLEASE CALL IF YOU HAVE QUESTIONS.

YOUR ASSISTANCE IS APPRECIATED.

John

DRAFT

PERMITTEE

Sumter County Public Works Department
209 North Florida Street
Bushnell, FL 33513

Attention: Bernard Dew,
County Administrator

PERMIT/CERTIFICATION

WACS ID No.: SWD/60/53008
Permit No.: **22926-003-SF**
Date of Issue:
Expiration Date: **06/15/2009**
County: Sumter
Lat/Long: 28° 44' 36" N
82° 05' 19" W
Sec/Town/Rge: 15/20S/22E
Project: Sumter County Closed
Class I Landfill,
Long-Term Care Permit

DRAFT

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Chapters 62-4, 62-330, 62-520, 62-522 and 62-701, Florida Administrative Code (F.A.C.). The above named permittee is hereby authorized to conduct long-term care, maintenance, and monitoring at the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Florida Department of Environmental Protection (Department), made a part hereof, and specifically described as follows:

For **long-term care, monitoring and maintenance** of a closed Class I landfill (approximately 30 acres), referred to as the Sumter County Landfill, subject to the specific and general conditions attached. The Sumter County Landfill is located approximately 1 mile east of I-75, south of C.R. 470, north of Bushnell, Sumter County, Florida.

Landfill details are summarized in the following table:

<u>Long Term Care Item</u>	<u>Description</u>
Final Survey Report	Updated site topography to be submitted within 90 days of completion of leveling and repaving the asphalt cover in accordance with Consent Order No. 04-0131 (see Specific Condition No. 8.e.)
Cert. of Closure Const. Completion (see Attachment 1)	Phase I - Inspection Dec. 6, 1989; DEP letter Dec. 11, 1989 Phase II - Inspection May 20, 1990; DEP letter May 24, 1990 Phase III - Inspection Feb. 22, 1990; DEP letter Mar. 5, 1990
Declaration to the Public	Recorded Feb. 25, 1998 (see Attachment 2)
Official Date of Closing	May 24, 1990
Date of Solid Waste Rule in Effect at Closing	Rule Date: <u>Nov. 28, 1989</u>
Long Term Care Period	Rule Citation: <u>17-701.075(1), F.A.C.</u> Specified Duration: <u>20 years, minimum</u>

DRAFT

<u>Landfill Feature</u>	<u>Description</u>
Bottom Liner Type	None
Leachate Collection	None
Final Cover/Cap	Phases I and II - synthetic cap, soil and vegetative cover Phase III - asphalt cap
Landfill Gas Venting	Passive vents

Replaces Permit No.: 22926-002-SF

This permit contains a summary of compliance items (see Attachment 3) that shall be submitted to the Department by the dates noted. If the compliance dates are not met and submittals are not received by the Department on the specified dates, enforcement actions may be initiated.

DRAFT

SPECIFIC CONDITIONS:

1. Facility Designation. This landfill shall be classified as a Class I closed landfill and shall be monitored and maintained in accordance with all applicable requirements of the Florida Administrative Code. Requirements for closure (Rule 17-7.070 through 17-7.074, F.A.C.), long-term care monitoring and maintenance (Rule 17-7.075, F.A.C.), and financial responsibility (Rule 17-7.076, F.A.C.) that are included in the Solid Waste Management Facilities rule with an effective date of November 28, 1989 remain in effect for the Sumter County landfill. Otherwise, the requirements in the current Solid Waste Management Facilities rule (Chapter 62-701, F.A.C., effective May 27, 2001) are in effect, except as identified by the Specific Conditions of this permit. In the event that the regulations governing this permitted operation are revised, the Department shall notify the permittee, and the permittee shall request modification of those Specific Conditions that are affected by the revision of regulations to incorporate those revisions.

2. Facility Stabilization. Rule 17-7.075(1), F.A.C. (effective date November 28, 1989) requires monitoring and maintenance of the facility in accordance with an approved closure plan for a minimum of 20 years from the date of closing. Any request for approval of a reduced long-term care period for the Sumter County Landfill shall provide reasonable assurance to the Department that the facility poses no significant threat to human health or the environment. Such a request must demonstrate that the facility has "stabilized" as indicated in Rule 17-701.020(61), F.A.C. (effective date November 28, 1989), as follows: the facility was closed with appropriate final cover, a good vegetative cover was established, and a good monitoring system was installed; and, there is a 10-year history of no leachate detected in the monitoring system, no detrimental erosion of cover has occurred, and subsidence of waste has ceased. Prior to the expiration of the long-term care monitoring and maintenance period the Department may extend the time period if the closure design or closure operations plan has been found to be ineffective.

DRAFT

3. Permit Application Documents. This permit is valid for long term care, monitoring and maintenance of approximately 30 acres of the landfill site in accordance with all applicable requirements of Department rules, and the reports, plans and other information, submitted as follow:

- Permit renewal application and supporting information, including:
 - Application fee for permit renewal, received February 24, 2003 (small county waiver)
 - Supporting information prepared by Springstead Engineering, Inc. (SEI), received February 24, 2003, including:
 - Section 1 -- DEP Form No. 62-701.900(1), Solid Waste Management Facility
 - Section 2 - DEP Form No. 62-701.900(4), Waste Processing Facility
 - Section 3 - DEP Form No. 62-701.900(10), Production of Compost
 - Section 4 - Engineering Report
 - Section 5 - Operations Manual
 - Section 6 - Water Quality Reports
 - Section 7 - Waste Quantity Reports
 - Section 8 - Financial Assurance Cost Estimates
 - Ground Water Monitoring Plan Evaluation, 1998 - 2002 (GWMPE), prepared by Central Testing Laboratory (CTL), dated March 3, 2003, received March 5, 2003

DRAFT

DRAFT

SPECIFIC CONDITIONS:

3. Permit Application Documents. (continued)

- Responses to the Department's first request for additional information dated March 25, 2003, were received October 9, 2003, including:
 - Transmittal letter from SEI dated October 7, 2003 (14 pages, to Steven Morgan)
 - Transmittal letter from SEI dated October 7, 2003 (9 pages, to John Morris)
 - Section 1 - DEP Form No. 62-701.900(1), Solid Waste Management Facility, revised
 - Section 4 - *Engineering Report*, revised
 - Subsection entitled "Requirements of Section M"
 - Subsection entitled "Requirements of Section P"
 - Subsection entitled "Requirements of Section R"
 - Subsection entitled "Supplemental Information for Long Term Care"
 - Subsection entitled "Report of Effectiveness of Landfill Design"
 - Subsection entitled "General Maintenance for the Covered Areas of the Closed Class I Landfill"
 - Proof of Publication of Declaration to the Public dated February 12, 1998
 - Section 5 - *Sumter County Solid Waste Facility, Operations Manual*, revised
 - Subsection entitled "Section 5.0 - Long Term Care"
 - App. F - Monitoring Well Location Map, prepared by SEI, dated October 2003
 - App. F - Overall Site Plan, Sheet 1 of 1, prepared by SEI, dated October 8, 2003
 - Section 6 - Transmittal letter from CTL, dated July 24, 2003:
 - Responses to selected review comments from the Department's letter dated March 25, 2003, including comment Nos., 16, 17, 19, 20, 21, 23.c.1) through 23.c.4), 23.d.1) and 23.d.2), 23.e.1), 23.e.3), and 25.d.
 - Table A - Monitor Well Construction Details, Sumter County Closed Class I Landfill, revised May 27, 2003
 - Revisions to the GWMPE prepared by CTL, dated May 28, 2003 (page 11 of 12 of the GWMPE, received via facsimile November 6, 2003)
 - Section 7 - Copies of closure documents and record drawings provided for Phases I, II and III
- Responses to the Department's second request for additional information dated November 7, 2003, were received January 14, February 2, and March 4, 2004, including:
 - Report entitled "Gas Migration Study Report", prepared by CTL, dated January 13, 2004, received January 14, 2004
 - Submittal from SEI, dated Jan. 30, 2004, received Feb. 2, 2004, including:
 - Section 1 -- Transmittal letter from SEI dated January 30, 2004 (15 pages, addressed to Steven Morgan);
 - Section 2 - DEP Form No. 62-701.900(1), Solid Waste Management Facility, revised pages 4, 5, 32, 33, 39;
 - Section 3 -- *Engineering Report*, revised December 30, 2003;
 - Subsection entitled "Requirements of Section M"
 - Subsection entitled "Supplemental Information for Long Term Care"
 - Subsection entitled "Report of Effectiveness of Landfill Design"
 - Subsection entitled "General Maintenance for the Covered Areas of the Closed Class I Landfill"
 - Section 4 -- *Sumter County Solid Waste Facility, Operations Manual*, revised January 30, 2004;
 - Subsection entitled "Section 5.0 - Long Term Care"
 - App. F - Monitoring Well Location Map, prepared by SEI, revised Jan. 12, 2004
 - App. F - Overall Site Plan, Sheet 1 of 1, prepared by SEI, revised Jan. 12, 2004
 - Section 5 - Transmittal letter from SEI dated January 30, 2004 (6 pages, addressed to John Morris);
 - Section 6 - Transmittal letter from SEI dated January 14, 2004 (3 pages, addressed to Steven Morgan)
 - Submittal from CTL dated March 2, 2004, received March 4, 2004, transmitting revisions to the GWMPE

DRAFT

DRAFT

SPECIFIC CONDITIONS:

DRAFT

3. Permit Application Documents. (Continued)

- Responses to the Department's letter dated April 6, 2004 which listed insufficiency items, including:
 - Submittal entitled "Proposed Preliminary Contamination Assessment Plan, Sumter County Closed Class I Landfill, Sumter County, Florida", dated April 2004, prepared by The Colinas Group, Inc., was transmitted via a letter from Sumter County dated April 12, 2004, received April 15, 2004
 - Letter from SEI dated April 19, 2004, received April 20, 2004 transmitting revisions to page 5 of the application form
 - Revisions to the GWMPE prepared by CTL, dated April 8, 2004, received April 28, 2004
 - Figure entitled "Monitoring Well Map", prepared by SEI, revised XXX. XX, 2004, received XXX. XX, 2004.

4. Permit Modifications. Any activities not previously approved as part of this permit may require a separate permit unless the Department determines a permit modification to be more appropriate. Permits shall be modified in accordance with the requirements of Rule 62-4.080, F.A.C. A modification which is reasonably expected to lead to substantially different environmental impacts and which requires a detailed review by the Department is considered to be a substantial modification.

5. Control of Access. Access to, and use of, the facility shall be controlled to prevent unauthorized dumping, or use of the facility by unauthorized persons as required by Rule 62-701.600(5)(i), F.A.C., and to protect the monitoring devices and general landfill condition.

DRAFT

6. Control of Nuisance Conditions. The operating authority shall be responsible for the control of odors and fugitive particulates arising from this facility. Such control shall minimize the creation of nuisance conditions on adjoining property. Complaints received from the general public and confirmed by Department personnel upon site inspection shall constitute a nuisance condition and the permittee must take immediate corrective action to abate the nuisance.

7. Stormwater System Management. The existing surface water management system shall be designed, constructed, operated and maintained to prevent surface water from running on to waste-filled areas. The existing surface water management system shall also include a stormwater runoff control system designed, constructed, operated, and maintained to collect and control stormwater to meet the requirements of Rule 62-330, F.A.C., and the requirements for management and storage of surface water in accordance with Rule 62-701.500(10) to meet applicable standards of Chapters 62-25, 62-302 and 62-330, F.A.C.

8. Facility Maintenance and Repair.

a. The site shall be properly maintained, including erosion control, maintenance of final cover (soil and vegetative cover and asphalt cover), maintenance of the monitor wells, maintenance of the gas probes, maintenance of the stormwater management system, and prevention of ponding over filled areas.

b. In the event of damage to any portion of the landfill site facilities, failure of any portion of the landfill systems (including dry or damaged wells), fire or explosion, the permittee shall **immediately (within 24 hours of discovery)** notify the Department explaining such occurrence, remedial measures to be taken, and time needed for repairs. Written detailed notification shall be submitted to the Department within **seven (7) days** following the occurrence outlining the cause of the failure and action taken to prevent such failures from recurring.

BY THE PERMITTEE OR
PERMITTEE'S REPRESENTATIVE

DRAFT

DRAFT

SPECIFIC CONDITIONS:

8. Facility Maintenance and Repair. (Continued)

c. In the event that any portion of the ground water monitoring system or gas probes are damaged, remedial measures shall be completed **within sixty (60) days** of the written notification required in Specific Condition No. 8.b., above, unless the Department determines that a minor permit modification is required, in which case the requirements of Specific Condition No. 17, below, shall apply.

d. In the event that the stormwater system is damaged or is not operating effectively, corrective actions shall be implemented **within thirty (30) days** of the written notification required in Specific Condition No. 8.b., above, unless otherwise approved by the Department.

e. The permittee shall inspect the previously closed portions of the landfill, at a minimum, **quarterly**. Repairs to the asphalt cover of the landfill shall be completed in accordance with Consent Order No. 04-0131. An updated site survey shall be provided within 90 days of completion of the required corrective actions to demonstrate the landfill cover has been adequately sloped to drain stormwater. Following completion of these repairs, any future instances where the asphalt final cover is found to be cracked, gouged, or otherwise damaged such that stormwater may infiltrate into the landfill below, the Department shall be notified as required by Specific Condition No. 8.b., above, and shall be repaired **within two (2) weeks** of the Department's approval of the corrective action plan.

f. Closed areas which are not covered by asphalt shall be inspected for erosion **within 48 hours** of each significant rainfall event. Areas with significant erosion shall be repaired **within two (2) weeks** of discovery.

g. Use of closed landfill areas requires consultation with and approval by the Department prior to conducting these activities in accordance with Rule 62-701.610(7), F.A.C.

DRAFT

9. Financial Assurance/Cost Estimates. The permittee shall provide adequate financial assurance for this facility and related appurtenances in accordance with Rule 17-701.076, F.A.C. (rule effective date November 28, 1989).

a. All costs for long-term care, monitoring and maintenance shall be adjusted and submitted **annually, by September 1st each year** to: Solid Waste Manager, Solid Waste Section, Department of Environmental Protection, 3804 Coconut Palm Drive, Tampa, Florida 33619-1352.

b. Proof that the financial mechanism has been adequately funded shall be submitted **annually** to: Financial Coordinator, Solid Waste Section, Department of Environmental Protection, 2600 Blair Stone Road, MS#4565, Tallahassee, Florida 32399-2400.

10. Gas Migration Monitoring. Landfill gas migration monitoring shall be conducted **annually** to ensure that combustible gas concentrations remain below 25% of the Lower Explosive Limit (LEL) calibrated to methane in all enclosed structures and below 100% of the LEL at the property boundary. Results of the annual landfill gas monitoring events shall be submitted **by December 15th** of each year, as follow:

a. Installation of gas probes GP-1 through GP-4 as shown on Figure 1 entitled "Monitoring Well Map", prepared by SEI, received XXX. XX, 2004 (**attached**) shall be completed **within 90 days of permit issuance**. An initial monitoring of gas probes GP-1 through GP-4 shall be conducted **within seven (7) days of installation** and the results shall be submitted to the Department **within seven (7) days of monitoring**. New gas probes GP-1 through GP-4 shall also be included in the annual monitoring events.

DRAFT

SPECIFIC CONDITIONS:

10. Gas Migration Monitoring. (continued)

DRAFT

b. Existing gas probes M-1 through M-29 as shown on the aerial photograph prepared by CTL (attached) shall be included in the annual monitoring events.

c. Ambient gas monitoring locations shall be sampled before the buildings are opened and in enclosed areas (i.e., electrical boxes, closets and restrooms, etc.), and included in the annual monitoring events at the following structures:

- "old" materials recovery building
- "new" materials recovery facility tipping area
- scale house/office building
- kennel for animal control
- Sheriff Department building

d. The annual gas monitoring event conducted prior to permit renewal shall also include the gas vents located within the closed landfill to determine if the buried wastes remain biologically active and continue to generate significant concentrations of landfill gasses.

e. The Department may require the installation of additional gas probes and/or ambient monitoring locations within any structures that may be associated with future uses of the property.

11. Gas Remediation. Gas concentrations exceeding 100% LEL in perimeter locations (GP-1 through GP-4, and M-1 through M-29) or 25% LEL in any on-site structure shall be reported to the Department **within 7 days of detection**, and shall be accompanied by a remediation plan describing the nature and extent of the gas migration problem and the proposed remedy. The remedy shall be completed **within 60 days of detection** unless otherwise approved by the Department.

DRAFT

12. Water Quality Requirements. The landfill shall be monitored throughout its design period (which includes long-term care) to control the movement of waste and waste constituents into the environment so that ground water and surface water quality standards and criteria of Chapters 62-4, 62-302, and 62-520, F.A.C., will not be violated beyond the zone of discharge specified for the landfill.

13. Water Quality Monitoring Quality Assurance.

a. All field work done in connection with the facility's Water Quality Monitoring Plan shall be conducted in accordance with the Standard Operating Procedures (SOPs) described in DEP-SOP-001/01 (February 2004), as referenced in Rule 62-160.210(1), F.A.C. All laboratory analyses done in connection with the facility's Water Quality Monitoring Plan shall be conducted by firms that hold certificates from the Department of Health Environmental Laboratory Certification Program under Chapter 64E-1, F.A.C., as referenced in Rule 62-160.300(1), F.A.C. The SOPs utilized and the laboratory's list of certified test methods and analytes must specifically address the types of sampling and analytical work that are required by the permit and shall be implemented by all persons performing sample collection or analysis related to this permit. Alternate field procedures and laboratory methods may be used if approved according to the requirements of Rules 62-160.220 and 62-160.330, F.A.C., respectively.

b. The field testing, sample collection and preservation, and laboratory testing, including the collection of quality control samples, shall be in accordance with the requirements of and methods approved by the Department in accordance with Rule 62-4.246 and Chapter 62-160, F.A.C. Approved methods published by the Department or as published in Standard Methods, or by A.S.T.M., or EPA methods shall be used.

DRAFT

SPECIFIC CONDITIONS:

DRAFT

14. Zone of Discharge.

a. The zone of discharge for this facility shall extend horizontally 100 feet from the limits of the landfill phase edges or to the property boundary, whichever is less, and shall extend vertically through the surficial aquifer to the bottom of the first confining unit.

b. The permittee shall ensure that the water quality standards and minimum criteria for Class G-II ground waters will not be exceeded at the boundary of the zone of discharge according to Rule 62-520.420, F.A.C., and that the minimum criteria listed in Rule 62-520.400, F.A.C., will not be exceeded outside the footprint of the landfill.

15. Ground Water Monitor Well Locations. The ground water monitor wells shall be located as shown on Figure 1 entitled "Monitoring Well Map", prepared by SEI, received XXX. XX, 2004 (**attached**), as follow:

<u>Well No.</u>	<u>WACS Testsite No.</u>	<u>Aquifer</u>	<u>Designation</u>	<u>Location</u>
MW-2	4535	Floridan	Lateral detection/ Vertical compliance	See Figure 1
MW-4	4537	Floridan	Lateral detection/ Vertical compliance	↓
MW-6A	4557	Floridan	Background	↓
MW-8	4592	Floridan	Lateral detection/ Vertical compliance	↓
MW-9A *	21211	Floridan	Lateral detection/ Vertical compliance	↓
MW-10 *	21212	Floridan	Lateral detection/ Vertical compliance	↓
MW-11 *	21213	Floridan	Lateral detection/ Vertical compliance	↓
MW-1	4534	Floridan	Piezometer	↓
MW-7	4564	Floridan	Piezometer	↓
MW-9	4593	Floridan	Piezometer	↓

DRAFT

* = to be installed **within 60 days of permit issuance** in accordance with the construction details provided in Section 6.0 and Appendix IX of the document entitled "Ground Water Monitoring Plan Evaluation, 1998 - 2002", prepared by CTL, revised April 8, 2004, received April 28, 2004; documentation of well construction details as indicated in Specific Condition Nos. 17.a. and 17.c. shall be submitted **within 30 days of well installation**; an initial sampling event as indicated in Specific Condition No. 16.b. shall be conducted **within 7 days of well installation and development**; results of initial sampling event shall be submitted to the Department **within 60 days of sample collection**.

All monitor wells are to be clearly labeled and easily visible at all times. The permittee should keep all wells locked to minimize unauthorized access.

16. Ground Water Sampling. The locations, parameters, and frequencies specified herein represent the minimum requirements for ground water monitoring. Additional samples, wells, and parameters may be required based upon subsequent analysis. Method Detection Limits must be reported at or below the Maximum Contaminant Levels established for the individual parameters to demonstrate compliance with Class G-II ground water standards referenced in Chapter 62-520, F.A.C. Compliance with ground water standards will be based on analysis of unfiltered samples.

a. Ground water levels shall be measured for all sampling events described in Specific Condition Nos. 16.b., 16.c., and 16.d., at all active wells and piezometers listed in Specific Condition No. 15 to a precision of 0.01 foot. Ground water surface contour maps prepared for each sampling event shall include water elevations (feet NGVD) calculated for each well and piezometer.

DRAFT

SPECIFIC CONDITIONS:

DRAFT

16. Ground Water Sampling. (continued)

b. An initial sampling event shall be conducted at wells MW-9A, MW-10 and MW-11 **within 7 days of well installation and development** for analysis of the following parameters:

Field Parameters
Static water levels
before purging
Specific conductivity
pH
Temperature
Turbidity
Dissolved oxygen
Colors & sheens (by observation)

Laboratory Parameters
Total ammonia
Chlorides
Nitrate
Total dissolved solids (TDS)
Parameters listed in 40 CFR
Part 258, Appendix II
Iron
Mercury
Sodium

c. Wells MW-2, MW-4, MW-6A, MW-8, MW-9A, MW-10 and MW-11 shall be sampled **quarterly** for analysis of the following parameters:

Field Parameters
Static water levels
before purging
Specific conductivity
pH
Temperature
Turbidity
Dissolved oxygen
Colors & sheens
(by observation)

Laboratory Parameters
Chlorides
Fluoride
Nitrate
Total ammonia
Gross alpha
Radium 226 + 228
Total dissolved solids (TDS)
Aluminum
Antimony
Cadmium
Chromium
Iron
Lead
Manganese
Mercury
Silver
Sodium
Thallium

d. To demonstrate that the reduced list of parameters listed in Specific Condition No. 16.c. remains appropriate, wells MW-2, MW-4, MW-6A, MW-8, MW-9A, MW-10 and MW-11 shall be sampled **during the fourth quarter of each year** for analysis of the parameters listed in Rule 62-701.510(8)(a), F.A.C., as follow:

Field Parameters
Static levels
before purging
Specific conductivity
pH
Temperature
Turbidity
Dissolved oxygen
Colors & sheens
(by observation)

Laboratory Parameters
Chlorides
Fluoride
Nitrate
Total ammonia
Total dissolved solids (TDS)
Parameters listed in 40 CFR
Part 258, Appendix I
Gross alpha
Radium 226 + 228
Aluminum
Iron
Manganese
Mercury
Sodium

DRAFT

17. Ground Water Monitor Well Construction. Prior to construction of any new or replacement wells (excluding wells MW-9A, MW-10 and MW-11), the permittee shall request and receive Department approval of a minor permit modification. The following information is required to be submitted within 90 days of new or replacement well installation, or as stated below:

a. Construction details for all new or replacement wells shall be provided to the Department's Southwest District Office on Department Form No. 62-522.900(3), Monitor Well Completion Form (see Attachment 4).

b. Within one week of well completion and development, each new or replacement well shall be sampled for the parameters listed in Rules 62-701.510(8)(a), and 62-701.510(8)(d), F.A.C.

c. A surveyed drawing shall be submitted in accordance with Rule 62-701.510(3)(d)(1), F.A.C., showing the location of all monitoring wells (active and abandoned) horizontally located in degrees, minutes and seconds of latitude and longitude, and the elevation of the top of the well casing to the nearest 0.01 foot, National Geodetic Vertical Datum. The surveyed drawing shall include the monitor well identification number, locations and elevations of all permanent benchmarks and/or corner monument markers at the site. The survey shall be conducted by a Florida Registered Surveyor.

DRAFT

SPECIFIC CONDITIONS:

DRAFT

18. Well Abandonment. All wells not a part of the approved Water Quality Monitoring Plan shall be plugged and abandoned in accordance with Rule 62-532.440, F.A.C., and the Southwest Florida Water Management District. The permittee shall submit a written report to the Department within 90 days of well abandonment documenting verification of the well abandonment. A written request for exemption to the abandonment of a well must be submitted to the Department's Solid Waste Section for approval.

19. Verification/Evaluation Monitoring. If at any time monitoring parameters are detected at concentrations significantly above background water quality, or exceed the Department's water quality standards or criteria at the edge of the zone of discharge, the permittee has 30 days within receipt of the laboratory data to resample the monitor well(s) to verify the original analysis. Should the permittee choose not to resample, the Department will consider the water quality analysis to be representative of current ground water conditions at the facility. If the data is confirmed, or if the permittee chooses not to resample, the permittee shall notify the Department within 14 days of this finding. Upon notification by the Department, the permittee shall initiate evaluation monitoring, prevention measures and corrective action as described in Rule 62-701.510(7), F.A.C.

20. Water Quality Reporting Requirements. All ground water quality monitoring shall be reported on Department Form 62-522.900(2), Groundwater Monitoring Report (see Attachment 5). The permittee shall submit to the Department the results of the water quality analyses required by Specific Condition Nos. 16.c. and 16.d. quarterly by January 15th, April 15th, July 15th and October 15th of each year. Each report shall contain the information listed in Rule 62-701.510(9)(a), F.A.C., including a ground water contour map representing conditions at the time of sampling and a summary of any water quality standards or criteria that are exceeded. The results shall be sent to: Solid Waste Section, Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-1352.

DRAFT

21. Ground Water Monitoring Plan Evaluation.

a. An evaluation of the adequacy of existing wells MW-2 and MW-4 shall be submitted to the Department **within 30 days of receipt of Department approval** of the Preliminary Contamination Assessment Report (PCAR) prepared in accordance with Consent Order No. 04-0131. This evaluation shall be the basis for determining the need to install additional detection and/or compliance wells in the vicinity of wells MW-2 and MW-4. In the event that additional wells are required and upon receipt of Department approval of the recommendations of the PCAR, the permittee shall submit a request for minor permit modification to revise the approved monitoring plan (Specific Condition Nos. 15 and 16) and establish the routine list of parameters and sampling frequency at the additional wells.

b. **By June 15, 2006 and no later than one hundred and eighty (180) days before permit expiration (by December 15, 2008),** the permittee shall submit an evaluation of the water quality monitoring data. The due dates and time periods to be covered by the evaluations are summarized below:

<u>Ground Water Monitoring Evaluation Due Date</u>	<u>Starting Sampling Event</u>	<u>Ending Sampling Event</u>
June 15, 2006	First quarter 2003	First quarter 2006
December 15, 2008	Second quarter 2006	Third quarter 2008

The evaluations shall include the applicable information as listed in Rule 62-701.510(9)(b), F.A.C., and shall include assessment of the effectiveness of the existing landfill design and operation as related to the prevention of ground water contamination. Any ground water contamination that may exist shall be addressed as part of a ground water investigation for the landfill assessment.

DRAFT

SPECIFIC CONDITIONS:

DRAFT

22. Permit Renewal Requirements. No later than one hundred eighty (180) days prior to permit expiration (by December 15, 2008), the permittee shall apply for renewal of this long-term care permit on forms and in a manner prescribed by the Department, to assure conformance with all applicable Department rules. Applicants for permit renewal shall demonstrate how they will comply with any applicable new or revised laws or rules relating to construction, operation, or closure, monitoring and maintenance of landfills. Long-term care plans shall be updated at the time of permit renewal to reflect changes in closure design and long-term care requirements. The application must include an engineering report that evaluates the landfill cover, subsidence, gas generation and migration, stormwater control, and the status of other landfill systems. Alternately, the permittee may submit a Stabilization Assessment Report to demonstrate that the facility has "stabilized" as defined in Rule 17-701.020(61), F.A.C. (described in Specific Condition No. 2, above), and request that the Department authorize the termination of long-term care, monitoring and maintenance activities at the Sumter County Landfill. In the event that the provided data does not demonstrate that the facility has met the definition of "stabilized", renewal of the long-term care permit shall be required.

DRAFT

23. Professional Certification. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.), Florida Statutes, applicable portions of permit applications, permit modifications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.

24. General Conditions. The permittee shall be aware of and operate under the "General Conditions." General Conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes.

25. Permit Acceptance. By acceptance of this Permit, the permittee certifies that he/she has read and understands the obligations imposed by the Specific and General Conditions contained herein, including the dates of permit expiration and renewal deadlines. It is a violation of this permit to fail to comply with all permit conditions and deadlines.

Executed in Tampa, Florida

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT

Deborah A. Getzoff
District Director
Southwest District

ATTACHMENT 3

SPECIFIC CONDITION	SUBMITTAL DUE DATE	REQUIRED ITEM
9.a.	Annually by September 1 st of each year	Submit financial assurance cost estimate updates
9.b.	Annually	Submit proof of funding
10.	Annually, by December 15 th of each year	Submit results of landfill gas migration monitoring
20.	Quarterly, by January 15 th , April 15 th , July 15 th , and October 15 th of each year	Submit results of ground water sample analysis
21.b.	June 15, 2006, and December 15, 2008	Submit an evaluation of the ground water monitoring plan
22.	180 days prior to permit expiration (by December 15, 2008)	Submit permit renewal application or stabilization assessment report

DRAFT

** Transmit Conf. Report **

P.1

Jun 21 2004 13:51

Telephone Number	Mode	Start	Time	Pages	Result	Note
813527930207	NORMAL	21,13:33	18'00"	12	# O K	

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

3804 Coconut Palm Drive
Tampa, FL 33619-8318

FAX

Date: 6/21/04

Number of pages including cover sheet: 12

To:

BERNARD DEW C 352-793-0007

DAVID SPRINGSTEAD C 352-787-7221

Phone:

Fax phone:

CC:

From:

JOHN MORRIS

Phone: (813) 744-6100, EXT. 334

Fax phone: (813) 744-6125

REMARKS:

☐ Urgent☒ For your review☒ Reply ASAP☐ Please comment

GENTLEMEN:

- ATTACHED IS THE DRAFT LONG-TERM CARE PERMIT FOR THE CLOSED SUMTER COUNTY LANDFILL FOR YOUR REVIEW, INCLUDING THE FOLLOWING ITEMS:

- PERMIT COVER PAGE (1 PAGE)

- SPECIFIC CONDITIONS (9 PAGES)

- SUMMARY OF COMPLIANCE DUE DATES (1 PAGE)

- BASED ON THE RECEIPT OF THE "PRELIMINARY CONTAMINATION ASSESSMENT PLAN" ON APRIL 15, 2004, THE PERMIT MUST BE ISSUED NO LATER THAN JULY 13, 2004.

** Transmit Conf. Report **

P.1

Jun 21 2004 13:59

Telephone Number	Mode	Start	Time	Pages	Result	Note
813527877221	NORMAL	21,13:51	7'11"	12	* O K	

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

3804 Coconut Palm Drive
Tampa, FL 33619-8318

FAX

Date: 6/21/04

Number of pages including cover sheet: 12

To:

BERNARD DEW @ 352-793-0207

DAVID SPRINGSTEAD @ 352-787-7221

Phone:

Fax phone:

CC:

From:

JOHN MORRIS

Phone: (813) 744-6100 EXT. 336

Fax phone: (813) 744-6125

REMARKS:

☐ Urgent

☒ For your review

☒ Reply ASAP

☐ Please comment

GENTLEMEN:

- ATTACHED IS THE DRAFT LONG-TERM CARE PERMIT FOR THE CLOSED SUMTER COUNTY LANDFILL FOR

YOUR REVIEW, INCLUDING THE FOLLOWING ITEMS:

- PERMIT COVER PAGE (1 PAGE)

- SPECIFIC CONDITIONS (9 PAGES)

- SUMMARY OF COMPLIANCE DUE DATES (1 PAGE)

- BASED ON THE RECEIPT OF THE "PRELIMINARY CONTAMINATION ASSESSMENT PLAN" ON APRIL 15, 2004,

THE PERMIT MUST BE ISSUED NO LATER THAN JULY 13, 2004.



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
3804 COCONUT PALM DRIVE
TAMPA, FL 33619-1352**

FAXED

FAX

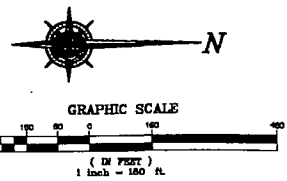
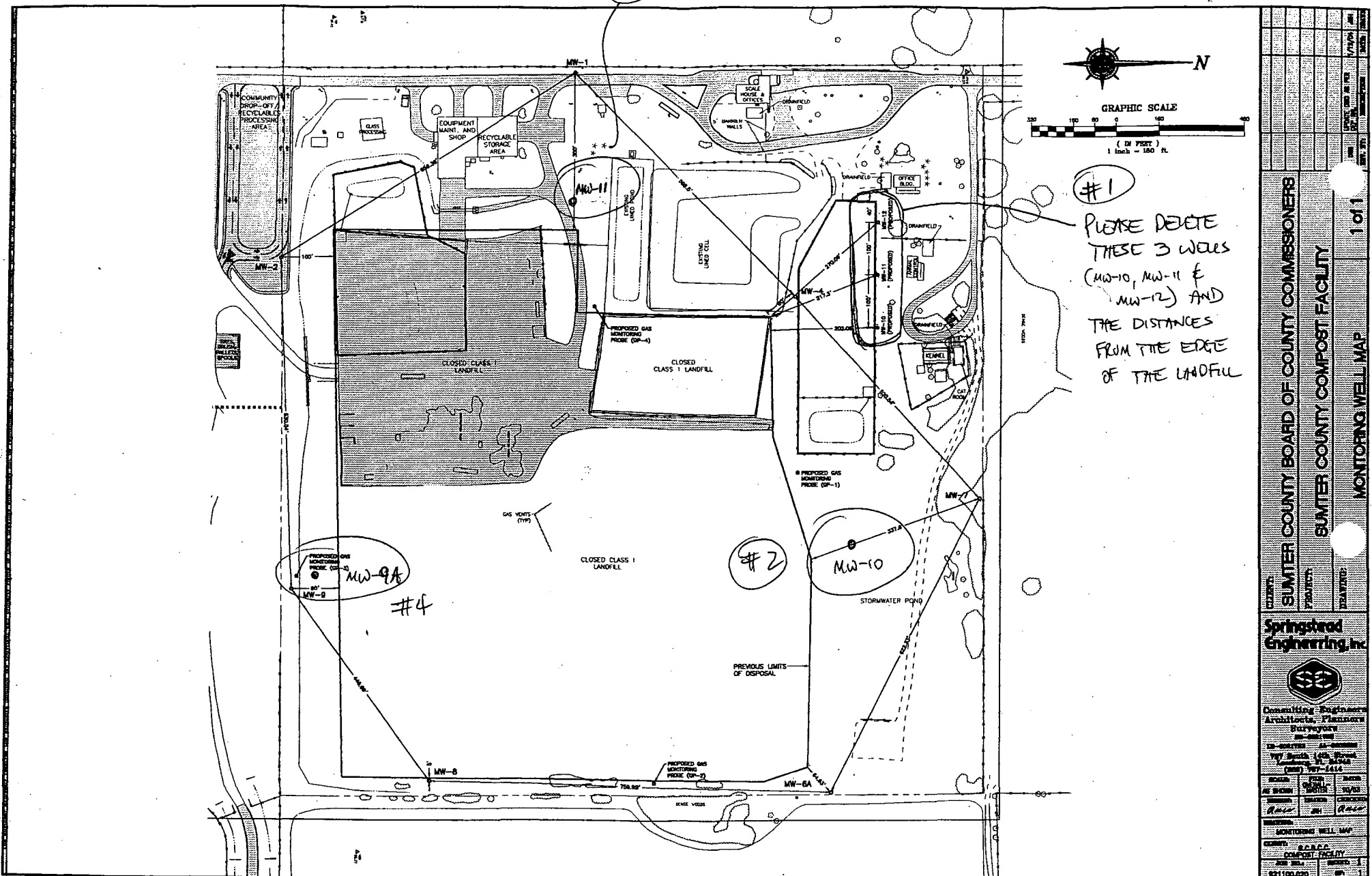
Date: JUNE 18, 2004
Number of pages including cover sheet: 2

TO:	DAVID SPRINGSTEAD	FROM:	JOHN MORRIS
PHONE:		PHONE:	(813) 744-6100, EXT. 334
FAX #:	352-787-7221	FAX #:	(813) 744-6125
CC:			
REMARKS:	Urgent	<input checked="" type="checkbox"/> For your review ^{USE}	Reply ASAP Please comment
DAVID -			
I'M LOOKING FOR AN UPDATED MONITORING WELL MAP FOR USE AS A PERMIT ATTACHMENT TO			
THE LONG TERM CARE PERMIT FOR SUMTER COUNTY CLOSED LF. THE FIGURE WAS INCLUDED AS			
APPENDIX F TO THE "OPERATIONS MANUAL" THAT WE RECEIVED FEB 2, 2004.			
(#1) - PLEASE DELETE MW-10, MW-11 & MW-12 THAT WERE SHOWN NEAR THE COMPOST PAD BY MW-4			
(#2) - PLEASE ADD MW-10 ABOUT 50 FT FROM THE LANDFILL EDGE, NEAR MW-7			
(#3) - PLEASE ADD MW-11 ABOUT 50 FT FROM THE LANDFILL EDGE, NEAR MW-1			

(#4) - PLEASE ADD MW-9A ABOUT 50 FT FROM THE LANDFILL EDGE, NEAR MW-9

I TRIED TO SHOW THESE CHANGES ON THE ATTACHED FIGURE. PLEASE CALL IF YOU HAVE QUESTIONS.
YOUR ASSISTANCE IS APPRECIATED.

John




#1
PLEASE DELETE
THESE 3 WELLS
(MW-10, MW-11 &
MW-12) AND
THE DISTANCES
FROM THE EDGE
OF THE LANDFILL

#2

#3

#4

CLIENT	SUMTER COUNTY BOARD OF COUNTY COMMISSIONERS	PROJECT	SUMTER COUNTY COMPOST FACILITY	DATE	1/1/01
DESIGNED BY		DRAWN BY		CHECKED BY	
Springstead Engineering Inc.  Consulting Engineers Architects, Planners Surveyors 1000 Highway 100 Vero Beach, FL 33408 (888) 767-2616					
SCALE	AS SHOWN	DATE	1/1/01	BY	RAH
REVISION	1	DATE	1/1/01	BY	RAH
MONITORING WELL MAP					
SUMTER COUNTY COMPOST FACILITY SHEET NO. 1 OF 1					

** Transmit Conf. Report **

P.1

Jun 18 2004 14:07

Telephone Number	Mode	Start	Time	Pages	Result	Note
813527877221	FINE	18,14:05	2'27"	2	* O K	



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
3804 COCONUT PALM DRIVE
TAMPA, FL 33619-1352**

FAX

Date: JUNE 18, 2004
Number of pages including cover sheet: 2

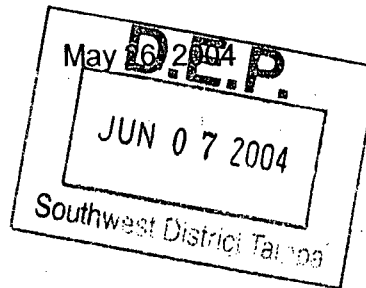
TO:	DAVID SPRINGSTEAD	FROM:	JOHN MORRIS
PHONE:		PHONE:	(813) 744-6100, EXT. 334
FAX #:	352-787-7221	FAX #:	(813) 744-6125
CC:			
REMARKS:	Urgent	USE ✓ For your review	Reply ASAP Please comment
DAVID -			
I'M LOOKING FOR AN UPDATED MONITORING WELL MAP FOR USE AS A PERMIT ATTACHMENT TO			
THE LONG TERM CARE PERMIT FOR SENTER COUNTY CLOSED LF. THE FIGURE WAS INCLUDED AS			
APPENDIX F TO THE "OPERATIONS MANUAL" THAT WE RECEIVED FEB 2, 2004.			

CR 206118
SM 11/6/25
JRM JRM



Jeb Bush
Governor

John O. Agwunobi, M.D.
Secretary



RECEIVED

JUN 04 2004

Central Dist. - DEP

Certified No.
7001 1140 0001 7580 8809

Humane Society/SPCA of Sumter County, Inc.
Agent: Dave Starnes
P.O. Box 253
Bushnell, FL 33513

RE: **Application for Variance from Chapter 64E-8, Florida Administrative Code (F.A.C.)**
Sumter County
Variance No. 2004-01
CR 529A, Lake Panasoffkee, FL 33538
Variance from Chapter 64E-8.002(b)3, F.A.C.(450' to a solid waste disposal facility)

Dear Mr. Starnes:

The granting of variances from established standards is intended to relieve hardships where no reasonable alternative exists, where the water system will not adversely affect the health of the applicant or the public, and the applicant did not intentionally cause the hardship. After reviewing your application and considering the recommendations of the Sumter County Health Department (CHD), the Variance Review and Advisory Committee for the Department of Health's Drinking Water Program has recommended approval of your application for variance in the case of the above referenced property. Please be advised that your variance request is granted subject to the provisos stated below.

Facts: The property is located on CR 529A in Lake Panasoffkee, Florida. An animal shelter and limited use well are proposed on this property. Chapter 64E-8.002(b)3., F.A.C., requires that all limited use wells be constructed at least 500 feet from solid waste disposal facilities. The maximum achievable distance between a nearby disposal facility and the proposed limited use well is 450 feet. There is no available location on the property for a limited use well that meets all required setbacks.

Conclusions: The proposed water well location violates Chapter 64E-8.002(b)3., F.A.C., which requires that all limited use wells be constructed at least 500 feet from solid waste disposal facilities. Maintaining maximum obtainable setback distances, protective well construction measures and periodic water quality monitoring as specified in the provisos below, will provide reasonable protection from this hazard. Under the circumstances presented, this variance is the best available solution to a problem not of your causing.

RECEIVED

JUN 04 2004

Central Dist. -

Humane Society
May 26, 2004
Page 2

Provisos:

1. The water well must be installed at the maximum obtainable distance from the solid waste disposal facility, no less than 450 feet.
2. The water well shall be drilled to a minimum of 150 feet into the water bearing strata and the well casing shall be fully grouted from bottom to top in accordance with Chapter 62-532.500(2)(f)4, F.A.C.
3. Following completion of the well, and every five years thereafter, the well water shall be analyzed for primary drinking water contaminants (inorganics, volatile organic compounds, and regulated synthetic organic compounds) as outlined in Chapter 62-550, F.A.C. All analyses must be performed by an approved laboratory using approved methods.
4. All sample results shall be submitted to the Sumter County Health Department within 30 days of receipt. If the results are unsatisfactory, corrective measures must immediately be taken to correct the water quality.
5. Applicant must meet all other requirements for limited use public water systems in accordance with Chapter 64E-8, F.A.C.

If you have questions regarding this variance, you may contact Michelle Fredette at (850) 245-4444 ext. 2716.

Sincerely,



Bart Bibler, P.E., Chief
Bureau of Water Programs

BB/mf

Enclosures

cc: Keith Hunter, Environmental Manager, Sumter CHD
Michelle Fredette, Environmental Health Program Consultant, HSEW

RECEIVED

JUN 04 2004

Central Dist. - DEP

NOTICE OF RIGHTS

A party whose substantial interest is affected by this order may petition for an administrative hearing pursuant to sections 120.569 and 120.57, Florida Statutes. Such proceedings are governed by Rule 28-106, Florida Administrative Code. A petition for administrative hearing must be in writing and must be received by the Agency Clerk for the Department, within twenty-one (21) days from the receipt of this order. The address of the Agency Clerk is 4052 Bald Cypress Way, BIN # A02, Tallahassee, Florida 32399-1703. The Agency Clerk's facsimile number is 850-410-1448.

Mediation is not available as an alternative remedy.

Your failure to submit a petition for hearing within 21 days from receipt of this order will constitute a waiver of your right to an administrative hearing, and this order shall become a "final order".

Should this order become a final order, a party who is adversely affected by it is entitled to judicial review pursuant to Section 120.68, Florida Statutes. Review proceedings are governed by the Florida Rules of Appellate Procedure. Such proceedings may be commenced by filing one copy of a Notice of Appeal with the Agency Clerk of the Department of Health and a second copy, accompanied by the filing fees required by law, with the Court of Appeal in the appropriate District Court. The notice must be filed within 30 days of rendition of the final order.

STATE OF FLORIDA
DEPARTMENT OF HEALTH

PETITION FOR HEARING

Chapter 64E-8, Florida Administrative Code, Variance Request:
Sumter County 2004-01

Check **one** box only:

- ☐ **I do not accept the provisions** of the variance approval and hereby **request an informal administrative hearing**. I do not dispute the facts the department used in approving my variance request. My reasons for requesting this hearing are as follows (You must include your reasons for requesting this hearing.):

- ☐ **I do not accept the provisions** of the variance approval and hereby **request a formal administrative hearing** before an administrative law judge with the division of Administrative Hearings because I **disagree with the facts** used by the department in approving my variance request. The specific facts I disagree with and my reasons for requesting this hearing are as follows (You must include the specific facts on which you wish to dispute and your reasons for requesting this hearing.):

(Attach additional sheets if necessary)

Requirements for the initiation of a proceeding or hearing not involving disputed issues of material are found in Rule 28-106.301, Florida Administrative Code (F.A.C.).

Requirements for the initiation of a proceeding or hearing involving disputed issues of material are found in Rule 28-106.201, F.A.C.

Signature: _____

Typed or Printed Name: _____

Date: _____

To request a hearing, return this form to:

Department of Health

Agency Clerk

4052 Bald Cypress Way

Bin # A-02

Tallahassee, FL 32399-1703

cc: Edward A. Bettinger, R.S., M.S., Bureau of Water Programs

February 28, 2003

Page No. 1

Revised May 28, 2003

Revised March 2, 2004

Revised April 8, 2004

1.0 Introduction

Sumter County Public Works Department received a five year permit (No. 22926-002-SF) issued May 29, 1998 to conduct long-term care monitoring and maintenance of a closed Class I Landfill (approximately 30 acres), referred to as the Sumter County Class I Landfill. The permit was issued subject to specific conditions. This report is prepared to provide an evaluation of the water quality monitoring as required by Specific Condition No. 20 of the permit.

MW-2 and MW-4 are currently being addressed under a consent order and preliminary contingency assessment plan (PCAP). Discussion regarding these wells is for information purposes. Information regarding modifications for these wells will be discussed in the PCAP.

2.0 Ground Water Monitoring Plan

The groundwater monitoring plan for this permit required sampling and testing from seven (7) monitor wells positioned in the zone of discharges around the landfill. The location of these wells is presented in the attached Figure 1. The monitor wells were identified as MW-1, MW-2, MW-4, MW-6A, MW-7, MW-8 and MW-9. All wells are considered to represent the water of the Floridian Aquifer. Monitor well MW-6A has been designated as a background well with all other wells designated as Detection Wells. Details of monitor well construction and soil lithologies are presented on the Typical Monitor Well Detail, MW Boring Logs and Well Completion reports in Appendix I.

Response to RAI dated 3/25/03 Comment 20 M.1.c(3)

Based on the hydrographs, MW-6A fluctuates like the other monitor wells at the site. According to the Boring Log in Appendix I, the well is in limestone and most of the water

PARTIAL RESPONSES
TO COMPLETED LTR
4/28/04

HAND-DELIVERED
MATERIALS REFERENCED
IN LETTER FROM SPRINGSTEAD
ENGINEERING DATED 4/20/04

levels have been recorded in the limestone stratum of the well. There is no evidence of a surficial aquifer. For these reasons, MW-6A is thought to be screened in all aquifers that may be affected by the landfill.

In accordance with Specific Conditions 13a of the permit, the plan required sampling of all wells quarterly for the following parameters:

<u>Field Parameters</u>	<u>Laboratory Parameters</u>			
Static water levels	Aluminum	Thallium	Selenium	Antimony
before purging	Arsenic	Silver	Beryllium	Nickel
Specific Conductivity	Barium	Sodium	Chloride	Fluoride
pH	Cadmium	Copper	Cyanide	Nitrate
Turbidity	Chromium	Iron	Sulfate	TDS
Temperature	Manganese	Zinc	Nitrite	Ammonium
Colors, sheens	Lead	Mercury	Foaming Agents	
	Gross Alpha	Radium-226 + Radium-228		

Response to RAI dated 12/07/2003 Comment 20M.1.f(3)

<u>Field Parameters</u>	<u>Laboratory Parameters</u>		
Static water levels	Chlorides	Aluminum	Mercury
before purging	Fluoride	Antimony	Silver
Specific conductivity	Nitrate	Cadmium	Sodium
pH	Total ammonia	Chromium	Thallium
Temperature	Total dissolved solids (TDS)	Iron	
Turbidity	Gross alpha	Lead	Manganese
Dissolved oxygen	Radium 226 + 228		
Colors & sheens			
(by observation)			

Specific condition 13b required testing annually for the above parameters, as well as the Volatile Organic Compounds, Pesticides, PCB=s and Trihalomethanes listed in the Primary Drinking Water Standards listed in F.A.C. Chapter 62-550.310 (Rule dated September 7, 1994).

The results of all quarterly testing is presented in Appendix II by a Summary Table and graphic plot of each parameter through the period of review. The Annual Test results are presented in

Appendix III.

Response to RAI dated 3/25/03 Comment 20 M.1.f(3)

It is recommended that the parameters listed in Specific Condition 13a are still appropriate, with the exception of those parameters which have not recently shown "hits" or are consistently well below the MCL. It is recommended that those parameters be dropped from Specific Condition 13a and be added to the list of parameters tested annually or dropped altogether. The list of parameters currently tested on a quarterly basis recommended to be dropped or tested only annually follows:

<u>Arsenic</u>	<u>Chloride</u>	<u>Nitrite</u>
<u>Barium</u>	<u>Cyanide</u>	<u>Selenium</u>
<u>Beryllium</u>	<u>Fluoride</u>	<u>Sodium</u>
<u>Copper</u>	<u>Nickel</u>	<u>Sulfate</u>
		<u>Zinc</u>

Per the RAI dated 3/25/03, the Department intends to replace the parameters in Specific Condition 13b (the current annually tested parameters) with the parameters listed in Rule 62-701.510(8)(a) as these parameters will be more representative of previous solid waste disposal at the facility. The list of parameters in Rule 62-701.510(8)(a) are as follows:

EPA 8260 (Volatile Organics)

The current list of quarterly metals (except Aluminum & Manganese) plus Cobalt & Vanadium

Total Ammonia (as N)

Chlorides

Nitrate

TDS

Given the rate of "hits" on Nitrate and TDS and the metals NOT listed in the "drop or change to annual" list above, the Department might consider leaving some or all of those parameters on the Quarterly Testing schedule.

The monitor wells were surveyed by Springstead Engineering, Inc. to provide top of casing elevations. This survey data is presented in the following Table 1. It should be noted that MW-2 was cut down to be flush with ground surface between 1st and 2nd quarter 2002. A subsequent

survey was performed to determine the elevation of this well prior to second quarter 2002.

TABLE 1

Well Survey Data

Approximate Survey Date	Monitor Well No.	Elevation Top of Casing
1985	1	70.17
1985	2	74.14 thru Jan. 2002
		69.13 after Jan. 2002
1985	4	70.36
1989	6A	77.54
1989	7	73.14
1993	8	69.26
1993	9	71.95

Response to RAI dated 3/25/03 Comment 17 M.1.c.(4)

TABLE 1 (Revised 5/27/03)

Well Survey Data

Approximate Survey Date	Monitor Well No.	Elevation Top of Casing	Latitude	Longitude
1985	1	70.17	28°44'34.9"	082°05'30.2"
1985	2	74.14 thru Jan. 2002	28°44'29.5"	082°05'26.8"

		69.13 after Jan. 2002		
1985	4	70.36	28°44'39.1"	082°05'26.2"
1989	6A	77.54	28°44'39.7"	082°05'14.8"
1989	7	73.14	28°44'42.4"	082°05'21.1"
1993	8	69.26	28°44'32.1"	082°05'15.1"
1993	9	71.95	28°44'30.6"	082°05'19.1"

This survey data has been used throughout the course of monitoring for this permit. The water level contour maps and hydrographs prepared for this report are based on this survey data.

3.0 Ground Water Elevations

Review of the static water levels recorded through the period between January 1998 and

December 2002 reveals water levels fluctuating between the elevations of 36.64 (minimum) and 50.24 (maximum) feet NGVD. The water level recorded at each well for each sampling event is presented in the following Table 1:

Response to RAI dated 3/25/03 Comment 23 c.

Table 1(Revised 5/27/03)

Water Level Elevations

DATE	MW-1	MW-2	MW-4	MW-6A	MW-7	MW-8	MW-9
1Q/98	48.01	48.47	48.2	49.12	48.64	49.68	49.68
2Q/98	47.59	47.48	47.53	48.46	47.81	49.1	47.95
3Q/98	44.17	44.39	44.03	44.87	44.56	45.51	44.87
4Q/98	45.92	47.14	46.11	46.62	46.47	46.76	46.37
1Q/99	44.9	43.81	43.78	45.87	47.14	44.93	44.28
2Q/99	42.92	42.89	42.86	42.87	43.31	44.93	43.28
3Q/99	43.75	43.98	43.11	44.04	44.39	44.76	44.45
4Q/99	44.17	44.47	43.94	44.71	44.56	45.1	44.62
1Q/00	43.17	40.54	43.36	44.04	43.56	43.1	43.62

Sumter County Public Works
Sumter County Ground Water Monitoring Plan Evaluation

February 28, 2003

Page No. 6

Revised May 28, 2003

Revised March 2, 2004

Revised April 8, 2004

2Q/00	41.67	41.81	41.86	41.12	42.06	42.59	42.2
3Q/00	41.34	42.31	41.28	41.21	41.47	42.26	41.79
4Q/00	42.25	42.72	42.36	42.54	42.64	43.1	42.87
1Q/01	41.17	41.27	41.36	41.6	41.64	42.06	41.55
2Q/01	42.17	42.14	42.06	42.31	42.24	40.96	42.15
3Q/01	41.74	36.64	41.76	42.04	41.94	43.06	42.05
4Q/01	47.49	48.5	47.62	48.5	47.98	49.7	48.05
1Q/02	43.37	43.59	43.76	43.89	43.59	45.01	43.85
2Q/02	41.97	42.16	42.02	42.33	42.23	43.4	42.32
3Q/02	48.19	48.83	48.41	49.17	48.84	50.24	48.75
4Q/02	46.05	38.49 46.32	45.54	46.74	46.33	47.82	46.34

Hydrographs of each Monitor Well and one of all wells have been prepared and are presented in Appendix IV.

A review of the hydrographs shows similar fluctuations in all wells over the period in review.

Also depicted is the seasonal variations and range at seasonal water levels. Based on this data it is evident that the normal seasonal high water level on this site is at an elevation of

approximately 49 feet NGVD as present in most wells of the third quarter 2002 sampling event. The lowest water

levels recorded were in the third quarter of 2000 at around 41 feet NGVD. These water levels are consistent with the anticipated water levels considered during installation of the monitor wells.

There has been only one occurrence of a monitor well not having sufficient water available for sampling during the period in review. This occurrence was in the 3rd quarter of 2001 where well MW-6 could not be sampled. This event occurred during a prolonged drought as was explained in a response to the RAI dated November 5, 2001 from Mr. John Morris with F.D.E.P. The well did recover prior to the next sampling event and is providing sufficient water as necessary. A copy of which is presented in Appendix VI.

4.0 Groundwater Flow

Groundwater elevations have been plotted to create contour maps of the surface of the groundwater for the various sampling events. A copy of these contour maps is presented in Appendix V. A review of the water level contour maps reveals groundwater flow being generally from the east, southeast to west, northwest with a hydraulic gradients ranging between 0.00056 feet per foot and 0.0058 feet per foot. Given the distance between MW-8 and MW-4 (1,200 LF) and using the hydraulic gradient of 0.0019 ft./ft. as representing worst case beneath the site in the direction of flow, and a hydraulic conductivity of 22.08 ft./day, groundwater flow rate is calculated as follows:

porosity (n) = 0.25

hydraulic conductivity (k) - 22.08 ft./day

hydraulic gradient (I) = 0.0019 ft./ft.

$$\text{Flow Velocity (V)} = \frac{KI}{n} = \frac{22.08 \text{ ft./day} \times 0.0019 \text{ ft./ft.}}{0.25} \quad V = 0.16 \text{ ft./day}$$

With a flow velocity of 0.16 ft./day it is calculated that it would take 625 days for a contaminant to travel through the zone of discharge of 100 feet. Considering that the wells are positioned within the zone of discharge, a contaminant would be detected in a shorter period of time. The time to travel through this zone of discharge is considerably longer than the time between sampling events, therefore, the sampling frequency of quarterly is considered sufficient for this purpose.

Response to RAI dated 3/25/03 Comment 23d 1) & 2)

The source for hydraulic gradient is the 4th Quarter 2002 contour map. The difference between MW-8 and MW-4 is greater here than any other time covered by the GWMPE. Hydraulic conductivity referenced in this section is another site (Sumter Recycling, formerly D&C Disposal) located just to the west of the Sumter County Closed Class I Landfill. See Appendix VII for this information.

5.0 Groundwater Quality

A review of the field parameters obtained reveals static water levels following similar trends upward and downward in most wells for each sampling event. Three water levels appear unusually low in comparison to other wells. Specifically the water levels in MW-2, 1st quarter of 2000, 2nd quarter of 2001 and 4th quarter 2002. Contour maps produced using these data points may be suspect of not accurately representing groundwater flow. Since 3rd quarter of 2001 all wells appear to follow similar trends.

Temperature readings taken between the 4th quarter of 1998 and the 4th quarter of 1999 appear unusually low and may indicate equipment failure for this parameter through this period. There have been several equipment upgrades since that time and temperatures have since stabilized. The values of pH have remained in the same range over the entire period of review. Several values are outside the lower range specified for pH of 6.5. The lower values occur mostly in wells MW-1 and MW-9. Since the 1st quarter of 2002 all values have been within an acceptable range.

Specific conductivity values vary significantly from well to well with similar trends observed, between wells. Generally MW-1 has the lower values while MW-9 is generally on the high side

of values.

Turbidity values varied widely from the 2nd quarter of 1998 through the 3rd quarter of 2000.

Values for this period ranged between 2.1 and 940 NTU. Between the 4th quarter of 2000 and the 2nd quarter of 2001 turbidity values were not recorded due to equipment failure. Since the 2nd quarter of 2001 turbidity values are significantly lower, ranging between 1.2 and 84 NTU.

A review of Laboratory Parameters reveals that there were a minimum number of contaminants above the detection limits and none above the MCL for the annual testing of Volatile Organic Compounds, Pesticides, PCB=s and Trihalomethanes listed in the Primary Drinking Water Standards listed in F.A.C. Chapter 62-550.310.

Laboratory results of the parameters required for quarterly testing revealed the following parameters above maximum Contaminant levels (MCL).

Aluminum	Fluoride	Mercury
Antimony	Foaming Agents	Nitrate
Beryllium	Iron	Silver
Cadmium	Lead	TDS
Chromium	Manganese	Thallium

On the parameters such as Antimony, Beryllium, Chromium, Fluoride, Foaming Agents, Mercury and Silver where there is a single exceedance of the MCL in a well and the preceding and subsequent testing indicates results below MCL, it is evident that this single occurrence does not represent a trend and may not accurately represent ground water quality.

The Aluminum, Cadmium, Iron, Lead, Manganese and Thallium are consistently over the MCL.

These exceedances have generally been occurring over the entire period in review. There is a correlation between magnitude of turbidity values to most metals and as turbidity values have decreased significantly since 2nd quarter of 2001, so have values and frequency of exceedances in these metals. The result is a downward trend in metal parameters. This is best seen in the plotted parameters Aluminum, Iron, Lead, and Manganese.

There are also values of Nitrate in MW-4 and TDS in MW-4 and MW-9 that are often above the MCL. Additionally there is a slight upward trend in Nitrate levels of MW-4 and a sharp increase in both Nitrate and TDS in MW-2 since the 1st quarter of 2002.

The exceedances listed above along with the dry well MW-6A mentioned earlier prompted the RAI letter from Mr. Morris dated November 5, 2001. A copy of this RAI and responses are provided in Appendix VI.

~~In response to the RAI the elevated levels and upward trend in Nitrate of MW-4 has been explored by performance of expanded parameters. The expanded parameters selected were indicator parameters for septic leachate as it is believed that MW-4 is being influenced by septic drainfields in close proximity to this well.~~

The elevated values of TDS on MW-4 and MW-9 do not show a trend upward or downward but occur at a relatively steady state for the period in review.

~~The sharp upward trend in Nitrate and TDS of MW-2 since the 1st quarter of 2002 is believed to be attributed to the activities in this area that have resulted in the well being cut down to be flush with the ground surface. The activities included significant grade changes in the area exposing~~

~~subgrade soils. The excavation resulted in a grade change on the order of six feet by removing surficial sands. It is CTL's opinion that the excavation has removed approximately six feet of the natural sand filter and exposed subgrade soils to a higher degree of saturation. The saturation and infiltration of runoff water may be the cause of the increase in values at this location.~~

Response to RAI dated 3/25/03 Comment 23.e.4

That the Department may require Evaluation Monitoring per Rule 62-701.510(7) in regard to Nitrate & TDS at MW 2 is noted. However, both parameters have been trending downward. TDS was below MCL for the 1st & 2nd Quarters of 2003. Nitrate was lower for the 1st quarter of 2003, but above MCL. It fell below MCL for the 2nd Quarter of 2003.

6.0 Evaluations and Recommendations

~~Based on this review it is CTL's opinion that the current Groundwater Monitoring Plan is effective in monitoring groundwater flowing beneath the landfill site. The plan is following the guidelines of the permit and is providing the necessary information with respect to groundwater flow and groundwater quality.~~

Through the period in review it is evident that the groundwater flow is generally in a westerly direction as was presented in the plan. The well locations and the flow rates calculated indicate that the sampling frequencies are currently adequate to identify contaminants before reaching the limits of the zone of discharge.

While individual results have been reported above the MCL in several parameters, often the exceedance was a single event and the preceding and subsequent sampling events were below MCL. In these cases it is our opinion that the single exceedances do not reflect a trend or an

accurate reflection of the impact to the groundwater quality.

The metal parameters that are exceeding MCL are believed to be due to natural background concentrations of these parameters in the groundwater for this area. This would account for the similar trends observed in Turbidity and the metal parameters in the background wells. It is evident that equipment upgrades as well as changes in sampling procedure as discussed in the response dated November 30, 2001 to the RAI dated November 5, 2001 over the past two years have had a significant impact to the values of turbidity and metals as well as the overall effectiveness of the groundwater monitoring. The downward trends in these parameters indicate that the results above the MCL do not appear to be related to effects on the groundwater quality by the landfill. If the landfill was causing these elevated results an upward trend would be expected.

~~The additional testing of MW 4 has indicated that this well is being effected by septic tank systems in place near the well. Since these systems are still active it is expected that this condition will continue.~~

~~The increase in Nitrate and TDS of MW 2 is believed to be related to the excavations in the area of the well and should be reviewed in subsequent sampling events.~~

~~Given the noted improvement of the consistency in results over the past two years, CTL recommends continuing the current Groundwater Monitoring Plan with quarterly and annual testing. If the current downward trends continue with consistency, the county may provide a bi-annual review of the plan with the possibility of reducing the frequency from~~

~~quarterly to semi-annual.~~

CTL recommends the following changes to the Groundwater Monitoring Plan:

Response to RAI dated 3/25/03 Comment 20 M.1.f(3)

1. Changing the quarterly and annual testing per Section 2.0, Groundwater Monitoring Plan (revised 5/27/03) of this report.
2. Per Rule 62-701.510(10)(b), the Groundwater Monitoring Plan Evaluation shall be done biannually.

Response to RAI dated 3/25/03 Comment 21 M.1.g

3. Per Rule 62-701.510(7)(a) & 62-701.510(7)(b), Evaluation Monitoring, Preventive Measures and Corrective Action shall be added to the plan. A copy of Rule 62-701.510(7)(a & b) is presented in Appendix VIII.

Response to RAI dated 12/07/03 Comment 19 M.1.e(6)

1. ~~An evaluation of monitor well conditions and the construction details of each well as presented in table A of appendix IX. The following recommendations are offered: MW 2A is currently located in a high traffic area. Central Testing Laboratory believes that this traffic is affecting the well. Central Testing Laboratory recommends a new well to replace MW 2A be relocated ten to fifteen feet to the north of the existing well. This well will be constructed with ten feet of screen allowing for sampling in the dry season.~~

Central Testing Laboratory recommends that a secondary well be installed at MW 7 and MW 9 with ten foot screens to accommodate the saturated thickness of the uppermost aquifer. The new screen intervals will be at elevation of approximately thirty eight to forty eight feet. This will accommodate sampling the upper most portion of the aquifer during seasonal fluctuation in water levels.

MW 2A, MW 7, and MA 9 will no longer be sampled. The new wells will now be sampled.

Due to the distance from the indicated leachate of waste Central Testing Laboratory recommends that two new wells MW-10 and MW-11 be installed closer to the area of barrier waste in line with MW-7 and MW-1 respectively. In addition a secondary well (MW-9A) should be installed at MW-9 with a ten foot screen to accommodate the saturated thickness of the uppermost aquifer. The new screen intervals for all wells will be at elevation of approximately thirty eight to forty eight feet. This will accommodate sampling the upper most portion of the aquifer during seasonal fluctuation in water levels as shown in Table A of Appendix X.

MW-1, MW-7, and MW-9 will no longer be sampled, but will be used to obtain ground water elevations. The new wells will be sampled.

Sumter County Public Works
Sumter County Ground Water Monitoring Plan Evaluation

February 28, 2003

Page No. 14

Revised May 28, 2003

Revised March 2, 2004

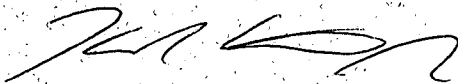
Revised April 8, 2004

Closure

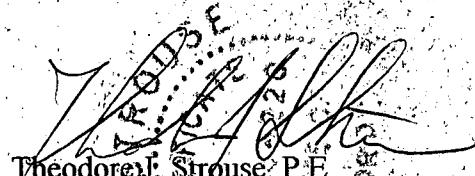
CTL appreciates the opportunity to be of assistance on this project. Should you have additional questions please contact our office at 352-787-1268.

Respectfully submitted,

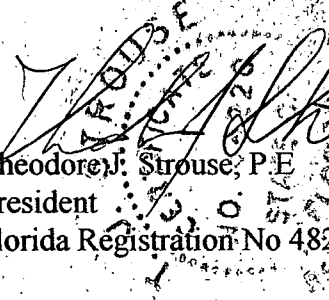
CENTRAL TESTING LABORATORY, INC.



Karl Retherford Jr.
Environmental Technician



Theodore J. Strouse, P.E.
President
Florida Registration No 48220

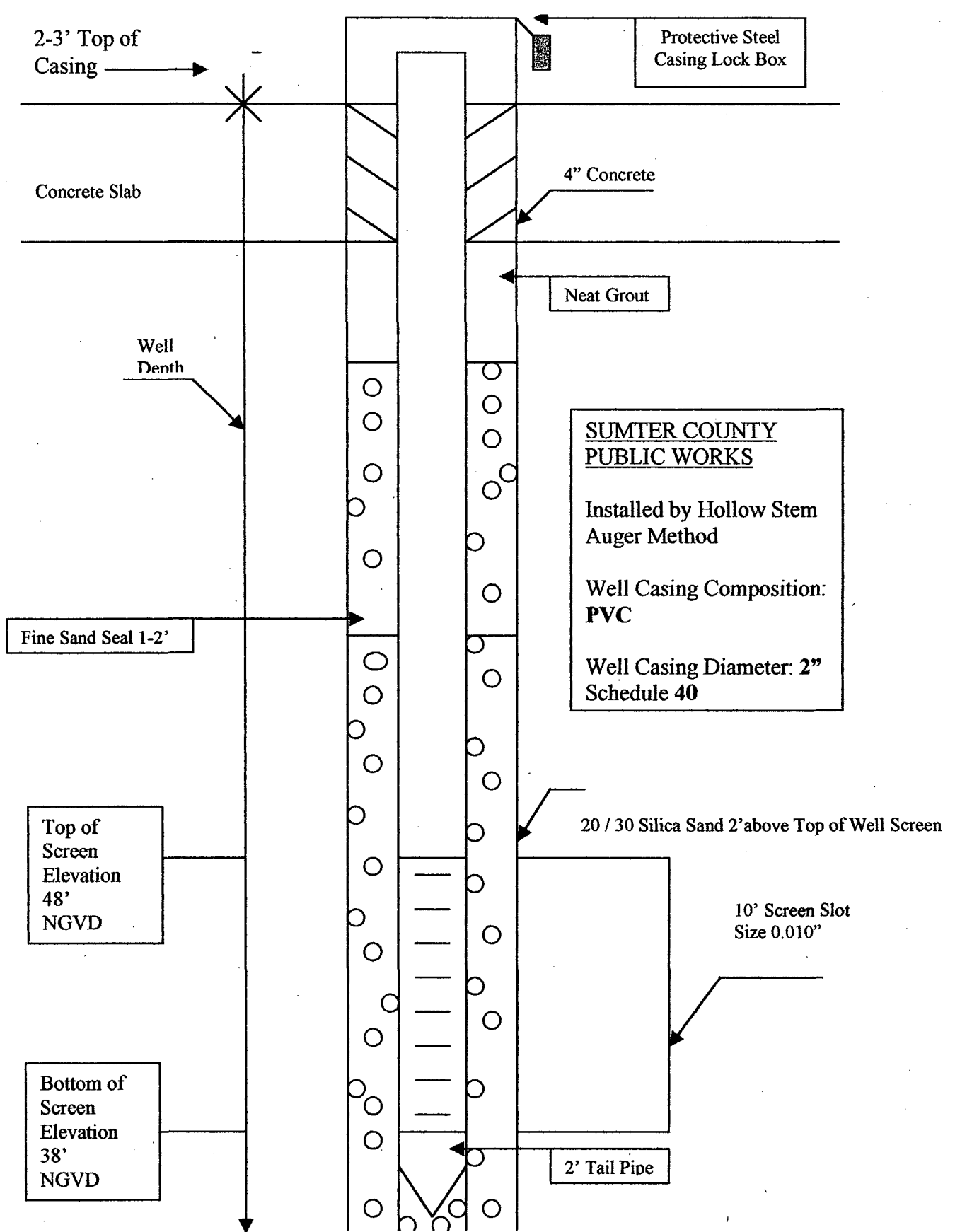


4/12/04

Revised April 8, 2004

APPENDIX IX

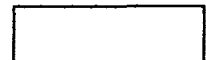
CENTRAL TESTING LABORATORY

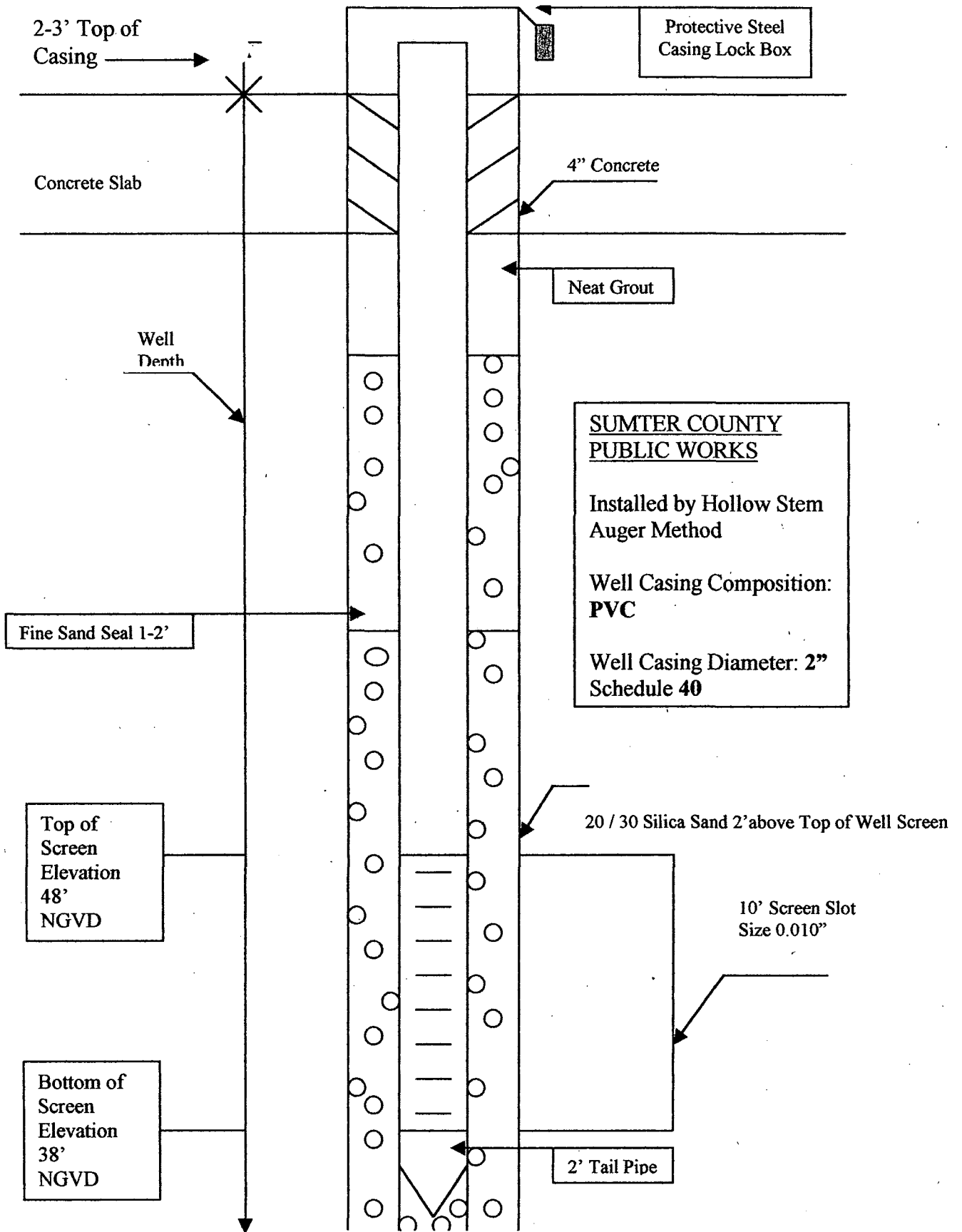


**Monitoring Well Construction
NTS**

**Proposed Monitor Wells
MW-9A**

**Development consists of
high-speed pumping until
water is clear.**





**Monitoring Well Construction
NTS**

**Proposed Monitor Wells
MW-10 and MW-11
Development consists of
high-speed pumping until
water is clear.**



Revised April 8, 2004

APPENDIX X

CENTRAL TESTING LABORATORY

TABLE A (Revised 03/02/04) Monitor Well Construction Details, Sumter County Closed Class I Landfill

Well#	Elevation (feet NGVD)						Screen Length (ft)	Total Depth (ft)	Lithology Encountered (feet) below land surface
	Top of Casing	Ground Surface	Top of Screen	Bottom of Screen	Maximum Water Level	Minimum Water Level			
MW-1	70.17	69.58	42.67	37.67	48.19	41.17	5	32.5	0 - 10 Sand
									10 - 15 Sandy clay
									15 - 22 Clay
									22 - 32 Limestone
MW-2	74.14	72.53	41.49	36.49	48.83	36.64	5	37.65	0 - 10 Sand
	69.13*	N/A**	41.49	36.49	48.83	36.64	5	32.64*	10 - 18 Sandy clay
									18 - 30 Clay
									30 - 37 Limestone
MW-4	70.36	N/A**	42.69	37.69	48.41	41.28	5	37.69	0 - 10 Sand
									10 - 20 Sandy clay
									20 - 30 Clay
									30 - 37 Limestone
MW-6A	77.54	75.71	32.54	27.54	49.17	41.12	5	50	0 - 20 Sand
									20 - 29 Clay with limestone fragments
									29 - 51 Limestone
MW-7	73.14	71.49	28.74	23.74	48.84	41.47	5	49.4	0 - 20 Sand
									20 - 25 Sand and clay
									25 - 28 Clay and sand
									28 - 31 Limestone
									31 - 34 Clay
									34 - 51 Limestone
MW-8	69.26	68.09	30.41	25.41	50.24	42.06	5	43.85	0 - 24 Sand
									24 - 34 Sandy clay
									34 - 41 Limestone
MW-9	71.95	70.37	29.15	24.15	49.68	41.55	5	47.8	0 - 26 Sand
									26 - 32 Sandy clay
									32 - 46 Limestone

TABLE A (Revised 3/02/04) Monitor Well Construction Details, Sumter County Closed Class I Landfill

footnotes

- Top of Casing Elevations and Screen Lengths from Central Testing Laboratory GWMPE dated 3/3/03 (Section 2.0, Table 1 – Revised 5/27/03)
- Total Depth and Ground Surface Elevations from Central Testing Laboratory field measurements 1/22/02
- Top/Bottom of Screen elevations for all wells calculated using Total Depth measurements from Central Testing Laboratory field measurements 1/22/02 and Top of Casing Elevations
- Maximum/Minimum Water Elevations measured during sampling events conducted between 1st Quarter of 1998 and 4th Quarter of 2002, from Central Testing Laboratory GWMPE dated 3/3/03 (Section 3.0 Table 1 – Revised 5/27/03)
- Screen Length for MW-1, MW-2, MW-4, MW-6A and MW-7 from “Second Response to Request for Additional Information” prepared by Springstead Engineering Inc. dated 7/29/92, Appendix B.
- Screen Length for MW-8 and MW-9 from Central Testing Laboratory GWMPE dated 3/3/03, (Section 2.0, Table 1 – Revised 5/27/03)
- Lithology Encountered from Central Testing Laboratory GWMPE dated 3/3/03 (Appendix I)
- *New Top of Casing Elevation for MW-2 following excavation activities: Top of Casing and Total Depth adjusted reflect the new well configuration
- **Ground Surface is slightly above Top of Casing – No Survey available with Ground Surface Elevations



**Springstead
Engineering, Inc.**

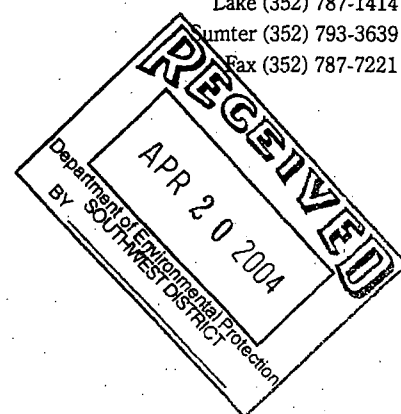
Consulting Engineers - Architects - Planners - Surveyors

EB-0001723
AA-0002820
LB-0001723

727 South 14th Street
Leesburg, Florida 34748

April 19, 2004

Mr. Steve Morgan
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619



RE: Supplemental Information for Permit
Sumter County Composting and Recycling Facility
DEP Permit No. **126940-008-SC**
Sumterville, Sumter County, Florida

Dear Mr. Morgan:

Based on our discussions in a meeting held Tuesday March 23, 2004, Sumter County would like to present this supplemental information for the Department to consider while reviewing the pending permit application.

The initial discussion concerned the capacity of the facility and the need to include transferring waste as a continuous process at the facility. We have revised the Operations plan to include this language. The facility can process 100 tons of tipped waste through the digesters. The current limiting process is the floor space in the finishing building. As additional finishing space is permitted, constructed and approved for operation, the limiting process at the facility will become the recyclables recovery line. An additional processing shift will double the capacity of the facility at that time. Due to current growth, the need to transfer will occur during the course of this permit. The interior ramp and current operational process will facilitate the transferring of waste. The information regarding the capacity of Digester No. 2 is attached as requested.

The next area of discussion focused on the need for material to spend 72 hours in the digester and what methodology would be used to determine how long the material has resided in the digester. After a lengthy discussion it was decided that the county would propose testing to be performed on material exiting the digester for a period of time after permit issuance to insure proper destruction of pathogens.

PARTIAL RESPONSES
TO "COMPLETION" CTL
4/20/04

The revised application page indicating Mr. Bernard Dew as the facility contact person is attached as requested

NOTE:- THE COMMENT ON PG 2 THAT COMMENTS ABOUT ADDITIONAL WELLS WERE ADDRESSED IN ATTACHED SUBMITTAL FROM CTL IS NOT CORRECT; REVISIONS FROM CTL WERE HAND-DELIVERED 4/28/04.

- THE COMMENT ON PG 2 THAT COMMENTS REGARDING GAS MONITORING WERE ADDRESSED IN THE ATTACHED SUBMITTAL IS NOT CORRECT; NOTHING FROM SEI ADDRESSED GAS MONITORING

Mr. Steve Morgan
Department of Environmental Protection

April 19, 2004
Page No. 2

The revised pages from the engineering report indicating that material will not be in the tube for 24 hours are attached.

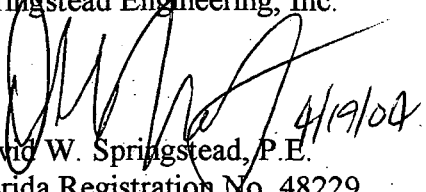
The revised Operations Plan discussing the transfer of waste and the operation of Digester 2 along with the other changes based on our discussions are attached.

Mr. John Morris' comments concerning the additional wells and locations for gas monitoring have been addressed and the revised monitoring plan evaluation is attached.

The Department's comments about the long term care and closure costs have been addressed in the revised comments. A revised estimate will follow.

We hope that this information meets your needs at this time. Please review this information and contact me if you have any questions.

Very truly yours,
Springstead Engineering, Inc.


David W. Springstead, P.E.
Florida Registration No. 48229

Attachments

cc: Bernard Dew - Sumter County
Chuck Jett - Sumter County Solid Waste
Mitch Kessler - Kessler Consulting, Inc.
Miriam Zimms - Kessler Consulting, Inc.

APR 20 2004

Applicant name (operating authority): Sumter County Solid Waste Works Dept.

Mailing address: 209 North Florida Street Bushnell FL 33513
Street or P.O. Box City State Zip

Contact person: Bernard Dew Telephone (352) 793-0200

Title: County Manager

E-Mail address (if available)

9. Authorized agent/Consultant: Springstead Engineering, Inc.

Mailing address: 727 S. 14th Street Leesburg FL 34748
Street or P.O. Box City State Zip

Contact person: David W. Springstead, P.E. Telephone (352) 787-1414

Title: Vice President

staff@springsteadeng.com

E-Mail address (if available)

10. Landowner (if different than applicant): same as applicant

Mailing address: _____
Street or P.O. Box City State Zip

Contact person: _____ Telephone ()

Title: _____

E-Mail address (if available)

11. Cities, towns and areas to be served: All areas within the boundaries of

Sumter County, Florida

12. Population to be served:

Current: 50,000

Five-Year

Projection: 61,300

13. Date site will be ready to be inspected for completion: Not Applicable

14. Expected life of the facility: 50 years

15. Estimated costs: Not applicable

Total Construction: \$ _____ Closing Costs: \$46,408

16. Anticipated construction starting and completion dates:

From: _____ To: _____

17. Expected volume or weight of waste to be received:

_____ yd³/day 220 tons/day _____ gallons/day

276029

Board of County Commissioners

Sumter County, Florida

209 North Florida Street, Suite 3 • Bushnell, FL 33513-6146 • Phone (352) 793-0200 • FAX: (352) 793-0207
SunCom: 665-0200 • Website <http://boocc.co.sumter.fl.us>

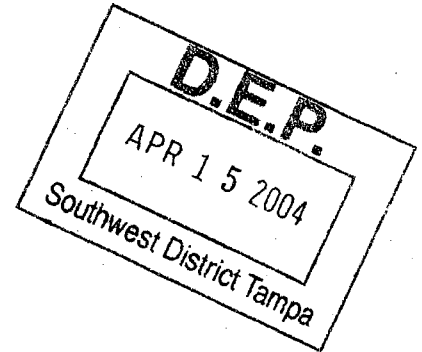


April 12, 2004

Florida Department of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, FL 33619

Attn: Deborah A. Getzoff, District Director

Subject: Submission of Preliminary Contamination Assessment Plan
Sumter County Closed Class I Landfill
Consent Order/OGC File No. 04-0131
Board of County Commissioners
Sumter County, Florida



Dear Ms. Getzoff:

In accordance with Item 9 of the referenced Consent Order and the provisions of Exhibit B attached thereto, Sumter County has implemented the "Preliminary Contamination Assessment Actions". In satisfaction of Exhibit B, Item 2, Sumter County herewith submits a proposed Preliminary Contamination Assessment Plan (PCAP) for the Department's review and approval.

The proposed PCAP was prepared by The Colinas Group, Inc. (TCG), Winter Park, Florida on behalf of Sumter County. Four (4) copies of the proposed PCAP are submitted.

If you have any questions concerning this submittal, please do not hesitate to contact Bernard Dew (352) 793-0200 or myself at your earliest convenience.

We look forward to fully resolving the issues addressed by the Consent Order.

Very Truly Yours,

Chuck Jett
Solid Waste Superintendent
Sumter County Solid Waste

cc: Susan Pelz, P.E., FDEP
Stephanie Petro, FDEP
Kessler Consulting, Inc.

Benny G. Strickland, Chairman
Dist 1, (352) 753-1592 or 793-0200
209 North Florida Street, Suite 3
Bushnell, FL 33513-6146

Robin Cox, Dist 5
(352) 793-6910
P.O. Box 1482
Webster, FL 33597

Joey A. Chandler, Vice Chairman
Dist 2, (352) 748-5005
6255 CR 429
Lake Panasoffkee, FL 33538

Bernard Dew, County Administrator
(352) 793-0200
209 North Florida Street, Suite 3
Bushnell, FL 33513-6146

Billy "Tiny" Rutter, Dist 3
(352) 753-1592 or (352) 748-4220
5885 CR 472
Oxford, FL 34484

Gloria R. Hayward, Clerk & Auditor
(352) 793-0215
209 North Florida Street
Bushnell, FL 33513

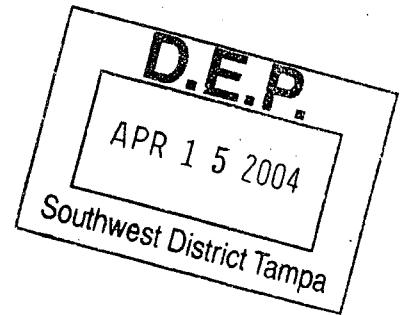
Jim Roberts, Dist 4
(352) 793-4776
209 North Florida Street, Suite 3
Bushnell, FL 33513-6146

Randall N. Thornton
County Attorney
(352) 793-4040 P.O. Box 58
Lake Panasoffkee, FL 33538

"PCAP" document
4/15/04

THE COLINAS GROUP, INC.
ENGINEERING AND ENVIRONMENTAL CONSULTANTS

April 13, 2004



Mr. Mitch Kessler

Kessler Consulting, Inc.
14620 N. Nebraska Avenue, Bldg. D
Tampa, Florida 33613

Subj: Proposed Preliminary Contamination Assessment Plan
Sumter County Closed Class I Landfill
Sumter County, Florida
FDEP Southwest District Office OGC File No.04-0131
TCG Project No.P-257.10


Dear Mr. Kessler:

Enclosed please find four (4) copies of the Preliminary Contamination Assessment Plan (PCAP) prepared by The Colinas Group, Inc. for the Sumter County Closed Class I Landfill. The PCAP is submitted in satisfaction of FDEP/Sumter County Consent Order, Item 9 and Exhibit B, Item 2.

Four (4) copies of the PCAP should be transmitted by the County to the Florida Department of Environmental Protection, Southwest District Office, Tampa, Florida. Department review and approval is required prior to implementation of the actions proposed in the PCAP.

If you have any questions concerning the PCAP we have developed for the Sumter County solid waste facility, please contact me at your convenience.

Very truly yours,
THE COLINAS GROUP, INC.

44304 
Richard L. Potts, Jr., P.G.
Principal Hydrogeologist
Fl. P.G. Reg. No.1113

**PROPOSED
PRELIMINARY CONTAMINATION ASSESSMENT PLAN,
SUMTER COUNTY CLOSED CLASS I LANDFILL,
SUMTER COUNTY, FLORIDA
FDEP SOUTHWEST DISTRICT OFFICE OGC FILE NO. 04-0131**

Prepared for:

Kessler Consulting, Inc.
14620 N. Nebraska Avenue
Tampa, Florida 33613

Prepared by:

THE COLINAS GROUP, INC.
509 N. Virginia Avenue
Winter Park, Florida 32789

April 2004

**PROPOSED
PRELIMINARY CONTAMINATION ASSESSMENT PLAN
SUMTER COUNTY CLOSED CLASS I LANDFILL
SUMTER COUNTY, FLORIDA**

TABLE OF CONTENTS

- 1.0 INTRODUCTION**
 - 1.1 Purpose and Scope**
 - 1.2 Objectives**
 - 1.3 Project QA/QC**
 - 1.4 Project Location**
- 2.0 PRELIMINARY CONTAMINATION ASSESSMENT ACTIONS**
 - 2.1 Facility Monitoring Records Review**
 - 2.2 Regional Hydrogeologic Review**
 - 2.3 Initial Field Data Collection**
 - 2.3.1 Zone of Discharge Confirmation**
 - 2.3.2 Water Well Inventory**
 - 2.3.3 Pollution Source Inventory**
 - 2.4 Soil/Groundwater Investigations**
 - 2.4.1 Soil/Sediment Sampling and Analysis**
 - 2.4.2 New Monitoring Well Installation**
 - 2.4.3 Groundwater Sampling and Analysis**
- 3.0 PRELIMINARY CONTAMINATION ASSESSMENT REPORT**
- 4.0 PROPOSED PCAP COMPLETION SCHEDULE**

* * * * *

**PROPOSED
PRELIMINARY CONTAMINATION ASSESSMENT PLAN
SUMTER COUNTY CLOSED CLASS I LANDFILL
SUMTER COUNTY, FLORIDA**

1.0 INTRODUCTION

Sumter County owns and operates a solid waste management facility comprised of three operating subcomponents: The Sumter County Composting Facility; Sumter County Recovery Facility, and; Sumter County Closed Class I Landfill. In March of 2004, Sumter County (the County) entered into a Consent Order with the Florida Department of Environmental Protection (FDEP).

Part of the Consent Order requires the County to immediately implement Preliminary Contamination Assessment Actions outlined in Exhibit B to the Consent Order. These actions are directed at reported exceedances of Florida ground water quality standards and minimum criteria at two (2) monitoring wells installed as part of the groundwater monitoring plan for the closed Class I landfill.

This Preliminary Contamination Assessment Plan is submitted by the County in accordance with the requirements of FDEP Consent Order Exhibit B, Item 2.

1.1 Purpose and Scope

The Colinas Group, Inc. (TCG) was retained by Kessler Consulting, Inc., solid waste consultants to Sumter County, to prepare a Preliminary Contamination Assessment Plan (PCAP) in accordance with Item 9 and Exhibit B of the FDEP Consent Order. The purpose of the PCAP is to provide a plan of data collection and evaluation to address apparent groundwater quality constituent exceedances recorded in previous quarterly monitoring reports for the closed landfill facility. The proposed PCAP is subject to review and approval by the FDEP Southwest District Office.

The scope of the PCAP includes assessment of potential water quality standards violations attributable to the closed solid waste disposal facility (landfill), as well as potential pollution sources situated beyond the closed landfill boundaries. Field data collection activities proposed as part of this PCAP are limited to the real property owned by the County and used for operation of the Sumter County solid waste management facilities.

1.2 Objectives

The objective of the PCAP is to determine whether the soil, sediment, surface water or ground water are contaminated at the Sumter County Closed Class I Landfill, and, if so; whether such contamination has resulted in a violation of the water quality standards and minimum criteria established in Florida Administrative Code Chapter 62-520 and 62-302, or constitutes a risk to the public health, the environment or the public welfare.

1.3 Project QA/QC

The PCAP presented herein includes requirements for soil/sediment sampling, water sampling, exploratory test drilling, monitoring well installation, water level recording and assessment of geologic, hydrologic and geochemical site factors. TCG is responsible for, and will direct completion of each component of the proposed PCAP. The Colinas Group, Inc. is licensed by the State of Florida to practice the profession of geology. Mr. Richard L. Potts, Jr., P.G. is TCG's project manager and principal-in-charge for completion of the PCAP and is a licensed professional geologist in Florida.

TCG will subcontract with a commercial analytical laboratory, USBiosystems, Inc., Boca Raton, Florida to complete all solid and aqueous matrix chemical analyses required by the proposed PCAP. A copy of the title page and Table of Contents from USBiosystems' current FDEP-approved Comprehensive Quality Assurance Plan (CompQAP#980126) is attached in the Appendix.

TCG will complete all solid and aqueous media sampling required for the PCAP. TCG will conduct field sampling in strict accordance with the latest issue of the FDEP Standard Operating Procedures for Field Activities (SOP). Field activities, including solid and aqueous media sampling, will be completed under the supervision of a Florida licensed professional geologist.

Field surveying will be required to establish vertical and horizontal control for specific testing sites. Surveying services will be provided by a Florida licensed professional land surveyor retained directly by Sumter County.

1.4 Project Location

The Sumter County Closed Class I Landfill and associated County solid waste management facilities are located in Sumter County, Florida about one mile east of the intersection of Interstate Highway 75 and County Road 470. The latitude/longitude coordinates for the facility are 284430/820520. The street address for the facility is 835 County Road 529, Lake Panasoffkee, Florida 33538.

2.0 PRELIMINARY CONTAMINATION ASSESSMENT ACTIONS

2.1 Facility Monitoring Records Review

Information existing in the County's files will be compiled, including previous reports prepared for facility permitting, surveying, monitoring well design and installation and routine quarterly water quality monitoring. Available information concerning limits of waste, zone of discharge delineation and permitted facility configuration will be compiled from review of Department files and permitting records available in the FDEP's Southwest District Office in Tampa, Florida.

Results of historical groundwater sample analyses for parameters identified in the Consent Order will be summarized for the affected facility monitoring wells over the available period of record. Graphical plots of concentrations over time will be prepared to evaluate apparent trends for constituents-of-concern and to identify spurious or suspect data.

2.2 Regional Hydrogeologic Review

The PCAP will compile relevant geologic, hydrologic and geochemical information for the site and vicinity from available published sources to include: The Southwest Water Management District (SWFWMD), the U.S. Geological Survey (USGS), Florida Bureau of Geology (FBOG), U.S. Natural Resources Conservation Service (NRCS) and the FDEP.

Compiled information will be used to describe regional characteristics in the vicinity of the project site. This information will be integrated with site-specific data found during records review and collected from PCAP drilling and testing activities to develop a comprehensive description of near-surface hydrogeologic conditions within and near the project site.

2.3 Initial Field Data Collection

Initial PCAP field activities are intended to complete site characterization requirements and enhance the rationale and precision of locations for drilling and testing actions called for in the PCAP.

2.3.1 Zone of Discharge Confirmation

The lateral limits of buried Class I waste and zone of discharge for the closed landfill defined in the facility FDEP operating permit will be physically located in the vicinity of affected monitoring wells using

standard surveying methods. Limits of waste and related ZOD delineations will provide the basis for confirming the line of regulatory compliance with respect to water quality at the affected monitoring wells.

2.3.2 Water Well Inventory

Existing water wells located within a one-half (0.5) mile radius of the landfill will be inventoried by driving reconnaissance. Where available, information concerning well use, total depth and intake interval will be recorded. Large public and private groundwater users in the inventory area will be identified through a records search of SWFWMD permitting files. Existing water wells situated within the inventory radius will be listed and located on a scaled map of the project site and vicinity.

2.3.3 Pollution Source Inventory

Potential sources of soil and/or groundwater pollution will be inventoried within a one-quarter (0.25) mile radius of the landfill. Potential pollution sources will be identified by review of available aerial photographs and maps and by driving reconnaissance. Locations of potential pollution sources within the inventory area will be listed and located on a scaled map of the project site and vicinity.

Potential groundwater pollution sources within the County-owned solid waste facility property boundaries, including the closed Class I landfill, will be identified and mapped on a scaled map of the project site.

2.4 Soil/Groundwater Site Investigations

2.4.1 New Monitoring Well Installation

A total of three (3) new groundwater monitoring wells are proposed as part of this PCAP. One new well each will be installed downgradient on the water table surface from affected existing monitoring wells MW-2 and MW-4, as shown on the attached map of the project site (see Figure 1). One (1) new well is proposed between existing well MW-4 and known septic tanks used at separate County facilities located immediately north of the well.

Groundwater measurements and contour maps presented in previous routine water quality monitoring reports prepared by the County will be

used to locate new monitoring well sites for use in the PCAP. These data will provide the basis for determining predominant groundwater flow directions in local areas near affected existing monitoring wells MW-2 and MW-4.

New monitoring wells will be designed and constructed to sample groundwater at the same depth intervals as respective existing wells. A Standard Penetration Test (SPT) boring will be drilled at each new well site to identify geologic conditions prior to final well design and construction. SPT borings will be drilled and sampled to the total depth reported for adjacent existing monitoring wells. Geologist's logs of the SPT borings will be prepared and selected soil/sediments samples will be collected and preserved for laboratory chemical analysis.

New monitoring wells installed for this PCAP will be designed and constructed in accordance with Chapter 62-522, F.A.C. Proposed general well construction specifications are indicated below as follows:

Method:	Hollow-stem auger (nom. 6-in. I.D.)
Well casings:	2-in. dia. Schedule 40 PVC
Well screens:	2-in. dia. Continuous-slot Sch. 40 PVC
Gravel pack:	Commercial graded silica sand
Pack seal:	Fine silica sand or bentonite pellets
Grout:	Portland Type II cement, neat
Well Pad:	24" x 24" x 4" concrete
Protection:	4-in. sq. aluminum cover, locking

Well screen slot size and gravel pack gradation will be determined from grain-size analysis of unconsolidated sediments occurring in the design screened intervals. In the event that well screens are set in consolidated limestone/dolostone formations, 0.010"-slot well screens and 20/30 graded silica sand will be used. This combination of pack gradation and slot size has been shown to be effective in screened monitoring wells installed in rock in Florida.

Upon completion of construction, new wells will be developed using conventional pump and surge methods until the discharge is clear and visibly free from suspended particles and fluid turbidity is less than 20 NTUs. Each new well will be surveyed by a Florida licensed Land Surveyor to establish land surface and top of casing elevation. Well Completion Reports for new wells constructed as part of this PCAP will be prepared on FDEP Form 62-522.900(3) and submitted to the Department as part of the Preliminary Contamination Assessment Report (PCAR).

2.4.2 Soil/Sediment Sampling and Analysis

Sediment samples will be collected at and near the water table surface and within the depth intervals screened in nearby existing monitoring wells at each SPT boring, assuming materials at these depths are unconsolidated. Collected samples will be preserved and submitted to an independent analytical laboratory for analysis of selected metals constituents listed in the FDEP Consent Order, namely:

Aluminum
Iron, as Fe
Manganese

Laboratory results of analyses will be reported as ug/kg concentrations.

2.4.3 Groundwater Measurements, Sampling and Analysis

One round of water level measurements will be made using the seven (7) existing monitoring wells and new wells installed for this PCAP. Measurements will be made at all wells within an 8-hour period and prior to groundwater sampling activities.

Groundwater samples will be collected from the facility background well (MW-6A), existing affected wells MW-2 and MW-4, and from new monitoring wells installed as part of this PCAP. Groundwater samples will be analyzed for the following parameters:

Field Parameters

Fluid temperature
Specific conductance
Turbidity
Dissolved oxygen
pH

Laboratory Parameters

Aluminum *
Antimony *
Cadmium *
Iron, as Fe *
Manganese *
Nitrate, as N *
Total dissolved solids *
Thallium *
Total alkalinity, as CaCO₃
Total hardness, as CaCO₃

* parameters listed in Consent Order

The total sample set submitted to the laboratory will include the following QA/QC water samples:

- One (1) equipment blank
- One (1) trip blank/per sampling day
- One (1) blind duplicate sample

The analytical laboratory performing the analyses will provide the quality assurance data required by Consent Order Exhibit B, Item 7E.

Monitoring well sampling activities proposed in this PCAP are independent of, and do not replace, scheduled routine quarterly sampling and analysis required by the facility's FDEP operating permit(s).

3.0 PRELIMINARY CONTAMINATION ASSESSMENT REPORT

On completion of the preliminary contamination assessment actions included in this PCAP, a written Preliminary Contamination Assessment Report (PCAR) will be prepared addressing the PCAP objectives. The PCAR will present the information required by listing in Consent Order Exhibit B, Item 7 (A through E). The PCAR will include reports submitted by subcontractors to the County and to TCG required to complete the proposed PCAP. Reports from the subcontract Professional Land Surveyor and analytical laboratory and logs from the test drilling/well construction contractor will be attached in the Appendix to the PCAR.

The PCAR will include, but may not be limited to:

- a. Summary of PCAP tasks completed
- b. Summary of well construction data
- c. Cross-section descriptions of site geology
- d. Summary of historical groundwater contour maps
- e. Groundwater contour map for PCAP measurements
- f. Tabulated historical water quality monitoring data
- g. Tabulated field/laboratory results for PCAP sampling

The PCAR will provide TCG's conclusions regarding the objectives of the PCAP and recommendations for further actions, if any, considered necessary to satisfy the requirements of the FDEP Consent Order. The PCAR will be signed and sealed by the licensed professional geologist directly responsible for implementation and completion of the PCAP. The County will submit two (2) copies of the PCAR to the Department for review and acceptance.

4.0 PROPOSED PCAP COMPLETION SCHEDULE

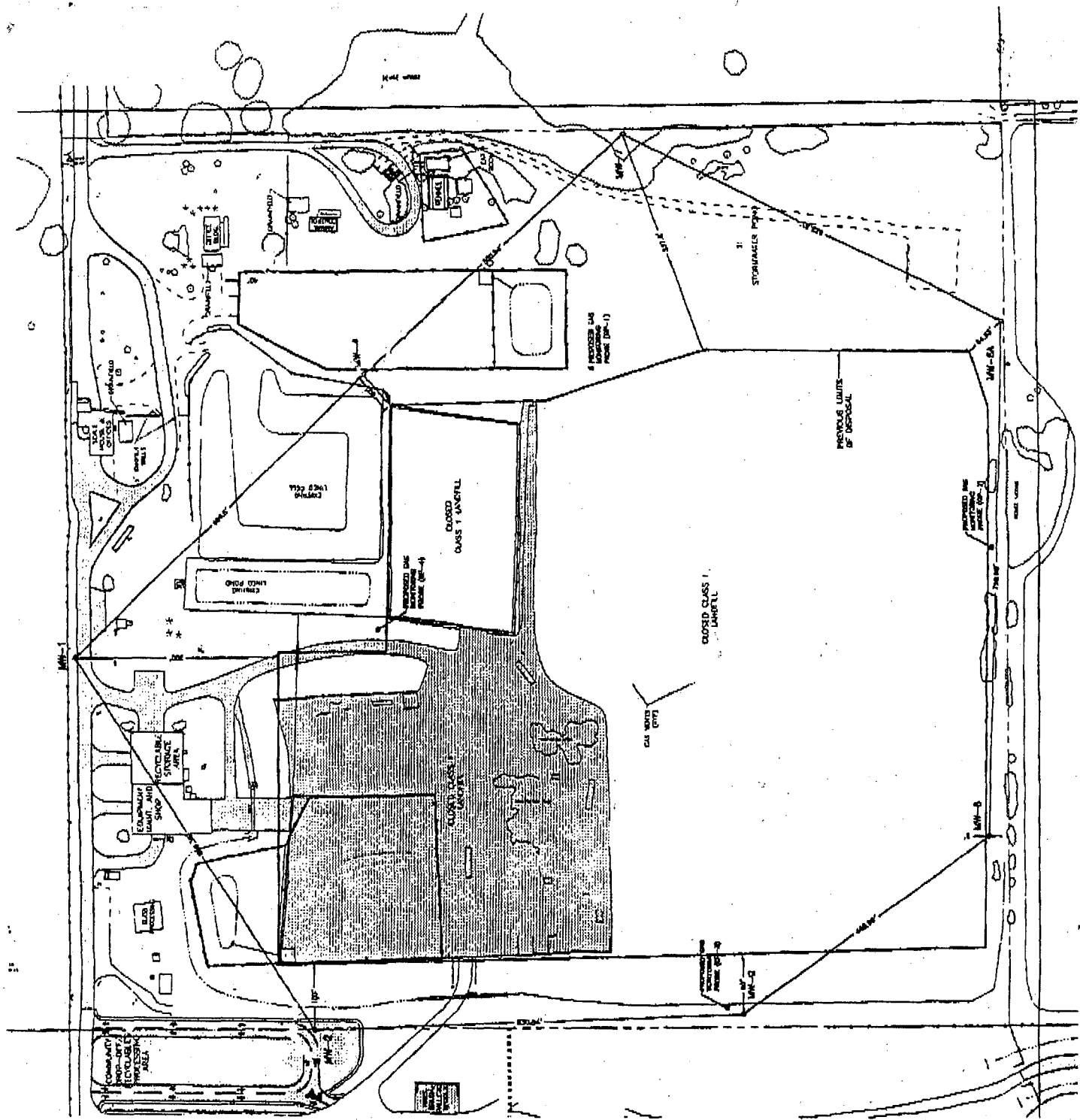
The proposed PCAP is intended to be completed in a step-wise fashion with intervals between primary tasks used for necessary data reduction, assessment

and interpretation. The proposed PCAP schedule is presented in tabular form below, by primary work tasks.

<u>PCAP Task</u>	<u>Task Completion (weeks)</u>	<u>Cumulative Time (weeks)</u>
Records/Literature Review	1	1
Initial Field Data Collection	1	2
SPT Drilling/Well Construction	1	3
Sampling and Analysis	4	7
Preparation of PCAR	3	10
County Review and DEP Submission	2	12

The proposed PCAP completion schedule complies with the 90-day reporting schedule requirement outlined in Consent Order Exhibit B, Item 2.

* * * * *



PROJ. NO. P-257.10
DATE: April 5, 2004
SCALE: 1" = 360' (approx.)
THE COLINAS GROUP

**SUMTER COUNTY
CLOSED CLASS I LANDFILL
SITE PLAN**
FIGURE 1



Department of Environmental Protection

Jeb Bush
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Colleen M. Castille
Secretary

April 6, 2004

Mr. Bernard Dew
Sumter County Administrator
209 North Bushnell Street
Bushnell, FL 33513

Re: Sumter County Closed Class I Landfill
Long-term Care Permit Renewal, Pending Permit No. 22926-003-SF

Dear Mr. Dew:

This letter has been prepared to acknowledge that responses to the Department's letter dated November 7, 2003 that requested additional information regarding the application for renewal of the closure (long-term care) permit for the closed Class I landfill were received as follows:

Submittal from Central Testing Laboratory (CTL) report entitled "Gas Migration Study Report", prepared by Central Testing Laboratory (CTL), dated January 13, 2004, received January 14, 2004;

Submittal from Springstead Engineering, Inc. (SEI) dated January 30, 2004, received February 2, 2004, including:

- Section 1 -- Transmittal letter from SEI dated January 30, 2004 (15 pages, addressed to Steven G. Morgan);
- Section 2 -- DEP Form No. 62-701.900(1), Solid Waste Management Facility, revised pages 4, 5, 32, 33, 39;
- Section 3 -- *Engineering Report*, revised December 30, 2003;
 - Subsection entitled "Requirements of Section M"
 - Subsection entitled "Supplemental Information for Long Term Care"
 - Subsection entitled "Report of Effectiveness of Landfill Design"
 - Subsection entitled "General Maintenance for the Covered Areas of the Closed Class I Landfill"
- Section 4 -- *Sumter County Solid Waste Facility, Operations Manual*, revised January 30, 2004;
 - Subsection entitled "Section 5.0 -- Long Term Care"
 - Appendix F -- Monitoring Well Location Map, prepared by SEI, revised January 12, 2004
 - Appendix F -- Overall Site Plan, Sheet 1 of 1, prepared by SEI, revised January 12, 2004
- Section 5 -- Transmittal letter from SEI dated January 30, 2004 (6 pages, addressed to John R. Morris);
- Section 6 -- Transmittal letter from SEI dated January 14, 2004 (3 pages, addressed to Steven G. Morgan); and,

Submittal from CTL dated March 2, 2004, received March 4, 2004, transmitting revisions to the document entitled *Sumter County Ground Water Monitoring Plan Evaluation* (GWMPE), revised March 2, 2004.

This letter also constitutes notice that a permit will be required for your project pursuant to Chapter 403, Florida Statutes. It has been 403 days since your permit renewal application was initially received. The Department has requested additional information in writing on two occasions. Based on review of the referenced submittals, your application for permit renewal has been deemed to be complete and in accordance with Chapter 62-4, F.A.C., the Department must take agency action on the pending permit renewal by May 25, 2004.

The review comment numbers presented below are consistent with the Department's letter dated November 7, 2003 and summarize those items for which sufficient responses were not provided. To facilitate the review process, the comments for which responses were received that were considered to be complete and sufficient have been omitted from this letter. As discussed during the meeting conducted on March 23, 2004, submittal of supplemental information is requested for the following comments by April 16, 2004 to provide adequate time for review and development of appropriate permit conditions. In the event that no responses, untimely responses or insufficient responses to this letter are received, the Department may proceed with permit denial.

"More Protection, Less Process"

"COMPLETENESS"
LETTER
4/6/04

DEP FORM NO. 62-701.900(1), SOLID WASTE MANAGEMENT FACILITY PERMIT FORM

Part M – Water Quality and Leachate Monitoring Requirements (Rule 62-701.510, F.A.C.)

15. **M.1.c.(1):** Section 5 of the SEI submittal indicated that the figure entitled “Monitoring Well Map”, dated January 12, 2004, was revised to depict the edge of the former disposal areas and the distances from the edge of the waste units to the monitor wells. The response is not considered sufficient to address the review comment, as follows:

- Neither the SEI nor the CTL submittals provided a response to the review comment regarding the adequacy of the existing well locations to address the requirements of Rule 62-701.510(3), F.A.C., regarding the lateral distance from the detection wells to the edge of the disposal units. The figure entitled “Monitoring Well Map” indicates that existing wells MW-1 and MW-7 are 300 feet and 337 feet, respectively, from the edge of the landfill. These wells do not meet the location requirements of the cited rule for detection wells, and the replacement detection wells shall be required.
- The figure entitled “Monitoring Well Map” does not include the boundaries of Phases I, II and III within the landfill area as requested in the review comment.
- The reference on the application form to Section 2.0 of the GWMPE is not correct. The application form should reference Appendix F of the *Operations Manual*.

19. **M.1.c.(6):** Section 6.0 of the revised GWMPE (CTL submittal) referenced the construction details summary table as Appendix IX, however the table appears to be included in Appendix X. Section 6.0 of the revised GWMPE recommended replacement of well MW-2 to move it away from a high traffic area and to construct the well with 10 feet of screen and recommended replacement of wells MW-7 and MW-9 to construct each well with 10 feet of screen at a specified range of elevations. The response is not considered sufficient to address the review comment, as follows:

- The justification provided for the proposed top/bottom screen elevations for the replacements for wells MW-7 and MW-9 does not address the lithology encountered at the facility and the potential to breach the confining unit.
- Unique identification numbers were not provided for the replacement wells.
- The locations of the replacement detection wells were not described relative to the edge of the landfill and were not shown on a site map.

23. **M.1.h.(2): Bi-annual report requirements signed, dated and sealed by P.G. or P.E.**
(Rule 62-701.510.(9)(b), F.A.C.)

b. **GWMPE – Section 2.0:** Section 5 of the SEI submittal referred to the figure entitled “Monitoring Well Map” (provided in Appendix F of the *Operations Manual* in Section 4 of the SEI submittal), dated January 12, 2004. The response is not considered sufficient to address the review comment, as follows:

- The revised map does not include the location of the compost pads as requested in the review comment.

25. **O.2.: Provide documentation that will describe locations, construction details and procedures for monitoring gas at ambient monitoring points and with soil monitoring probes** (Rule 62-701.530(2), F.A.C.)

b. Section 5 of the SEI submittal referred to the figure entitled “Monitoring Well Map”, dated January 12, 2004 (provided in Appendix F of the *Operations Manual* in Section 4 of the SEI submittal) which included the locations of four gas probes (designated GP-1 through GP-4). The response is not considered to be sufficient to address the review comment for the following:

- The adequacy of the existing perimeter gas probes was not provided.
- No discussion of the proposed gas probe construction details was provided. The figure entitled “Typical Gas Monitoring Probe” (provided in Section 5 of the SEI submittal) indicated that the bottom elevation of the proposed gas probes shall be elevation 55 feet NGVD, however justification of this elevation and comparison of ground water elevations were not provided.

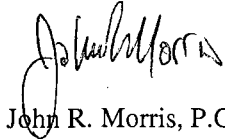
c. Section 5 of the SEI submittal did not include a response to this review comment which requested an evaluation of the ambient gas monitoring locations and did not provide a site map that located ambient gas monitoring locations within structures at the facility.

26. **P.2.b.(5):** Section 5 of the SEI submittal referenced revisions to Section 5.3 of the *Operations Manual* which were indicated to provide a description of procedures for conducting landfill gas monitoring (Section 5). It does not appear that this section of the *Operations Manual* was revised as indicated.

27. **P.3.d.:** Same as review comment No. 25.

The Department appreciates your assistance in addressing the sufficiency of the responses provided to the request for additional information regarding the pending permit renewal. Please contact me at 813-744-6100, extension 336, if you have questions about this letter.

Sincerely,



John R. Morris, P.G.
Solid Waste Section

cc: David Springstead, P.E., Springstead Engineering, Inc., 727 So. 14th Street, Leesburg, FL 34748
Ted Strouse, P.E., Central Testing Laboratories, Inc., 723 So. 14th Street, Leesburg, FL 34748
Virginia Watson, Sumter County, 209 N. Florida Street, Bushnell, FL 33513
Mitch Kessler, Kessler Consulting Inc., 14620 N. Nebraska Ave., Bldg. D, Tampa, FL 33613
Susan Pelz, P.E., FDEP Tampa
Steve Morgan, FDEP Tampa

3/23/04

3/23/04

SUMTER COUNTY - MEETING TO DISCUSS RESPONSES TO RFI #2

SJP
SGM
JRM
BERNARD DEW
MULHIM ZIMMS
CHUCK JETT
MITCH KESSLER
DAVID SPUNASTED

SGM - MATERIALS REC'D FEB 2, 2004 FOR COMPOST/MRF PERMITS

- COMPLETE BUT NOT SUFFICIENT; NEED SOME ADD'L INFORMATION
- MAY NEED TO DEVELOP SPECIFIC CONDITIONS

JRM - RESPONSES TO RFI #2 MOST RECENTLY REC'D 3/4/04

- "OFF CYCLE" FROM MRF & COMPOST PERMITS

SJP - NO FATAL FLAWS

- APPLICATIONS IN HOUSE FOR OVER 1 YEAR SO WILL NOT PREPARE RFI #3 LETTERS
- MAKE DECISIONS BASED ON INFORMATION PROVIDED IN HOUSE (OR ADD'L MATERIALS TO BE REC'D)

SGM - WASTE VOLUMES/WASTE HANDLING INCONSISTENT BETWEEN APPLICATION FORM, ENG REPORT & FINANCIAL

- HOW MUCH CAN BE HANDLED BY MRF, WILL ADD'L VOLUME BE BY-PASSED OR ADD ANOTHER SHIFT TO MRF - NOT ADDRESSED IN OPERATIONS PLAN

SJP - 200 TPD ON TIPPING FLOOR

D. SPUNASTED - GOT ~ 33% REDUCTION ON PICKING LINE

MITCH K - ACCEPTANCE TEST INDICATED MORE THAN 100 TPD

CHUCK J. - TAKING 75 TPD OFF TIPPING FLOOR NOW; PUTTING 50 TPD IN DIGESTER;

HAVING LIMITING AT FINISHING BUILDING NOW; ADD'L WASTE IS BY-PASSED

MZ - MAKING REVISIONS TO OPERATIONS MANUAL TO REFLECT THESE WASTE VOLUMES;

MAY MAKE CHANGES IN FUTURE BUT DON'T HAVE FUNDING FROM COUNTY AT THIS TIME FOR IMPROVEMENTS

- WILL BE PLANNING ON MAX OF 100 TPD THROUGH TIPPING FLOOR

MK - COUNTY HAS AGREEMENT W/ WASTE MGMT. TO PROVIDE TRUCKS TO HANDLE BULKY VOLUME

SJP - FOR PERMITS PENDING NOW, NEED TO REFLECT CURRENT VOLUMES THAT THE

BUILDINGS/FACILITIES CAN HANDLE; COME BACK LATER FOR PERMIT MOD TO INCREASE VOLUMES LATER

- REPAIR OF DIGESTER #1 DOESN'T MATTER; CAPACITY IS LIMITED BY FINISHING BUILDING

SUMTER COUNTY

SGM - MAX. CAPACITY OF DIGESTER #2 UNCLEAR BASED ON VOLUME

- CAN NEW DIGESTER DIGEST EFFECTIVELY WHEN FULL?

D.S. - DON'T KNOW YET FOR DIGESTER #2 AS NOT YET OPERATED W/ WASTE

SJP - EXPECT SOME VOLUME REDUCTION BUT CAN'T QUANTIFY YET (DIDN'T APPEAR TO HAVE A REDUCTION FACTOR FOR DIGESTER #1)

CJ. - DON'T LOAD DIGESTER ON WEDNESDAYS

DS - USED VOLUMES FROM MANUFACTURER

SGM - NEED TO RE-EVALUATE LOADING VOLUMES; CAN'T ASSUME IT IS LOADED FULL

MK - 800#/TON SEEMS HIGH FOR PICKED WASTE

SJP - NEED TO CHECK DENSITY USED BY MANUFACTURER IN THE CALCULATIONS

SGM - AIR SPACE IN DIGESTER #2 WON'T CHANGE; ESTIMATE IF PLAN TO RUN 66% OR 75% FULL AND SUBMIT REVISIONS

MK - CAPACITY OF TUBE IS (AIR SPACE) - (% FULL) - (% VOLUME REDUCTION)

SJP - IF COME UP W/ DIFFERENT BULK DENSITY, NEED TO JUSTIFY

- 800#/CUBIC YARD IS TYPICAL VALUE FOR UNCOMPRESSED SOLID WASTE

- CAN USE DATA COLLECTED AS "QUALITY CONTROL" CHECKS TO SEE HOW MUCH ORGANIC LOADING GOES INTO TUBE - BUT NEED TO MEASURE BULK DENSITY OF WASTE GOING INTO THE TUBE AFTER PICKING LINE (NOT CURRENTLY BEING MEASURED) - NEED TO ACCOUNT FOR VOLUME CHANGES AFTER PICKING LINE FOR NEW BULK DENSITY OF WASTE

SGM - "20% BLENDING" / MIXING ZONE BETWEEN SUCCESSIVE DAYS LOADING

DS - 10% MIXING FROM PREVIOUS DAY W/ CURRENT (10% MIXING AT BOTH ENDS OF EACH DAY)

SGM - 10% WILL REMAIN IN TUBE FOR 4 DAYS

- EPA REQUIREMENT FOR SLUDGE TO BE COMPOSTED A MINIMUM OF 3 DAYS

MK - WHAT ABOUT COMPOSTING SLUDGE OUTSIDE THE TUBE (IN WINDOWS)

SJP - EPA 503 RULE, REQUIRES WINDOWS FOR 30+ DAYS, NEED TO CHECK RULE

SUMTER COUNTY MEETING

DS - WHAT ABOUT 3 DAYS IN DIGESTER + 21 DAYS IN FINISHING BUILDING

MK - LAB DATA FROM THORNTON INDICATES MAJORITY OF FERM COLIFORMS ARE
KILLED WITHIN 24 HOURS

SJP - 503.32(B) ~~E~~ - CLASS B SLUDGE REQUIREMENTS

- THORNTON DATA INDICATE LESS THAN 5,000,000 CFU (?)

MK - COMPOST RULE HAS COLIFORM STANDARD

- COUNTY WENT THROUGH 3 DIFFERENT TESTS TO PROVIDE DATA NEEDED

SJP - W/ MULTIPLE STANDARDS IN RULES, NEED TO MEET MOST STRINGENT REQUIREMENT

DS - WHAT ABOUT CLASS A SLUDGE

MK - DEFINITIONS OF DISINFECTION IN 62-701

SJP - DEFINITION REFERS TO ^{VOLATILE} SUSPENDED SOLIDS (PER GRAM)

- SLUDGE RULE REFERS TO TOTAL SOLIDS

- 503 RULE REFERS TO TREATMENT OF BIOSOLIDS NOT COMPOST

- CONFLICT IN RULE REQUIREMENTS IS NOTHING NEW, NEED TO MEET MOST STRINGENT CRITERIA

DS - APPARENT CONFLICT IN RULES REGARDING LEVEL OF DISINFECTION IS CONFUSING

MZ - HOW IS SLUDGE CLASSIFIED & CAN THEY DEMONSTRATE ONLY TAKE SLUDGE THAT MEETS
PATHOGEN REDUCTION

SJP - DOMESTIC WASTE QUESTION REGARDING SLUDGE CLASSIFICATION

MK - COUNTY
NEEDS TO CONSIDER TALKING W/ ELLIOT EPSTEIN (AUTHOR OF 503 RULE) FOR CLARIFICATION
OF SLUDGE HANDLING

SJP - THAT'S FINE ^{TO GET HIS INPUT} MAY COME DOWN TO RULE INTERPRETATION W/ FRANK JOYAL - ANY CLARIFICATION
HAS TO COME THROUGH FRANK

- NEED TO LOOK AT METALS COMPOSITION FOR UNRESTRICTED USE OF COMPOST (SINCE USING SLUDGE)

MK - WINDOWS IN FINISHING BUILDING PROVIDE COMPOSTING FUNCTION

SJP/SEM - FINISHING BUILDINGS NOT PRESENTED TO US AS COMPOSTING FUNCTION, JUST CURING

- NEED TO DEMONSTRATE MEET TEMPERATURE & TURNING REQUIREMENTS FOR WINDOWS

CT - MEET TEMP REQUIREMENTS & HAVE TO TURN WINDOWS TO KEEP TEMP DOWN IN COMPOST

SUMMIT COUNTY MEETING

SGM - HOW DOES DIGESTER #2 MEET REQUIREMENTS TO HAVE IN VESSEL COMPOSTING FOR 3 DAYS

MK - TESTING CONDUCTED TO TRY TO DEMONSTRATE DISINFECTION

SJP - SOME QUESTIONS W/ SAMPLING RESULTS

- DOESN'T MEET 503 RULE; SAMPLING NOTES, HOW COLLECTED, WHERE IN TUBE COLLECTED, NEED TO PROVIDE SAMPLING METHODOLOGY

SAM - SAMPLING IN TUBE #1 IS EASIER W/ SEPARATE COMPARTMENTS

SJP - LOOKING AT SOME ADD'L TESTING FOR TUBE #2 - PERFORMANCE TESTING

- IF TESTING SHOWS NOT GETTING REQUIRED TREATMENT NEED TO RELOAD INTO TUBE; NEED TO HAVE CONTINGENCY AS PART OF PERMIT CONDITIONS

MK - HAVE 2 OTHER DIGESTERS THAT COMPOST LESS THAN 3 DAYS (MS & GA)

MZ - DIFFICULT TRYING TO GET APPROPRIATE TESTING METHODS THROUGH TALLAHASSEE

SGM - PARTIAL TESTING METHODOLOGY FOR COMPOST COMING OUT OF TUBE #2 TO MEET DISINFECTION REQUIREMENTS FOR BOTH RULES

SJP - ENOUGH DATA TO BE STATISTICALLY SIGNIFICANT TO DEMONSTRATE MEET DISINFECTION REQUIREMENTS

MK - WANT TO USE DIFFERENT FEEDSTOCKS FOR FORCE PROJECTS

SJP - CHANGE IN FEEDSTOCK WILL REQUIRE ADD'L TESTING PERIOD FOR DATA COLLECTION

DS - WHAT ABOUT FEEDSTOCK THAT DO NOT USE SLUDGE

SJP - THEN DO NOT HAVE TO MEET REQUIREMENTS OF 503 RULE

SGM - HOW DO YOU TELL TAKE A DAYS WORTH OUT OF DIGESTER #2 (VOLUME & RATE OF DISCHARGE)

- CJ - CONVEYOR LIMITS AMOUNT / VOLUME COMING OUT OF TUBE; RAN CAPACITY OF CONVEYOR OPERATION
- ALSO CHECK VOLUME OF MATERIAL IN THE FINISHING BUILDING
- IF OVERLOADED THE CONVEYOR IT STOPS

SGM - REWORK SECTION ABOUT DISCHARGE RATE

SGM - OPERATION PLAN INDICATES TEMPERATURE WILL BE MONITORED; ASKED THAT THE OPS PLAN INDICATE WHAT TEMP. IS THE TARGET FOR TEMP & MOISTURE FOR DAY 1, DAY 2, DAY 3

SUMTER COUNTY -

SGM - NEED REPORT TO SUMMARIZE PROPOSED REPAIR TO DISASTER #1

MK - HAVE HAD ENGINEERING REPORT; BOARD HAS NOT APPROVED REPAIR (\$250,000 TO \$500,000)

SJP - NEED TO SEE PHOTOGRAPHS OF CRACKS; NEED TO KNOW WHAT HAPPENED

CJ - REPAIR 60 FT OF TUBE ~~AT~~ AT BULKHEAD BETWEEN DAYS 2 & 3

SGM - NEED TO ADVISE OPS PLAN TO BE CONSISTENT W/ PROPOSED REPAIR TO TUBE #1

WHenever it happens; WILL BE A PERMIT MOD. WHEN IT HAPPENS

SGM - ASKED FOR UPDATED TOPO FOR FACILITY; HOW WILL KNOW HOW TO REPAIR W/O

STARTING POINT TOPO?

CJ - REPAIR PROBLEM AREAS, BRING UP TO GRADE & REPAVE

MK - HAVE HAD POTENTIAL CONTRACTORS ^(LANDFILL ENGINEERS) LOOKING AT PAVED AREA - PART OF C.O. PHASE II PLAN

SJP - NEED TO LOOK AT REPAIR TO ENTIRE PAVED AREA

- WILL COUNTY BE PROVIDING MATERIALS & LABOR TO DO REPAVING

CJ - NOT DECIDED YET, BUT PROBABLY WILL DO IT THAT WAY

SJP - HOW WILL AMOUNT OF MATERIALS BE DETERMINED

DS - DISTINCTION BETWEEN ROUTING OF WORK AREAS & SETTLEMENT OF WASTE

- PLACED CRUSHED LIMEROCK ON SURFACE, COMPACT IT & REPAVE

SJP - HOW WILL CONTRACTOR KNOW HOW MUCH MATERIALS WILL BE NEEDED

- WOULD PROVIDE INITIAL TOPO, BUT PRIMARY INTEREST IS THAT NEW GRADERS ~~WILL~~ WILL DRAIN

- NEED ADD'L INFORMATION FOR CONSENT ORDER; NEED ENOUGH INFO TO APPROVE PLAN;

(FINAL CONTRACTS & X-SECTIONS OF REPAVING) - NOT A PERMIT MOD. ISSUE, A C.O. ISSUE

- NEED TOPO FOR ENTIRE COORD OF (PAVED & UNPAVED)

JRM - GW ISSUES DISCUSSED AT LENGTH - NO NOTES TAKEN

SUMTER COUNTY

FINANCIAL COSTS -

SJP - 3 CRITERIA FOR RECOVERED MATERIAL - MUST PROVIDE THE DEMONSTRATION TO
EXEMPT FROM COSTS FOR FINANCIAL ASSURANCE; IT IS CONSIDERED WASTE IF NONE
NOT PROVIDED BY PRODUCT DEMONSTRATION

SGM - THIRD PARTY COSTS NOT PROVIDED FOR SOME

SGM - LTC COSTS - 3RD PARTY ESTIMATES FOR GW SAMPLING/ANALYSIS

- SOME COSTS FOR MAINTENANCE OF MON. WELLS
- LANDSCAPING COSTS (MOWING) - SAME AS 5 YRS AGO
- EROSION CONTROL - NO JUSTIFICATION FOR COST AMOUNT
- ADMIN. COSTS - SAME AS 5 YRS AGO

APPLICATION FORMS - NEW APPLICANT (BEHIND) DEW AS NEW APPLICANT

ENG REPORT - pg 2 - 72 HOURS FOR COMPOST RESIDENCE TIME

pg 7 - 100 TPD - REVIEW & REVISE BASED ON ETHERICAL CONVERSATION

OPS. PLAN pg 12-17 - DIGESTER OPERATION DESCRIPTION (ALL OF SECTION 4 OF OPS PLAN)

pg 19 - RETAIN TIMEFRAME REQUESTED FOR EROSION FEATURES

pg 22 - ~~EROSION~~ HOT LOADS DIRECTED TO A LOCATION THAT WON'T RUN OFF;
NEED TO BE ABLE TO CONTAIN FIRE FIGHTING WATER

HAF WASTE MANUAL pg 1 - NOT KNOWINGLY RECEIVE HAF WASTE

**Outstanding Items Summary -- Sumter County Closed Class I Landfill
Long-term Care Permit Renewal, Pending Permit No. 22926-003-SF**

COPY PROVIDED @
MEETING 3/23/04

15. **M.1.c.(1):** Section 5 of the SEI submittal indicated that the figure entitled "Monitoring Well Map", dated January 12, 2004, was revised to depict the edge of the former disposal areas and the distances from the edge of the waste units to the monitor wells. The response is not considered sufficient to address the review comment, as follows:

- ☒ Neither the SEI nor the CTL submittals provided a response to the review comment regarding the adequacy of the existing well locations to address the requirements of Rule 62-701.510(3), F.A.C., regarding the lateral distance from the detection wells to the edge of the disposal units. The figure entitled "Monitoring Well Map" indicates that existing wells MW-1 and MW-7 are 300 feet and 337 feet, respectively, from the edge of the landfill. These wells do not meet the location requirements of the cited rule for detection wells, and the replacement detection wells shall be required.
- ☒ The figure entitled "Monitoring Well Map" does not include the boundaries of Phases I, II and III within the landfill area as requested in the review comment.
- ☒ The reference on the application form to Section 2.0 of the GWMPE is not correct. The application form should reference Appendix F of the *Operations Manual*.

19. **M.1.c.(6):** Section 6.0 of the revised GWMPE (CTL submittal) referenced the construction details summary table as Appendix IX, however the table appears to be included in Appendix X. Section 6.0 of the revised GWMPE recommended replacement of well MW-2 to move it away from a high traffic area and to construct the well with 10 feet of screen and recommended replacement of wells MW-7 and MW-9 to construct each well with 10 feet of screen at a specified range of elevations. The response is not considered sufficient to address the review comment, as follows:

- ☒ The top/bottom screen elevations for the proposed well MW-2 replacement were not provided.
- ☒ The justification provided for the proposed top/bottom screen elevations for the replacements for wells MW-7 and MW-9 does not address the lithology encountered at the facility and the potential to breach the confining unit.
- ☒ Unique identification numbers were not provided for the replacement wells.
- ☒ The locations of the replacement detection wells were not described relative to the edge of the landfill and were not shown on a site map.

23. **M.1.h.(2): Bi-annual report requirements signed, dated and sealed by P.G. or P.E.**

(Rule 62-701.510.(9)(b), F.A.C.)

b. **GWMPE – Section 2.0:** Section 5 of the SEI submittal referred to the figure entitled "Monitoring Well Map" (provided in Appendix F of the *Operations Manual* in Section 4 of the SEI submittal), dated January 12, 2004. The response is not considered sufficient to address the review comment, as follows:

- ☒ The revised map does not include the location of the compost pads as requested in the review comment.

e. **GWMPE – Section 5.0:**

2) Section 5 of the SEI submittal referred to the figure entitled "Monitoring Well Map" (provided in Appendix F of the *Operations Manual* in Section 4 of the SEI submittal) for the locations of the three new wells that are proposed to be downgradient of existing well MW-4. Section 5 of the SEI submittal also indicated that the construction details of the proposed wells was attached but did not indicate the location of this information. It appears that Appendix IX of the revised GWMPE (CTL submittal) has been added to include the construction details for proposed wells MW-10, MW-11 and MW-12. The response is not considered to be sufficient to address the review comment for the following:

- ☒ Section 6.0 of the revised GWMPE (CTL submittal) does not address the need to install compliance wells downgradient of well MW-4.
- ☒ Section 6.0 of the revised GWMPE (CTL submittal) does not provide the justification of the screen elevations (ground water elevation range and lithology) for the proposed wells as presented in Appendix IX of the submittal.

X = ITEM NOT TO BE INCLUDED IN LTC PERMIT RENEWAL MATERIALS

⊖ = ITEM TO BE INCLUDED IN SUPPLEMENTAL INFORMATION FOR LTC PERMIT RENEWAL
s_w/jrm/sumter/corresp/sumter1.304.a

**Outstanding Items Summary -- Sumter County Closed Class I Landfill
Long-term Care Permit Renewal, Pending Permit No. 22926-003-SF**

25. **O.2.:** Provide documentation that will describe locations, construction details and procedures for monitoring gas at ambient monitoring points and with soil monitoring probes (Rule 62-701.530(2), F.A.C.)
- b. Section 5 of the SEI submittal referred to the figure entitled "Monitoring Well Map", dated January 12, 2004 (provided in Appendix F of the *Operations Manual* in Section 4 of the SEI submittal) which included the locations of four gas probes (designated GP-1 through GP-4). The response is not considered to be sufficient to address the review comment for the following:
- The adequacy of the existing perimeter gas probes was not provided.
 - No discussion of the proposed gas probe construction details was provided. The figure entitled "Typical Gas Monitoring Probe" (provided in Section 5 of the SEI submittal) indicated that the bottom elevation of the proposed gas probes shall be elevation 55 feet NGVD, however justification of this elevation and comparison of ground water elevations were not provided.
 - c. Section 5 of the SEI submittal did not include a response to this review comment which requested an evaluation of the ambient gas monitoring locations and did not provide a site map that located ambient gas monitoring locations within structures at the facility. *builder w/ subcongrade*
26. **P.2.b.(5):** Section 5 of the SEI submittal referenced revisions to Section 5.3 of the *Operations Manual* which were indicated to provide a description of procedures for conducting landfill gas monitoring (Section 5). It does not appear that this section of the *Operations Manual* was revised as indicated.
27. **P.3.d.:** Same as review comment No. 25.

Central Testing Laboratory

File COPY

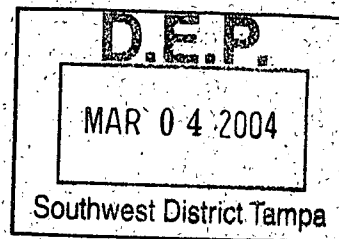
EB,0002407

Engineering and Materials Testing

Reply to:

March 2, 2004

Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619-8318



Attn: Mr. John Morris

RE: Response to RAI for Groundwater Monitoring Plan Evaluation 1998-2003
Sumter County Public Works Landfill
Permit No. 22926-002-SF

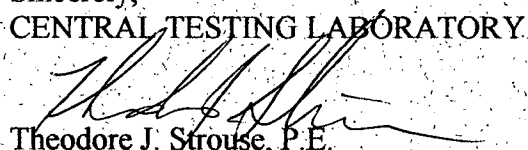
Dear Mr. Morris:

Central Testing Laboratory has completed the Request for Additional Information dated November 7, 2003 for the Groundwater Monitoring Plan Evaluation for 1998 through 2003.

Enclosed is the original RAI letter from the FDEP with CTL's responses to the comments. Also enclosed is a revision of the body of the GWMPE with the responses and corrections written into it, revisions and corrections to the original appendices, as well as two new appendices.

It has been a pleasure assisting you with this project. Should you have any Questions, or if you would like to discuss this report, please contact our office.

Sincerely,
CENTRAL TESTING LABORATORY


Theodore J. Strouse, P.E.
Florida Registration #48220

3/3/04

PARTIAL RESPONSES
TO RAI # 2
3/4/04

5400 S. Florida Avenue
Inverness, FL 34450
(352) 726-6447

723 S. 14th Street
Leesburg, FL 34748
(352) 787-1268

Sumter County
(352) 793-3639

1725 SW 17th Street
Ocala, FL 34474
(352) 622-1186



1.0 Introduction

Sumter County Public Works Department received a five year permit (No. 22926-002-SF) issued May 29, 1998 to conduct long-term care monitoring and maintenance of a closed Class I Landfill (approximately 30 acres), referred to as the Sumter County Class I Landfill. The permit was issued subject to specific conditions. This report is prepared to provide an evaluation of the water quality monitoring as required by Specific Condition No. 20 of the permit.

2.0 Ground Water Monitoring Plan

The groundwater monitoring plan for this permit required sampling and testing from seven (7) monitor wells positioned in the zone of discharges around the landfill. The location of these wells is presented in the attached Figure 1. The monitor wells were identified as MW-1, MW-2, MW-4, MW-6A, MW-7, MW-8 and MW-9. All wells are considered to represent the water of the Floridian Aquifer. Monitor well MW-6A has been designated as a background well with all other wells designated as Detection Wells. Details of monitor well construction and soil lithologies are presented on the Typical Monitor Well Detail, MW Boring Logs and Well

Completion reports in Appendix I.

Response to RAI dated 3/25/03 Comment 20 M.1.c(3)

Based on the hydrographs, MW-6A fluctuates like the other monitor wells at the site. According to the Boring Log in Appendix I, the well is in limestone and most of the water levels have been recorded in the limestone stratum of the well. There is no evidence of a surficial aquifer. For these reasons, MW-6A is thought to be screened in all aquifers that may be affected by the landfill.

In accordance with Specific Conditions 13a of the permit, the plan required sampling of all wells quarterly for the following parameters:

<u>Field Parameters</u>	<u>Laboratory Parameters</u>			
Static water levels	Aluminum	Thallium	Selenium	Antimony
before purging	Arsenic	Silver	Beryllium	Nickel
Specific Conductivity	Barium	Sodium	Chloride	Fluoride
pH	Cadmium	Copper	Cyanide	Nitrate
Turbidity	Chromium	Iron	Sulfate	TDS
Temperature	Manganese	Zinc	Nitrite	Ammonium
Colors, sheens	Lead	Mercury	Foaming Agents	
	Gross Alpha	Radium 226 + Radium 228		

Response to RAI dated 12/07/2003 Comment 20M.1.f(3)

<u>Field Parameters</u>	<u>Laboratory Parameters</u>		
Static water levels	Chlorides	Aluminum	Mercury
before purging	Fluoride	Antimony	Silver
Specific conductivity	Nitrate	Cadmium	Sodium
pH	Total ammonia	Chromium	Thallium
Temperature	Total dissolved solids (TDS)		
Turbidity	Gross alpha	Lead	Manganese
Dissolved oxygen	Radium 226 + 228		
Colors & sheens			
(by observation)			

Specific condition 13b required testing annually for the above parameters, as well as the Volatile Organic Compounds, Pesticides, PCB=s and Trihalomethanes listed in the Primary Drinking Water Standards listed in F.A.C. Chapter 62-550.310 (Rule dated September 7, 1994).

The results of all quarterly testing is presented in Appendix II by a Summary Table and graphic plot of each parameter through the period of review. The Annual Test results are presented in

Appendix III.

Response to RAI dated 3/25/03 Comment 20 M.1.f(3)

It is recommended that the parameters listed in Specific Condition 13a are still appropriate, with the exception of those parameters which have not recently shown "hits" or are consistently well below the MCL. It is recommended that those parameters be dropped from Specific Condition 13a and be added to the list of parameters tested annually or dropped altogether. The list of

parameters currently tested on a quarterly basis recommended to be dropped or tested only annually follows:

<u>Arsenic</u>	<u>Chloride</u>	<u>Nitrite</u>
<u>Barium</u>	<u>Cyanide</u>	<u>Selenium</u>
<u>Beryllium</u>	<u>Fluoride</u>	<u>Sodium</u>
<u>Copper</u>	<u>Nickel</u>	<u>Sulfate</u>
		<u>Zinc</u>

Per the RAI dated 3/25/03, the Department intends to replace the parameters in Specific Condition 13b (the current annually tested parameters) with the parameters listed in Rule 62-701.510(8)(a) as these parameters will be more representative of previous solid waste disposal at the facility. The list of parameters in Rule 62-701.510(8)(a) are as follows:

EPA 8260 (Volatile Organics)

The current list of quarterly metals (except Aluminum & Manganese) plus Cobalt & Vanadium
Total Ammonia (as N)

Chlorides

Nitrate

TDS

Given the rate of "hits" on Nitrate and TDS and the metals NOT listed in the "drop or change to annual" list above, the Department might consider leaving some or all of those parameters on the Quarterly Testing schedule.

The monitor wells were surveyed by Springstead Engineering, Inc. to provide top of casing elevations. This survey data is presented in the following Table 1. It should be noted that MW-2 was cut down to be flush with ground surface between 1st and 2nd quarter 2002. A subsequent survey was performed to determine the elevation of this well prior to second quarter 2002.

TABLE 1

Well Survey Data

Approximate Survey Date	Monitor Well No.	Elevation Top of Casing
1985	1	70.17
1985	2	74.14 thru Jan. 2002
		69.13 after Jan. 2002
1985	4	70.36
1989	6A	77.54
1989	7	73.14
1993	8	69.26
1993	9	71.95

Response to RAI dated 3/25/03 Comment 17 M.1.c.(4)

TABLE 1 (Revised 5/27/03)

Well Survey Data

Approximate Survey Date	Monitor Well No.	Elevation Top of Casing	Latitude	Longitude
1985	1	70.17	28°44'34.9"	082°05'30.2"
1985	2	74.14 thru Jan. 2002	28°44'29.5"	082°05'26.8"
		69.13 after Jan. 2002		
1985	4	70.36	28°44'39.1"	082°05'26.2"
1989	6A	77.54	28°44'39.7"	082°05'14.8"
1989	7	73.14	28°44'42.4"	082°05'21.1"
1993	8	69.26	28°44'32.1"	082°05'15.1"
1993	9	71.95	28°44'30.6"	082°05'19.1"

This survey data has been used throughout the course of monitoring for this permit. The water

level contour maps and hydrographs prepared for this report are based on this survey data.

3.0 Ground Water Elevations

Review of the static water levels recorded through the period between January 1998 and December 2002 reveals water levels fluctuating between the elevations of 36.64 (minimum) and 50.24 (maximum) feet NGVD. The water level recorded at each well for each sampling event is presented in the following Table 1:

Response to RAI dated 3/25/03 Comment 23 c.

Table 1(Revised 5/27/03)

Water Level Elevations

DATE	MW-1	MW-2	MW-4	MW-6A	MW-7	MW-8	MW-9
1Q/98	48.01	48.47	48.2	49.12	48.64	49.68	49.68
2Q/98	47.59	47.48	47.53	48.46	47.81	49.1	47.95
3Q/98	44.17	44.39	44.03	44.87	44.56	45.51	44.87
4Q/98	45.92	47.14	46.11	46.62	46.47	46.76	46.37
1Q/99	44.9	43.81	43.78	45.87	47.14	44.93	44.28
2Q/99	42.92	42.89	42.86	42.87	43.31	44.93	43.28
3Q/99	43.75	43.98	43.11	44.04	44.39	44.76	44.45
4Q/99	44.17	44.47	43.94	44.71	44.56	45.1	44.62
1Q/00	43.17	40.54	43.36	44.04	43.56	43.1	43.62
2Q/00	41.67	41.81	41.86	41.12	42.06	42.59	42.2
3Q/00	41.34	42.31	41.28	41.21	41.47	42.26	41.79
4Q/00	42.25	42.72	42.36	42.54	42.64	43.1	42.87
1Q/01	41.17	41.27	41.36	41.6	41.64	42.06	41.55
2Q/01	42.17	42.14	42.06	42.31	42.24	40.96	42.15
3Q/01	41.74	36.64	41.76	42.04	41.94	43.06	42.05
4Q/01	47.49	48.5	47.62	48.5	47.98	49.7	48.05
1Q/02	43.37	43.59	43.76	43.89	43.59	45.01	43.85
2Q/02	41.97	42.16	42.02	42.33	42.23	43.4	42.32
3Q/02	48.19	48.83	48.41	49.17	48.84	50.24	48.75
4Q/02	46.05	38.49 46.32	45.54	46.74	46.33	47.82	46.34

Hydrographs of each Monitor Well and one of all wells have been prepared and are presented in Appendix IV.

A review of the hydrographs shows similar fluctuations in all wells over the period in review. Also depicted is the seasonal variations and range at seasonal water levels. Based on this data it is evident that the normal seasonal high water level on this site is at an elevation of approximately 49 feet NGVD as present in most wells of the third quarter 2002 sampling event. The lowest water levels recorded were in the third quarter of 2000 at around 41 feet NGVD. These water levels are consistent with the anticipated water levels considered during installation of the monitor wells. There has been only one occurrence of a monitor well not having sufficient water available for sampling during the period in review. This occurrence was in the 3rd quarter of 2001 where well MW-6 could not be sampled. This event occurred during a prolonged drought as was explained in a response to the RAI dated November 5, 2001 from Mr. John Morris with F.D.E.P. The well did recover prior to the next sampling event and is providing sufficient water as necessary. A copy of which is presented in Appendix VI.

4.0 Groudwater Flow

Groundwater elevations have been plotted to create contour maps of the surface of the groundwater for the various sampling events. A copy of these contour maps is presented in Appendix V. A review of the water level contour maps reveals groundwater flow being generally from the east, southeast to west, northwest with a hydraulic gradients ranging between 0.00056 feet per foot and 0.0058 feet per foot. Given the distance between MW-8 and MW-4

(1,200 LF) and using the hydraulic gradient of 0.0019 ft./ft. as representing worst case beneath the site in the direction of flow, and a hydraulic conductivity of 22.08 ft./day, groundwater flow rate is calculated as follows:

porosity (n) = 0.25

hydraulic conductivity (k) - 22.08 ft./day

hydraulic gradient (I) = 0.0019 ft./ft.

$$\text{Flow Velocity (V)} = \frac{KI}{n} = \frac{22.08 \text{ ft./day} \times 0.0019 \text{ ft./ft.}}{0.25} \quad V = 0.16 \text{ ft./day}$$

With a flow velocity of 0.16 ft./day it is calculated that it would take 625 days for a contaminant to travel through the zone of discharge of 100 feet. Considering that the wells are positioned within the zone of discharge, a contaminant would be detected in a shorter period of time. The time to travel through this zone of discharge is considerably longer than the time between sampling events, therefore, the sampling frequency of quarterly is considered sufficient for this purpose.

Response to RAI dated 3/25/03 Comment 23d 1) & 2)

The source for hydraulic gradient is the 4th Quarter 2002 contour map. The difference between MW-8 and MW-4 is greater here than any other time covered by the GWMPE. Hydraulic conductivity referenced in this section is another site (Sumter Recycling, formerly D&C Disposal) located just to the west of the Sumter County Closed Class I Landfill. See Appendix VII for this information.

5.0 Groundwater Quality

A review of the field parameters obtained reveals static water levels following similar trends upward and downward in most wells for each sampling event. Three water levels appear

unusually low in comparison to other wells. Specifically the water levels in MW-2, 1st quarter of 2000, 2nd quarter of 2001 and 4th quarter 2002. Contour maps produced using these data points may be suspect of not accurately representing groundwater flow. Since 3rd quarter of 2001 all wells appear to follow similar trends.

Temperature readings taken between the 4th quarter of 1998 and the 4th quarter of 1999 appear unusually low and may indicate equipment failure for this parameter through this period. There have been several equipment upgrades since that time and temperatures have since stabilized. The values of pH have remained in the same range over the entire period of review. Several values are outside the lower range specified for pH of 6.5. The lower values occur mostly in wells MW-1 and MW-9. Since the 1st quarter of 2002 all values have been within an acceptable range.

Specific conductivity values vary significantly from well to well with similar trends observed, between wells. Generally MW-1 has the lower values while MW-9 is generally on the high side of values.

Turbidity values varied widely from the 2nd quarter of 1998 through the 3rd quarter of 2000. Values for this period ranged between 2.1 and 940 NTU. Between the 4th quarter of 2000 and the 2nd quarter of 2001 turbidity values were not recorded due to equipment failure. Since the 2nd quarter of 2001 turbidity values are significantly lower, ranging between 1.2 and 84 NTU.

A review of Laboratory Parameters reveals that there were a minimum number of contaminants above the detection limits and none above the MCL for the annual testing of Volatile Organic

Compounds, Pesticides, PCB=s and Trihalomethanes listed in the Primary Drinking Water

Standards listed in F.A.C. Chapter 62-550.310.

Laboratory results of the parameters required for quarterly testing revealed the following parameters above maximum Contaminant levels (MCL).

Aluminum	Fluoride	Mercury
Antimony	Foaming Agents	Nitrate
Beryllium	Iron	Silver
Cadmium	Lead	TDS
Chromium	Manganese	Thallium

On the parameters such as Antimony, Beryllium, Chromium, Fluoride, Foaming Agents, Mercury and Silver where there is a single exceedance of the MCL in a well and the preceding and subsequent testing indicates results below MCL, it is evident that this single occurrence does not represent a trend and may not accurately represent ground water quality.

The Aluminum, Cadmium, Iron, Lead, Manganese and Thallium are consistently over the MCL. These exceedances have generally been occurring over the entire period in review. There is a correlation between magnitude of turbidity values to most metals and as turbidity values have decreased significantly since 2nd quarter of 2001, so have values and frequency of exceedances in these metals. The result is a downward trend in metal parameters. This is best seen in the plotted parameters Aluminum, Iron, Lead, and Manganese.

There are also values of Nitrate in MW-4 and TDS in MW-4 and MW-9 that are often above the MCL. Additionally there is a slight upward trend in Nitrate levels of MW-4 and a sharp increase

in both Nitrate and TDS in MW-2 since the 1st quarter of 2002.

The exceedances listed above along with the dry well MW-6A mentioned earlier prompted the RAI letter from Mr. Morris dated November 5, 2001. A copy of this RAI and responses are provided in Appendix VI.

In response to the RAI the elevated levels and upward trend in Nitrate of MW-4 has been explored by performance of expanded parameters. The expanded parameters selected were indicator parameters for septic leachate as it is believed that MW-4 is being influenced by septic drainfields in close proximity to this well.

The elevated values of TDS on MW-4 and MW-9 do not show a trend upward or downward but occur at a relatively steady state for the period in review.

The sharp upward trend in Nitrate and TDS of MW-2 since the 1st quarter of 2002 is believed to be attributed to the activities in this area that have resulted in the well being cut down to be flush with the ground surface. The activities included significant grade changes in the area exposing subgrade soils. The excavation resulted in a grade change on the order of six feet by removing surficial sands. It is CTL's opinion that the excavation has removed approximately six feet of the natural sand filter and exposed subgrade soils to a higher degree of saturation. The saturation and infiltration of runoff water may be the cause of the increase in values at this location.

Response to RAI dated 3/25/03 Comment 23.e.4

That the Department may require Evaluation Monitoring per Rule 62-701.510(7) in regard to Nitrate & TDS at MW-2 is noted. However, both parameters have been trending downward. TDS was below MCL for the 1st & 2nd Quarters of 2003. Nitrate was lower for the 1st quarter of

2003, but above MCL. It fell below MCL for the 2nd Quarter of 2003.

6.0 Evaluations and Recommendations

~~Based on this review it is CTL's opinion that the current Groundwater Monitoring Plan is effective in monitoring groundwater flowing beneath the landfill site. The plan is following the guidelines of the permit and is providing the necessary information with respect to groundwater flow and groundwater quality.~~

Through the period in review it is evident that the groundwater flow is generally in a westerly direction as was presented in the plan. The well locations and the flow rates calculated indicate that the sampling frequencies are currently adequate to identify contaminants before reaching the limits of the zone of discharge.

While individual results have been reported above the MCL in several parameters, often the exceedance was a single event and the preceding and subsequent sampling events were below MCL. In these cases it is our opinion that the single exceedances do not reflect a trend or an accurate reflection of the impact to the groundwater quality.

The metal parameters that are exceeding MCL are believed to be due to natural background concentrations of these parameters in the groundwater for this area. This would account for the similar trends observed in Turbidity and the metal parameters in the background wells. It is evident that equipment upgrades as well as changes in sampling procedure as discussed in the response dated November 30, 2001 to the RAI dated November 5, 2001 over the past two years have had a significant impact to the values of turbidity and metals as well as the overall

effectiveness of the groundwater monitoring. The downward trends in these parameters indicate that the results above the MCL do not appear to be related to effects on the groundwater quality by the landfill. If the landfill was causing these elevated results an upward trend would be expected.

The additional testing of MW-4 has indicated that this well is being effected by septic tank systems in place near the well. Since these systems are still active it is expected that this condition will continue.

The increase in Nitrate and TDS of MW-2 is believed to be related to the excavations in the area of the well and should be reviewed in subsequent sampling events.

~~Given the noted improvement of the consistency in results over the past two years, CTL recommends continuing the current Groundwater Monitoring Plan with quarterly and annual testing. If the current downward trends continue with consistency, the county may provide a bi-annual review of the plan with the possibility of reducing the frequency from quarterly to semi-annual.~~

CTL recommends the following changes to the Groundwater Monitoring Plan:

Response to RAI dated 3/25/03 Comment 20 M.1.f(3)

1. Changing the quarterly and annual testing per Section 2.0, Groundwater Monitoring Plan (revised 5/27/03) of this report.
2. Per Rule 62-701.510(10)(b), the Groundwater Monitoring Plan Evaluation shall be done biannually.

Response to RAI dated 3/25/03 Comment 21 M.1.g

3. Per Rule 62-701.510(7)(a) & 62-701.510(7)(b), Evaluation Monitoring, Preventive Measures and Corrective Action shall be added to the plan. A copy of Rule 62-701.510(7)(a & b) is presented in Appendix VIII.

Response to RAI dated 12/07/03 Comment 19 M.1.c(6)

1. An evaluation of monitor well conditions and the construction details of each well as presented in table A of appendix IX the following recommendations are offered: MW-2A is currently located in a high

traffic area. Central Testing Laboratory believes that this traffic is affecting the well. Central Testing Laboratory recommends a new well to replace MW-2A be relocated ten to fifteen feet to the north of the existing well. This well will be constructed with ten feet of screen allowing for sampling in the dry season.

Central Testing Laboratory recommends that a secondary well be installed at MW-7 and MW-9 with ten foot screens to accommodate the saturated thickness of the uppermost aquifer. The new screen intervals will be at elevation of approximately thirty eight to forty eight feet. This will accommodate sampling the upper most portion of the aquifer during seasonal fluctuation in water levels.

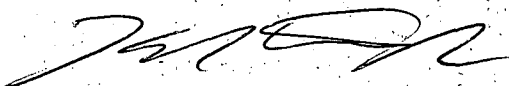
MW-2A, MW-7, and MA-9 will no longer be sampled. The new wells will now be sampled.

Closure

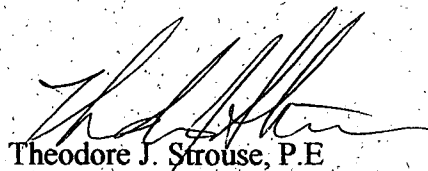
CTL appreciates the opportunity to be of assistance on this project. Should you have additional questions please contact our office at 352-787-1268.

Respectfully submitted,

CENTRAL TESTING LABORATORY, INC.



Karl Retherford Jr.
Environmental Technician



Theodore J. Strouse, P.E.
President

Florida Registration No 48220.

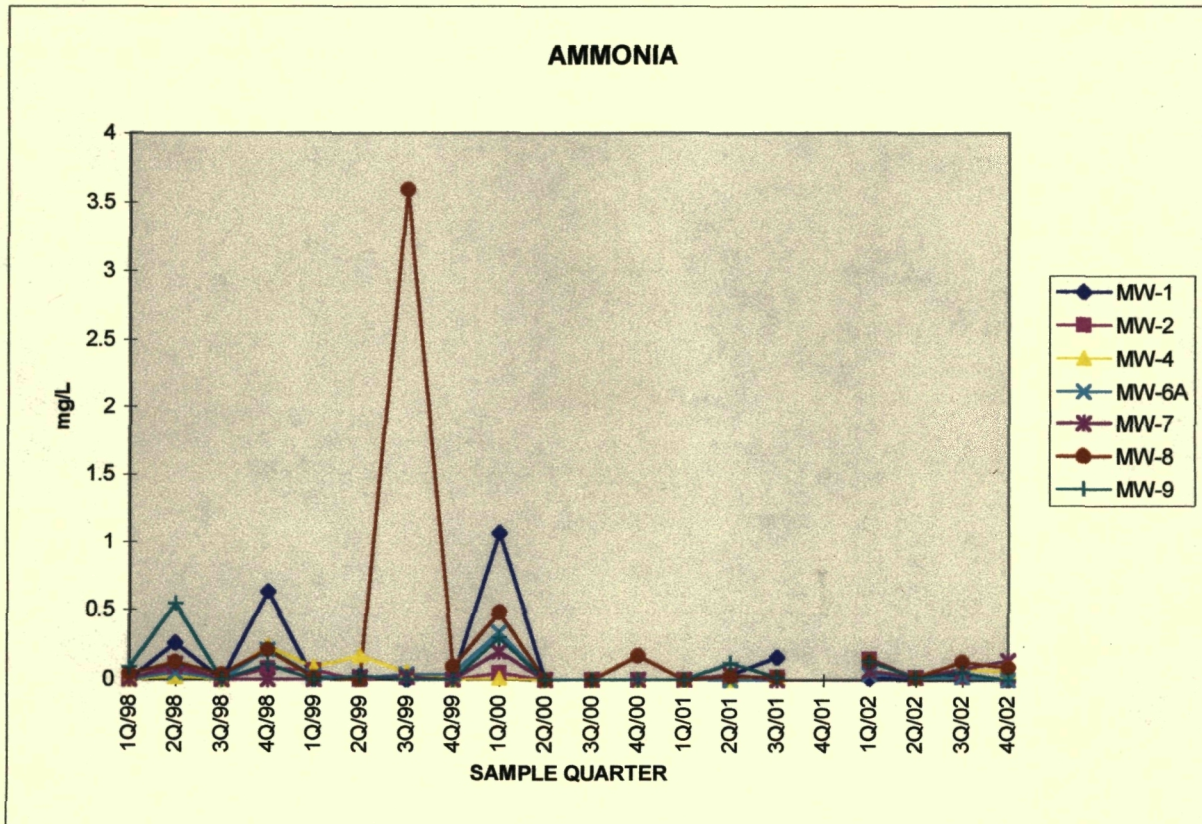
3/3/04

Revised March 2, 2004

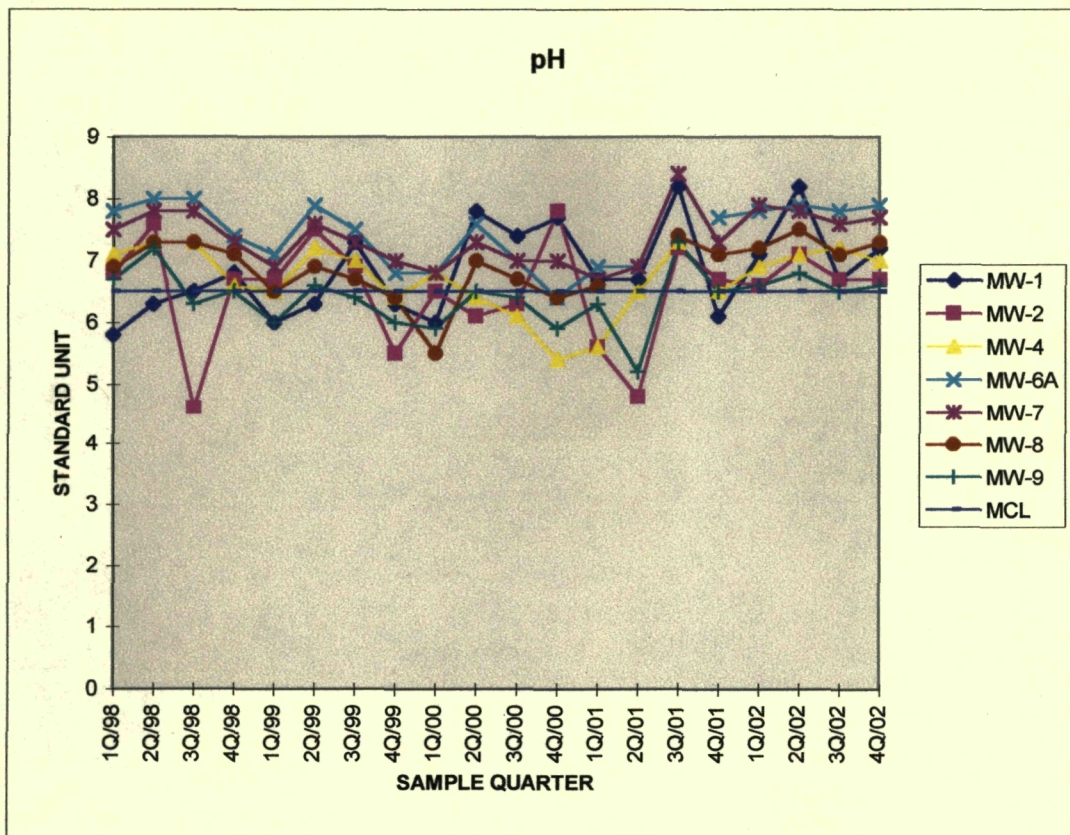
APPENDIX II

CENTRAL TESTING LABORATORY

DATE	MW-1	MW-2	MW-4	MW-6A	MW-7	MW-8	MW-9
1Q/98	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.0412	0.0887
2Q/98	0.262	0.0816	0.0208	0.0533	0.113	0.125	0.548
3Q/98	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.036	<0.0100
4Q/98	0.637	0.0796	0.235	0.212	<0.0100	0.214	0.108
1Q/99	<0.0100	0.0638	0.0872	0.0209	<0.0100	0.0158	<0.0100
2Q/99	0.0293	<0.0100	0.171	0.0124	0.0163	<0.0100	0.027
3Q/99	<0.0100	0.0242	0.0523	0.0385	0.0173	3.59	<0.0100
4Q/99	<0.0318	<0.0318	<0.0318	0.0433	<0.0318	0.0913	<0.0318
1Q/00	1.07	0.048	0.00762	0.338	0.198	0.484	0.302
2Q/00	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300
3Q/00	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300
4Q/00	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	0.171	<0.0300
1Q/01	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300
2Q/01	0.036	<0.02	<0.02	<0.02	0.041	0.029	0.12
3Q/01	0.16	0.02	0.02	<0.0300	<0.0300	0.02	0.02
4Q/01							
1Q/02	0.016	0.15	0.13	0.043	0.065	0.14	0.13
2Q/02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
3Q/02	0.04	0.023	0.08	0.021	0.077	0.13	0.049
4Q/02	<0.050	<0.050	0.06	<0.050	0.14	0.088	<0.050



DATE	MW-1	MW-2	MW-4	MW-6A	MW-7	MW-8	MW-9	MCL
1Q/98	5.8	6.8	7.1	7.8	7.5	6.9	6.7	6.5
2Q/98	6.3	7.6	7.3	8	7.8	7.3	7.2	6.5
3Q/98	6.5	4.6	7.3	8	7.8	7.3	6.3	6.5
4Q/98	6.8	6.7	6.6	7.4	7.3	7.1	6.5	6.5
1Q/99	6	6.7	6.5	7.1	6.9	6.5	6	6.5
2Q/99	6.3	7.5	7.2	7.9	7.6	6.9	6.6	6.5
3Q/99	7.3	6.9	7	7.5	7.3	6.7	6.4	6.5
4Q/99	6.3	5.5	6.4	6.8	7	6.4	6	6.5
1Q/00	6	6.5	6.8	6.8	6.8	5.5	5.9	6.5
2Q/00	7.8	6.1	6.4	7.6	7.3	7	6.5	6.5
3Q/00	7.4	6.3	6.1	7	7	6.7	6.4	6.5
4Q/00	7.7	7.8	5.4	6.4	7	6.4	5.9	6.5
1Q/01	6.7	5.6	5.6	6.9	6.7	6.6	6.3	6.5
2Q/01	6.7	4.8	6.5	6.9	6.9		5.2	6.5
3Q/01	8.2	7.2	7.3		8.4	7.4	7.3	6.5
4Q/01	6.1	6.7	6.5	7.7	7.3	7.1	6.5	6.5
1Q/02	7.1	6.6	6.9	7.8	7.9	7.2	6.6	6.5
2Q/02	8.2	7.1	7.1	7.9	7.8	7.5	6.8	6.5
3Q/02	6.7	6.7	7.2	7.8	7.6	7.1	6.5	6.5
4Q/02	7.2	6.7	7	7.9	7.7	7.3	6.6	6.5



Revised March 2, 2004

APPENDIX X

CENTRAL TESTING LABORATORY

TABLE A (Revised 03/02/04) Monitor Well Construction Details, Sumter County Closed Class I Landfill

Well#	Elevation (feet NGVD)						Screen Length (ft)	Total Depth (ft)	Lithology Encountered (feet) below land surface
	Top of Casing	Ground Surface	Top of Screen	Bottom of Screen	Maximum Water Level	Minimum Water Level			
MW-1	70.17	69.58	42.67	37.67	48.19	41.17	5	32.5	0 - 10 Sand
									10 - 15 Sandy clay
									15 - 22 Clay
									22 - 32 Limestone
MW-2	74.14	72.53	41.49	36.49	48.83	36.64	5	37.65	0 - 10 Sand
	69.13*	N/A**	41.49	36.49	48.83	36.64	5	32.64*	10 - 18 Sandy clay
									18 - 30 Clay
									30 - 37 Limestone
MW-4	70.36	N/A**	42.69	37.69	48.41	41.28	5	37.69	0 - 10 Sand
									10 - 20 Sandy clay
									20 - 30 Clay
									30 - 37 Limestone
MW-6A	77.54	75.71	32.54	27.54	49.17	41.12	5	50	0 - 20 Sand
									20 - 29 Clay with limestone fragments
									29 - 51 Limestone
MW-7	73.14	71.49	28.74	23.74	48.84	41.47	5	49.4	0 - 20 Sand
									20 - 25 Sand and clay
									25 - 28 Clay and sand
									28 - 31 Limestone
									31 - 34 Clay
									34 - 51 Limestone
MW-8	69.26	68.09	30.41	25.41	50.24	42.06	5	43.85	0 - 24 Sand
									24 - 34 Sandy clay
									34 - 41 Limestone
MW-9	71.95	70.37	29.15	24.15	49.68	41.55	5	47.8	0 - 26 Sand
									26 - 32 Sandy clay
									32 - 46 Limestone

TABLE A (Revised 3/02/04) Monitor Well Construction Details, Sumter County Closed Class I Landfill

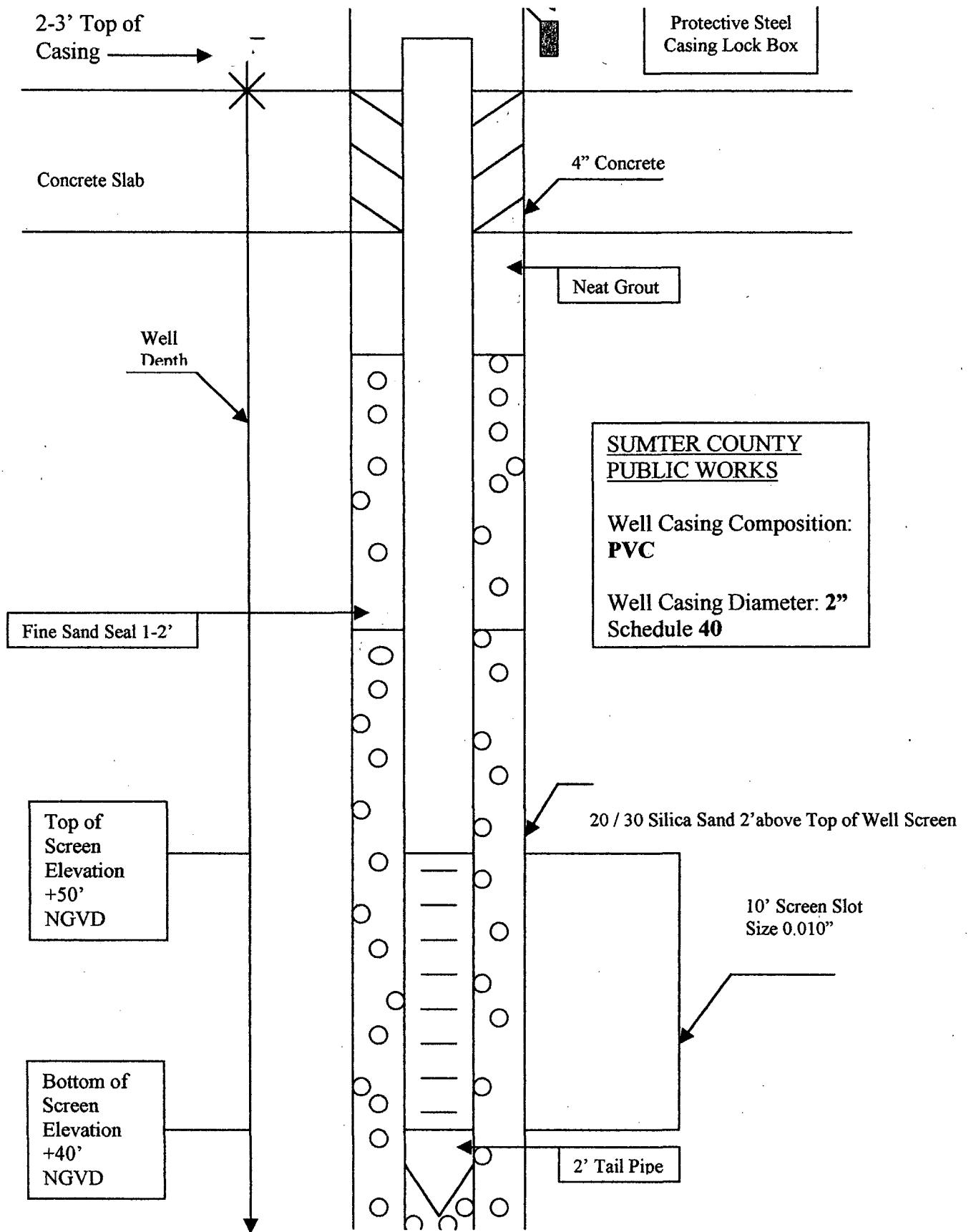
footnotes

- Top of Casing Elevations and Screen Lengths from Central Testing Laboratory GWMPE dated 3/3/03 (Section 2.0, Table 1 – Revised 5/27/03)
- Total Depth and Ground Surface Elevations from Central Testing Laboratory field measurements 1/22/02
- Top/Bottom of Screen elevations for all wells calculated using Total Depth measurements from Central Testing Laboratory field measurements 1/22/02 and Top of Casing Elevations
- Maximum/Minimum Water Elevations measured during sampling events conducted between 1st Quarter of 1998 and 4th Quarter of 2002, from Central Testing Laboratory GWMPE dated 3/3/03 (Section 3.0 Table 1 – Revised 5/27/03)
- Screen Length for MW-1, MW-2, MW-4, MW-6A and MW-7 from “Second Response to Request for Additional Information” prepared by Springstead Engineering Inc. dated 7/29/92, Appendix B.
- Screen Length for MW-8 and MW-9 from Central Testing Laboratory GWMPE dated 3/3/03, (Section 2.0, Table 1 – Revised 5/27/03)
- Lithology Encountered from Central Testing Laboratory GWMPE dated 3/3/03 (Appendix I)
- *New Top of Casing Elevation for MW-2 following excavation activities: Top of Casing and Total Depth adjusted reflect the new well configuration
- **Ground Surface is slightly above Top of Casing – No Survey available with Ground Surface Elevations

Revised March 2, 2004

APPENDIX IX

CENTRAL TESTING LABORATORY

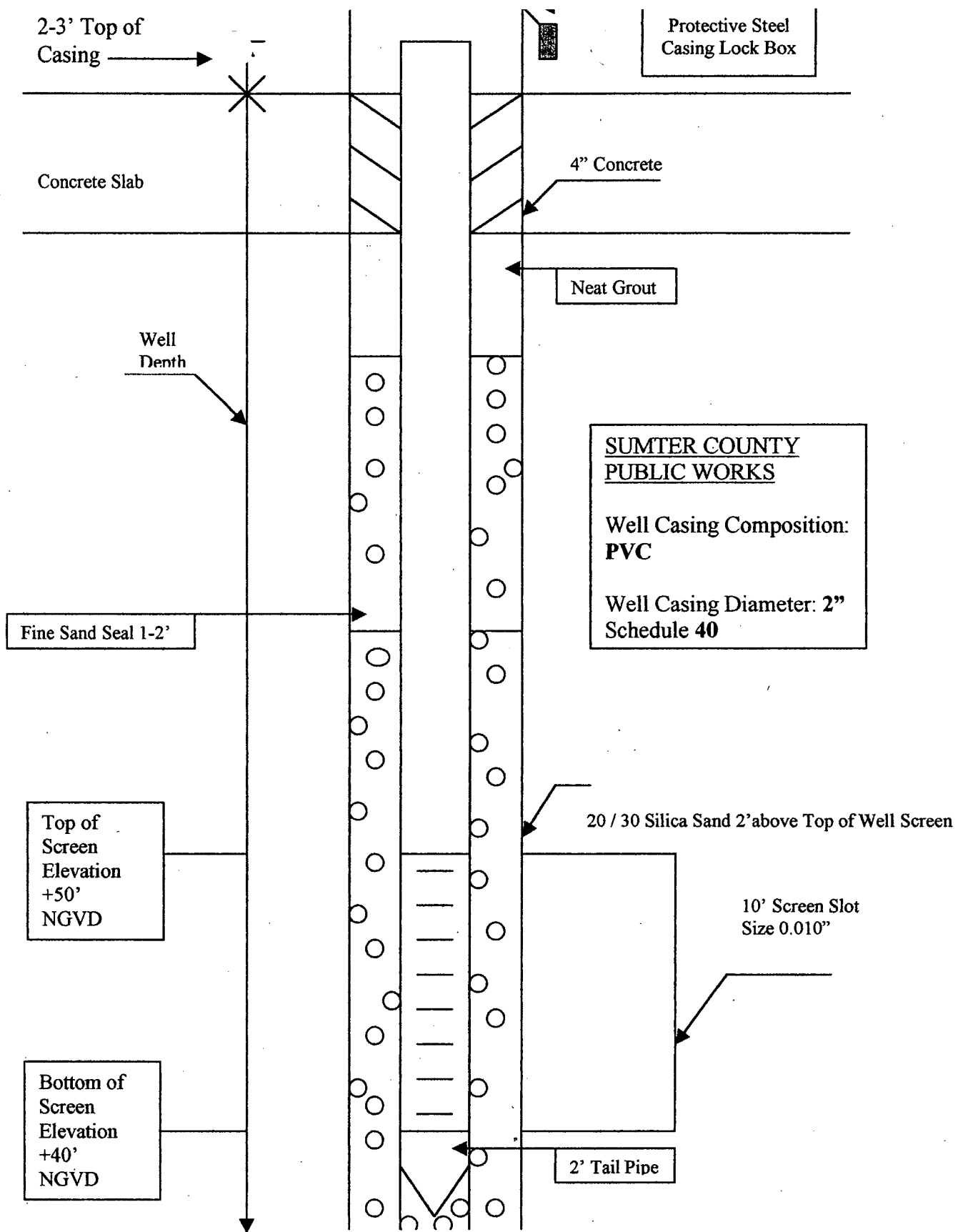


**Monitoring Well Construction
NTS**

**Proposed Monitor Wells
MW-10**

**Development consists of
high-speed pumping until
water is clear.**

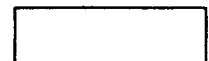


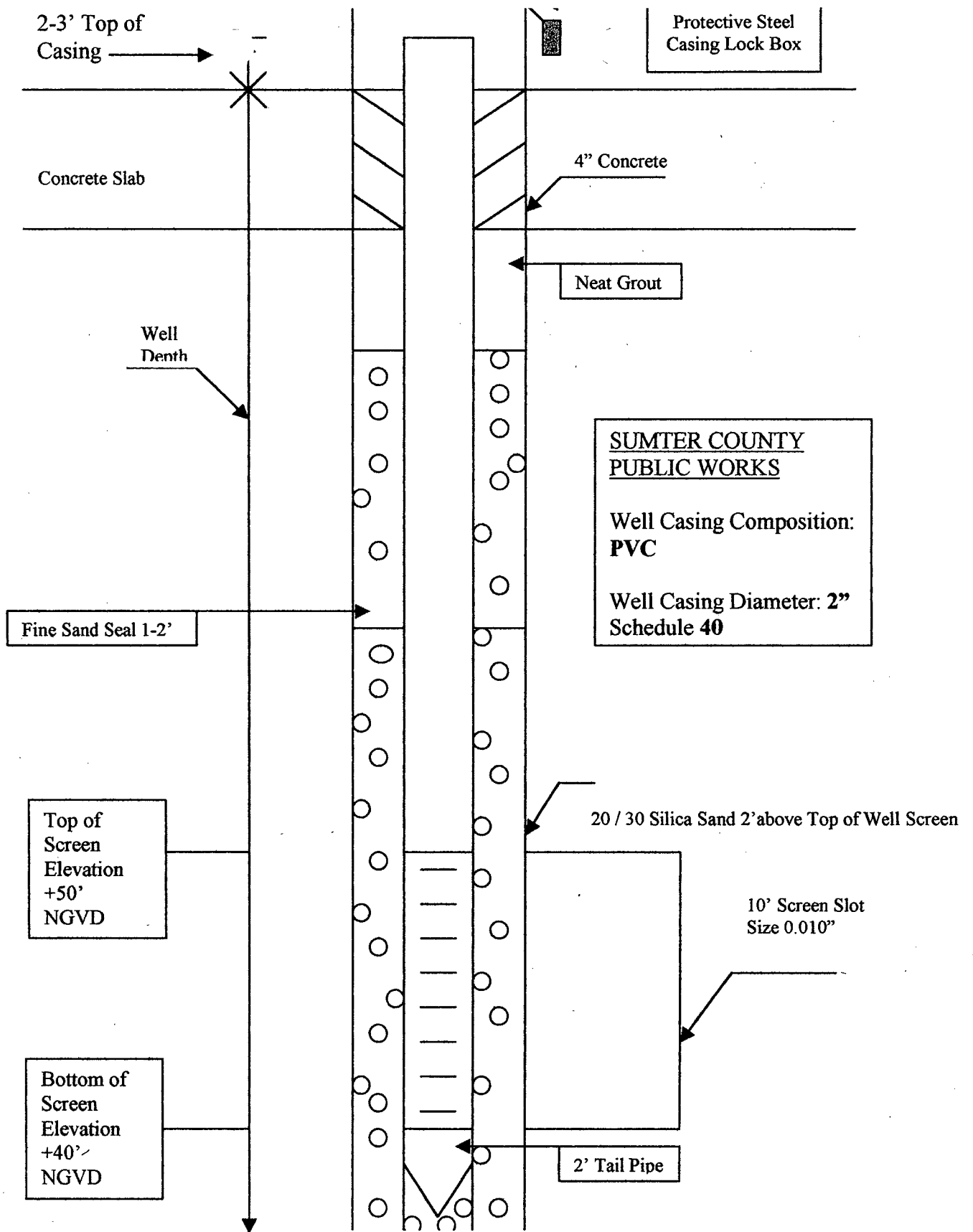


**Monitoring Well Construction
NTS**

**Proposed Monitor Wells
MW-11**

**Development consists of
high-speed pumping until
water is clear.**

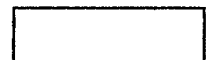




**Monitoring Well Construction
NTS**

**Proposed Monitor Wells
MW-12**

**Development consists of
high-speed pumping until
water is clear.**





**Springstead
Engineering, Inc.**

Consulting Engineers – Architects – Planners – Surveyors

EB-0001723
AA-0002820
LB-0001723

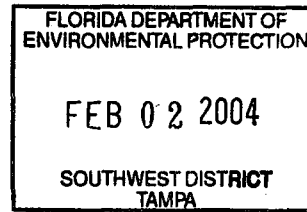
727 South 14th Street
Leesburg, Florida 34748

Lake (352) 787-1414

Sumter (352) 793-3639

Fax (352) 787-7221

January 30, 2004



Mr. John R. Morris, P.G.
Solid Waste Section
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619

SUPPORTING MATERIALS
CONTAINED IN 3-RING
BINDER, FILED WITH
OVERSIZED DOCUMENTS

Re: Response to Request for Additional Information
Sumter County Closed Class I Landfill
Long-term Care Permit Renewal, Pending Permit No. 22926-003-SF
SEI File No. 921100.020

Dear Mr. Morris:

We are in receipt of your Request for Additional Information dated November 7, 2003. As requested, we have provided responses to only those questions that did not include the Phrase "No additional information is requested".

DEP FORM NO. 62-701.900(1), SOLID WASTE MANAGEMENT FACILITY PERMIT FORM

Part A – General Information

4.A. A.7.: The latitude and longitude coordinates provided on the revised application form are different from the application form submitted in February 2003, and it is noted that neither set of coordinates represent the center of the landfill footprint. Please verify that a latitude of 28°44' 36" and a longitude of 82°5'19" accurately reflects the center of the closed class I landfill areas at the facility and submit revisions to this item of the application form.

Response 4A: The latitude 28° 44' 36" and longitude 82° 05' 19" accurately reflect the center of the closed landfill.

Part M – Water Quality and Leachate Monitoring Requirements (Rule 62-701.510, F.A.C.)

15. **M.1.c.(1):** While this item to the application form was revised to reference Section 2.0 of the GWMPE as requested, it does not appear that the GWMPE was revised to address the review comment regarding the lateral distance from the detection wells to the edge of the disposal units for Phases I, II and III. The response to this review comment in the SEI letter does not specify the location of the response. The only response to this comment appears to be in Section 5.2 of the *Operations Manual* that references a new figure ("Monitoring Well Map") presented in Appendix F. It is noted that this figure does not identify the location of the edge of the disposal units for the closed landfill phases, so this figure is not adequate to determine the lateral distances between the landfill and the monitor wells as requested. Please provide a complete response to this review comment as presented in the March 25, 2003 RAI letter, (presented below in italics):

Please submit a revised application form that references Section 2.0 of the Ground Water Monitoring Plan Evaluation (GWMPE), prepared by CTL. Please submit revisions to the GWMPE to demonstrate that the locations designated as detection wells in Specific Condition No. 20 of permit No. 22926-002-SF (MW-1, MW-2, MW-4, MW-7, MW-8 and MW-9) are within

PARTIAL RESPONSE
TO RAI #2
2/2/04

50 feet of the edge of the disposal unit in the downgradient direction. Please submit a scale-drawn figure that shows the waste footprint in Phases I, II and III and the distances from the edge of waste to each monitor well. (Rule 62-701.510(3), F.A.C.)

Response 15: The map has been revised to include the edge of the historic disposal areas based on the closure documents prepared and submitted to the DEP. The edge of waste line is shown on the attached plan as requested. The distance from the edge of waste to the well is indicated on the plan.

18. **M.1.c.(5):** While this item of the application form was revised to reference Section 2.0 of the GWMPE as requested, it does not appear that the GWMPE was revised to address the review comment regarding the lateral spacing between monitor wells on the downgradient side of the facility. Rather, the response to this review comment in the SEI letter indicates that the lateral distances between monitor wells are presented on the figures ("Monitoring Well Map" and "Overall Site Plan") provided in Appendix F of the *Operations Manual*. Please submit a revised application form that references Appendix F of the *Operations Manual*.

Response 18: Please see the revised application form which references Appendix F of the operations manual.

19. **M.1.c.(6):** While this item of the application form was revised to reference Section 2.0 of the GWMPE as requested, it does not appear that the GWMPE was revised to address the review comment regarding the adequacy of the well screen locations. The requested revisions to Table A ("Monitor Well Construction Details") were provided in the CTL transmittal letter, however this summary table was not incorporated into or referenced by the GWMPE. Please revise the appropriate section of the GWMPE to provide an evaluation of the adequacy of the well screens of the existing wells to monitor the saturated thickness of the uppermost aquifer within the zone of discharge (Rule 62-701.510(3)(d)4, F.A.C.), using the information provided in Table A (elevations for top of limestone unit, ground water elevation range and wells screen elevations). Please specifically evaluate the ability to sample well MW-2A during dry season conditions and compare the top of screen elevations at wells MW-7 and MW-9 with the top of the limestone unit encountered in the boring logs to determine if the depth of the wells is appropriate. Please also submit a revised application form that references the revised section of the GWMPE.

Response 19: A revised GWMPE by Central Testing Laboratory is being sent to the Department under separate cover which addresses the adequacy of the well screens.

20. **M.1.f.(3):** Please submit a revised application form that references Section 2.0 of the GWMPE. The Department does not object to deleting many of the parameters from the quarterly sampling events as suggested in the revision to Section 2.0 of the GWMPE, however it is considered appropriate to maintain two indicator parameters that are characteristic of landfill leachate (chloride and sodium) and one parameter (fluoride) that has been reported to exceed the ground water standard in a previous sampling event. The anticipated list of parameters for routine quarterly events follows:

Field Parameters

Static water levels
before purging
Specific conductivity
pH
Temperature
Turbidity
Dissolved oxygen
Colors & sheens
(by observation)

Laboratory Parameters

Chlorides	Aluminum	Mercury
Fluoride	Antimony	Silver
Nitrate	Cadmium	Sodium
Total ammonia	Chromium	Thallium
Total dissolved solids (TDS)	Iron	
Gross alpha	Lead	
Radium 226 + 228	Manganese	

The revised list of parameters for the annual sampling event (during fourth quarter of each year) provided in the revision to Section 2.0 of the GWMPE appears to be somewhat inconsistent with Rule 62-701.510(8)(a), F.A.C., and does not address some of the parameters that have been reported to exceed ground water standards in previous sampling events. The anticipated list of parameters for the annual sampling events follows:

<u>Field Parameters</u>	<u>Laboratory Parameters</u>	
Static water levels	Chlorides	Aluminum
before purging	Fluoride	Iron
Specific conductivity	Nitrate	Manganese
pH	Total ammonia	Mercury
Temperature	Total dissolved solids (TDS)	Sodium
Turbidity	<u>Those parameters listed in 40 CFR</u>	
Dissolved oxygen	<u>Part 258, Appendix I</u>	
Colors & sheens	Gross alpha	
(by observation)	Radium 226 + 228	

Please submit revisions to Section 2.0 of the GWMPE to include the lists of parameters for the quarterly and annual sampling events.

Response 20: A revised GWMPE indicating the lists of parameters for quarterly and annual sampling events is being sent to the Department under separate cover.

21. **M.1.g.:** Please submit a revised application form that references Section 6.0 of the GWMPE. The revisions to Section 6.0 and the addition of Appendix VIII of the GWMPE that present the procedures for implementing evaluation monitoring, prevention measures, and corrective action are noted.

Response 21: Please see the revised application form referencing Section 6.0 of the GWMPE.

22. **M.1.h. and M.1.h.(1):** The revision to this item of the application form to reference the *Engineering Report* is noted. Please submit additional revisions to the *Engineering Report* subsection entitled "Requirements of Section M" that reference the changes to Section 2.0 of the GWMPE regarding the anticipated parameters for the quarterly and annual ground water sampling events as requested in review comment No. 20.

Response 22: Please see the revised engineering report which indicates the proposed parameters for sampling and testing.

23. **M.1.h.(2): Bi-annual report requirements signed, dated and sealed by P.G. or P.E.**
(Rule 62-701.510.(9)(b), F.A.C.)

b. **GWMPE – Section 2.0:** The revised GWMPE does not include the well location map referenced as Figure 1 as requested in the March 25, 2003 RAI letter. The response to this review comment in the SEI letter references the attached maps without specifying their location in the submittal. It is assumed that the response refers to Appendix F of the *Operations Manual* that includes the figure entitled "Monitoring Well Map" and the drawing entitled "Overall Site Plan". It is noted that the figure and the drawing do not identify the location of the edge of the disposal units for the closed landfill phases or the compost pads as requested. Please submit revisions to the referenced figure and drawing to show the omitted information.

Response 23(b): As described in the response to No. 15 above, these maps have been revised to include the documented edges of disposal as requested.

e. GWMPE – Section 5.0:

1) The revisions to the summary of analytical results in Appendix II for the specified ground water quality analyses are noted, however additional revisions are required to be consistent with the reports for the routine sampling events provided to the Department. Please review the apparent inconsistencies for the following sampling events and submit revisions to the quarterly reports or to the summary tables in Appendix II, as appropriate:

October 2000 -- pH at MW-2 (7.57 SU), MW-4 (5.53 SU), MW-6A (6.43 SU), MW-7 (7.02), MW-8 (6.44 SU), and MW-9 (5.92 SU)
Ammonia at MW-8 (0.171 mg/L)

April 2001 -- Ammonia at MW-1 (0.036 mg/L), MW-2 (<0.02 mg/L), MW-4 (<0.02 mg/L), MW-6A (<0.02 mg/L), MW-7 (0.041 mg/L), MW-8 (0.029 mg/L), and MW-9 (0.12 mg/L)

Response 23(e)(1): The summary and quarterly reports have been reviewed and revised to make the sample results consistent with the summary tables. This will be sent to the Department under separate cover.

2) The response in the SEI letter that references the drainfield locations on the attached figure (Appendix F of the *Operations Manual*, figure entitled "Monitoring Well Map" and drawing entitled "Overall Site Plan") is noted. However, the requested information to substantiate the potential for the septic drainfields to impact ground water quality at well MW-4 was not provided in Section 5.0 of the GWMPE, including: the direction of ground water flow between the drainfields and well MW-4; the calculation of the time required for ground water to migrate from the drainfields to well MW-4; and, the distance between the drainfields and well MW-4. In the absence of the requested information, the source of elevated nitrate at well MW-4 is considered to be the closed Class I landfill areas or the activities conducted with the processing of MSW at the facility, and it appears that evaluation monitoring is appropriate (Rule 62-701.510(7), F.A.C.). Please submit a site map that provides the proposed locations for additional monitor wells to determine the extent of the elevated nitrate at the facility and submit construction details for these proposed well locations (screen top/bottom elevation, screen slot size, sand pack size, method of installation and development, and distance from the edge of the landfill phases).

Response 23(e)(2): The site map indicates the locations for the additional wells downgradient of MW-4. These wells will be constructed using hollow-stem auger. The details for construction of the proposed wells is attached.

Part O – Gas Management System Requirements (Rule 62-701.530, F.A.C.)

25. **O.2.: Provide documentation that will describe locations, construction details and procedures for monitoring gas at ambient monitoring points and with soil monitoring probes (Rule 62-701.530(2), F.A.C.)**

a. The revision to this item of the application form to reference the *Engineering Report* is noted. It is also noted that the revisions to the "Supplemental Information for Long Term Care" subsection of the *Engineering Report* indicate that a supplemental study is being performed at the gas vents to determine if gas is still being generated within the closed landfill cells. Please submit an evaluation and the results of this supplemental study with the responses to this RAI letter and submit revisions to the *Engineering Report* regarding recommendations to maintain or terminate gas monitoring at the facility.

b. It is noted that the revisions to the Supplemental Information for Long Term Care subsection of the *Engineering Report* indicate that the perimeter gas probes do not extend to the depth of the waste in the

landfill cells, however the requested discussion of the adequacy of these monitoring locations was not provided in the response to this review comment. Please submit an evaluation of the results of the supplemental gas study referenced in review comment No. 25.a. with the responses to this RAI letter and submit revisions to the *Engineering Report* regarding the adequacy of the existing perimeter gas probes and include recommendations regarding the need to install deeper gas probes. If appropriate, please submit a site map showing the existing and any proposed gas probe locations on a scale-drawn site map (no larger than 11x17 inches in a black and white format), and include identification numbers.

c. It is noted that the revisions to the Supplemental Information for Long Term Care subsection of the *Engineering Report* indicate that a supplemental gas study will include all site structures. Please submit an evaluation of the results of the supplemental gas study referenced in review comment No. 25.a. with the responses to this RAI letter and submit revisions to the *Engineering Report* regarding the ambient monitoring points at the facility. Please submit a site map showing the existing and any proposed ambient gas monitoring locations on a scale-drawn site map (no larger than 11x17 inches in a black and white format), and include identification numbers.

Response 25 (a)(b)(c): A sampling of the existing gas vents was performed during the December '03 gas migration study to determine if the vents were still active and if so to what extent. The results of the sampling indicated that all of the gas vents remain active. Based on this information we have determined that gas probes are needed in the vicinity of the closed landfill area. Proposed locations for the gas monitoring probes are shown on the attached site plan of the closed portion of the landfill. A schematic of the proposed monitoring device is attached.

Part P – Landfill Final Closure Requirements (Rule 62-701.600, F.A.C.)

26. **P.2.b.(5):** The revision to this item of the application form to reference the *Operations Manual* is noted. The addition of Section 5.0 (Long Term Care) to the *Operations Manual* is also noted. Please submit additional revisions to Section 5.3 of the *Operations Manual* to delete the reference to the Department's SOPs and insert a description of the procedures used to conduct the gas monitoring events at the facility (perimeter gas probes, gas vents, and ambient locations). Please ensure that the gas monitoring procedures address the requirements of Rule 62-701.530(2), F.A.C.

Response 26: Section 5.3 has been revised to include a description of the procedure for conducting the gas monitoring events.

27. **P.3.d.:** The revision to this item of the application form to reference the *Engineering Report* is noted. It is noted that the revisions to the "Supplemental Information for Long Term Care" subsection of the *Engineering Report* indicate that a supplemental study is being performed at the gas vents to determine if gas is still being generated within the closed landfill cells. Please submit an evaluation and the results of this supplemental study with the responses to this RAI letter and submit revisions to the *Engineering Report* to substantiate the statement that the "gas vents are in proper working order".

Response 27: As described in the response to Item 25 above, the sampling of the gas vents installed in the closed landfill was conducted during the gas migration study in December 2003. The sampling indicated that the gas vents were still operating and that gas is being generated by the waste materials. Gas probes to measure the gas on the perimeter of the waste are proposed at this time.

28. **P.3.e.:** The revision to this item of the application form to reference the *Engineering Report* is noted. Please submit revisions to the *Engineering Report* subsections entitled "Report of Effectiveness of Landfill Design"

and "General Maintenance for the Covered Area's of the Closed Class I Landfill" to respond to comment Nos. 5, 6 and 7 in Steve Morgan's letter dated November 7, 2003, provided under separate cover.

Response 28.: Please see the response to this concern in the response to Mr. Morgan's letter.

Part R – Long Term Care Requirement (Rule 62-701.620, F.A.C.)

32. **R.5.:** Please submit a revised application form for this item that indicates a "N/A" response since the long term care period has not been completed for the facility.

Response 32: Please see the revised application form indicating the N/A for this item.

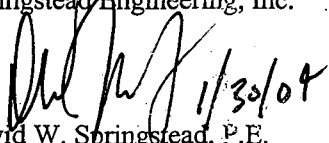
Part S – Financial Responsibility Requirements (Rule 62-701.630, F.A.C.)

33. **S.1.:** Please submit revisions to the Financial Responsibility (Section 8 of the renewal application) that respond to comment No. 15. in Steve Morgan's letter dated November 7, 2003, provided under separate cover.

Response 33: Please see the attached response to the Request for Additional Information regarding the Financial Assurance.

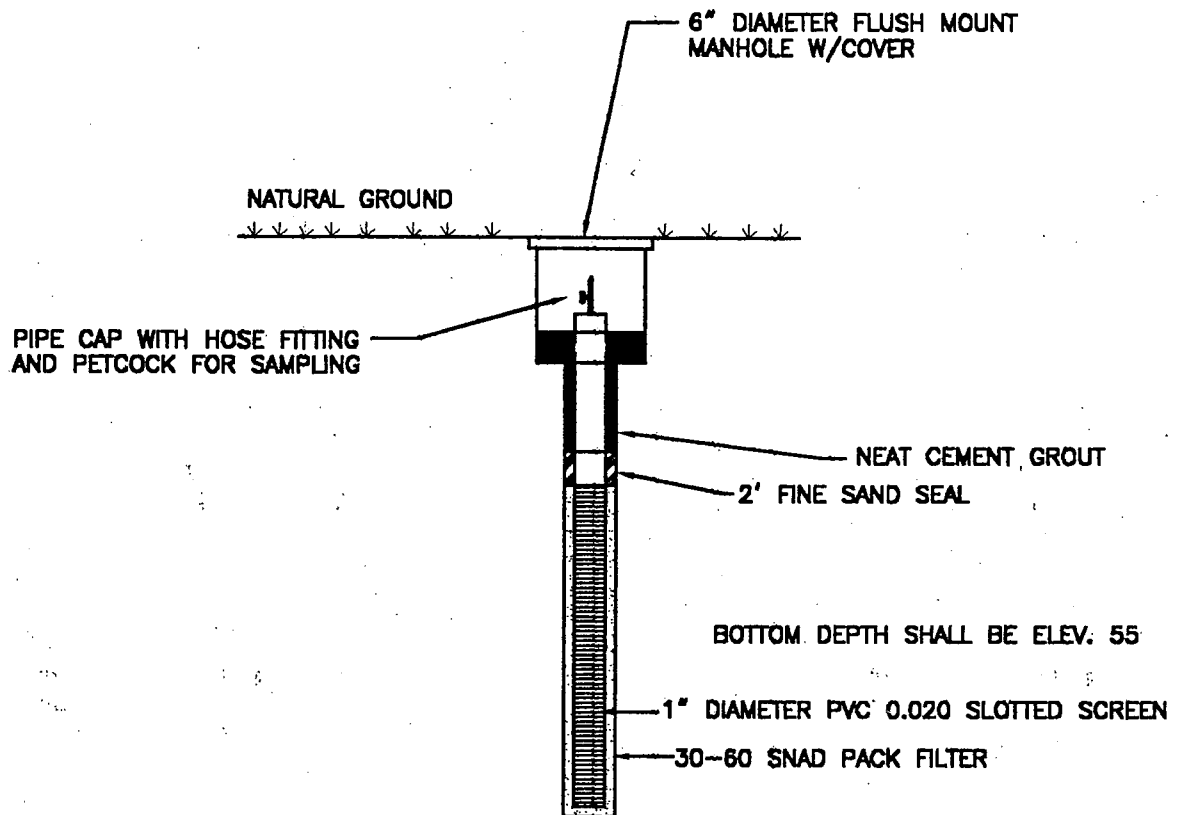
I trust this information meets your needs at this time. Should you have any questions or require additional information, please contact our office.

Very truly yours,
Springstead Engineering, Inc.


David W. Springstead, P.E.
Florida Registration No. 48229

DWS/jal

cc: Sumter County Public Works



TYPICAL GAS MONITORING PROBE
NTS

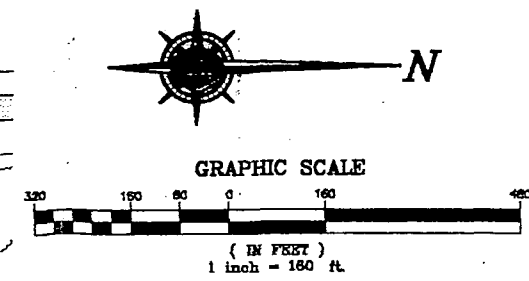
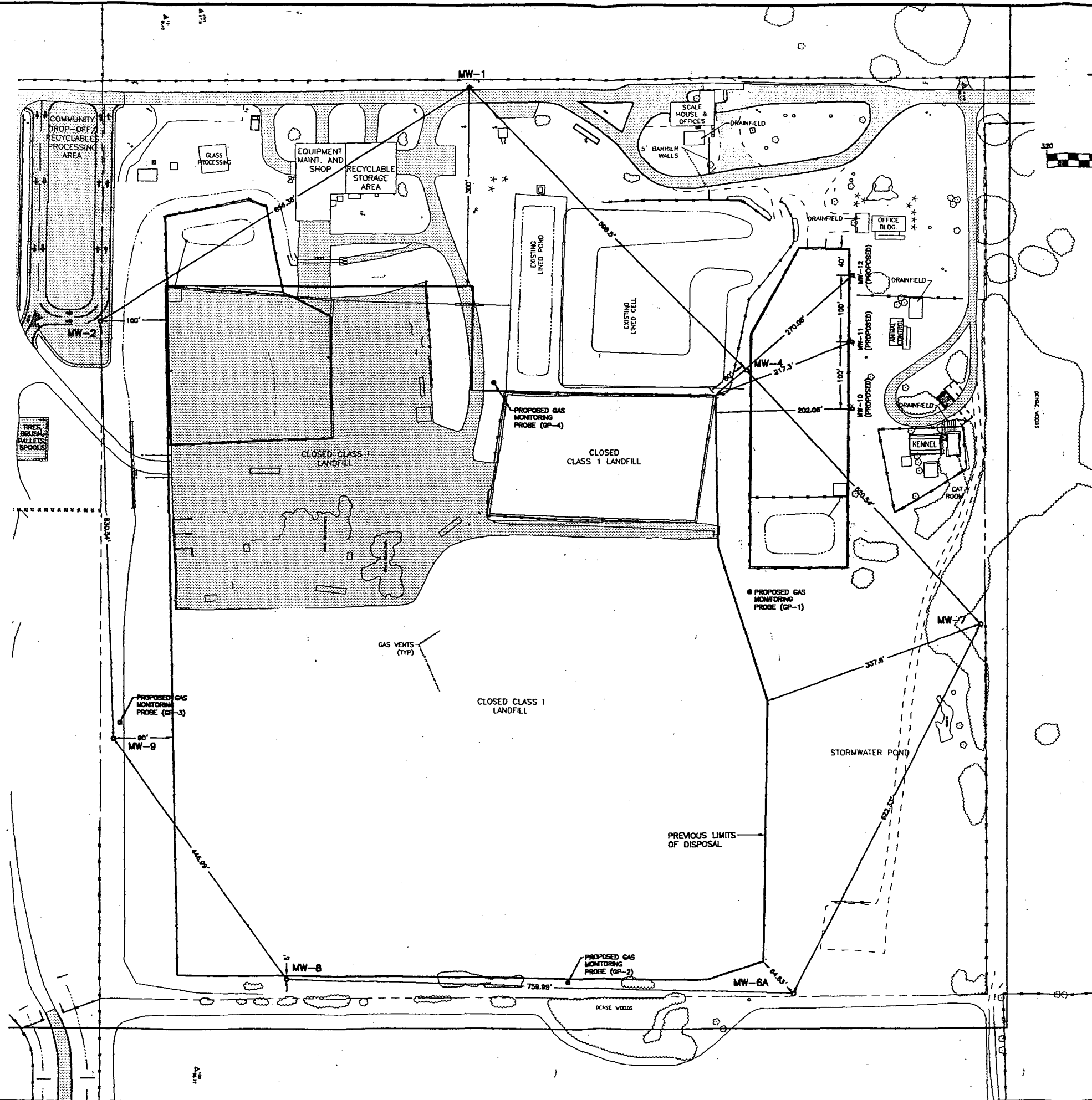


**Springstead
Engineering, Inc.**
Consulting Engineers
Planners
Surveyors

**TYPICAL GAS
MONITORING PROBE**

821100.020

1/8/04



--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Central Testing Laboratory

Engineering and Materials Testing

65383

EB 0002407

alal04

2R

Reply to:

January 13, 2004

Leesburg

Mr. Tommy Hurst
Sumter County Public Works Department
319 E. Anderson Avenue
Bushnell, FL 33513

**RE: Gas Migration Study Report
Gas Monitoring in and Around Buildings
Sumter County Solid Waste Management Facility
9984006.300**

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JAN 14 2004

SOUTHWEST DISTRICT
TAMPA

Dear Mr. Hurst:

As is required by specific condition of the permit, Central Testing Laboratory (CTL) performed a gas migration study at the above referenced facility on December 1, 2003. Permanent monitoring assemblies were installed, October 5, 1994, at various locations at the facility. The purpose of this study is to determine if generation and possible migration of combustible gases occur at the closed Class I Landfill.

The monitoring assemblies were placed at sampling locations chosen to detect methane gas migrating off areas of the subject site to areas of concern, which include the structures. The sampling location within the structures was based upon accessibility. At all locations sampled within the buildings no methane gas was detected. The sampling locations were analyzed by inserting a probe of a Foxboro Organic Vapor Analyzer (OVA), Model 128, (Serial Number A41775) through a rubber stopper then inserting the rubber stopper into the top of the monitoring assembly. The meter on the OVA was visually monitored, allowing the meter to stabilize. The OVA was calibrated using air and 100 ppm methane (CH_4) in air. No methane gas was detected in the monitoring assemblies. The results of the OVA analysis are tabulated in the table entitled Gas Migration Survey - December 1, 2003, presented below.

Florida Department of Environmental Protection (FDEP) has requested that the OVA test results be converted to percentage of Lower Explosive Limit (LEL) for methane. The LEL for methane reported in various publications is 5.0 percent. This value was used to make the conversion from percent methane to percent LEL of methane. To simplify, divide the ppm methane by 50,000 to obtain percent LEL of methane.

GAS MIGRATION
STUDY
1/14/04



**GAS MIGRATION SURVEY
DECEMBER 1, 2003**

MONITORING POINT N^o	Ppm CH₄	%LEL CH₄
M-1	0	0
M-2	0	0
M-3	0	0
M-4	0	0
M-5	0	0
M-6	0	0
M-7	0	0
M-8	0	0
M-9	0	0
M-10	0	0
M-11	0	0
M-12	0	0
M-13	0	0
M-14	0	0
M-15	0	0
M-16	0	0
M-17	0	0
M-18	0	0
M-19	0	0
M-20	0	0
M-21	0	0
M-22	0	0

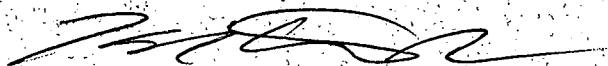
M-23	0	0
M-24	0	0
M-25	0	0
M-26	0	0
M-27	0	0
M-28	0	0
M-29	0	0

John Morris of Florida Department OF Environmental Protection requested that all methane vent pipes on top of the capped portion of the landfill be monitored for methane. The results were all above the range of the organic vapor analyzer.

Based upon the results of the tests conducted as part of this gas migration survey, it is CTL's opinion that the existing gas venting system is functioning satisfactorily and that no recommendations for additional measures or corrective actions are required at this time.

We hope that the provided information meets your needs at the present time. Should you have any questions, or if you require additional information, please contact our office.

Sincerely,
Central Testing Laboratory



Karl Retherford Jr.
Environmental Technician



Morris, John R.

From: Morris, John R.
Sent: Wednesday, November 19, 2003 2:22 PM
To: 'staff@springsteadeng.com'
Subject: Letter dated 11/7/03 regarding renewal of the long term care permit for Sumter County LF



sumter1.n03.doc

John R. Morris, P.G.
Solid Waste Section, Southwest District Office
Telephone: 813-744-6100, ext. 336 (suncom 512-1042, ext. 336)
Facsimile: 813-744-6125
E-mail: john.r.morris@dep.state.fl.us



Jeb Bush
Governor

Department of Environmental Protection

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

David B. Struhs
Secretary

November 7, 2003

Mr. Garry Breeden
Sumter County Department of Public Works
319 E. Anderson Ave.
Bushnell, FL 33513

Re: Sumter County Closed Class I Landfill
Long-term Care Permit Renewal, Pending Permit No. 22926-003-SF

Dear Mr. Breeden:

This letter has been prepared to acknowledge the receipt of the submittal entitled *Response to Request for Additional Information (1)*, prepared by Springstead Engineering, Inc. (SEI), received October 9, 2003 in response to the Department's request for additional information (RAI) letter dated March 25, 2003 regarding the renewal application for the long term care permit at the referenced facility. In addition, the proof of publication of the Notice of Application was received under separate cover via facsimile from SEI on October 15, 2003. The sections of the SEI submittal that address the long term care permit include the following:

- Transmittal letter from SEI dated October 7, 2003 (14 pages, addressed to Steven G. Morgan)
- Transmittal letter from SEI dated October 7, 2003 (9 pages, addressed to John R. Morris)
- Section 1 -- DEP Form No. 62-701.900(1), Solid Waste Management Facility, revised
- Section 4 -- *Engineering Report*, revised
 - Subsection entitled "Requirements of Section M"
 - Subsection entitled "Requirements of Section P"
 - Subsection entitled "Requirements of Section R"
 - Subsection entitled "Supplemental Information for Long Term Care"
 - Subsection entitled "Report of Effectiveness of Landfill Design"
 - Subsection entitled "General Maintenance for the Covered Areas of the Closed Class I Landfill"
 - Proof of Publication of Declaration to the Public dated February 12, 1998
- Section 5 -- *Sumter County Solid Waste Facility, Operations Manual*, revised
 - Subsection entitled "Section 5.0 -- Long Term Care"
 - Appendix F -- Monitoring Well Location Map, prepared by SEI, dated October 2003
 - Appendix F -- Overall Site Plan, Sheet 1 of 1, prepared by SEI, dated October 8, 2003
- Section 6 -- Transmittal letter from Central Testing Laboratory (CTL) dated July 24, 2003.
 - Responses to selected review comments from the Department's letter dated March 25, 2003, including comment Nos., 16, 17, 19, 20, 21, 23.c.1) through 23.c.4), 23.d.1) and 23.d.2), 23.e.1), 23.e.3), and 25.d.
 - Table A -- Monitor Well Construction Details, Sumter County Closed Class I Landfill, revised May 27, 2003
 - Submittal entitled *Sumter County Ground Water Monitoring Plan Evaluation (GWMPE)*, prepared by CTL, revised May 28, 2003 (page 11 of 12 of the GWMPE, received via facsimile November 6, 2003)
- Section 7 -- Copies of closure documents and record drawings provided for Phases I, II and III

This letter also constitutes notice that a permit will be required for your project pursuant to Chapter 403, Florida Statutes. Your application for a permit renewal remains incomplete. This letter represents the second request for additional information in support of your permit application. Evaluation of your proposed project will be delayed until all requested information have been received. The following information is needed in support of the solid waste application [Chapter 62-701, Florida Administrative Code (F.A.C.)].

"More Protection, Less Process"

RAI # 2
11/7/03

Please provide responses to all review comments that do not include the phrase: **"No additional information is requested."** Please provide revised submittals, or replacement pages to the submittals, that use a ~~striethrough~~ and underline format, or similar format, to facilitate review. Please also include the revision date as part of the header/footer for all revised or replacement pages. The information requests have been referenced to the permit application form and sections of the supporting information, and the review comment numbers are consistent with the Department's RAI letter dated March 25, 2003, except for new comment No. 4A, as presented below:

DEP FORM NO. 62-701.900(1), SOLID WASTE MANAGEMENT FACILITY PERMIT FORM

Part A – General Information

1. **A.1.:** The revision to this item of the application form to indicate the type of facility as a Class I landfill is noted. **No additional information is requested.**
2. **A.2.:** The revision to this item of the application form to indicate the type of application is a closure permit is noted. **No additional information is requested.**
3. **A.4.:** The revision to this item of the application form to indicate the facility name is the Sumter County closed Class I landfill is noted. **No additional information is requested.**
4. **A.5.:** The revision to this item of the application form to indicate the DEP ID Number is SWD/60/53008 is noted. **No additional information is requested.**
- 4.A. **A.7.:** The latitude and longitude coordinates provided on the revised application form are different from the application form submitted in February 2003, and it is noted that neither set of coordinates represent the center of the landfill footprint. Please verify that a latitude of 28°44' 36" and a longitude of 82°5'19" accurately reflects the center of the closed class I landfill areas at the facility and submit revisions to this item of the application form.
5. **A.17.:** The revision to this item of the application form to indicate that the closed Class I landfill areas of the facility receive no waste (0 tons/day) is noted. **No additional information is requested.**

Part B – Disposal Facility General Information

6. **B.10.:** The revision to this item of the application form to indicate that an attendant will not be present at the closed Class I landfill is noted. **No additional information is requested.**
7. **B.11.:** The revision to this item of the application form to indicate that spotters will not be present at the closed Class I landfill is noted. **No additional information is requested.**
8. **B.14.:** The revision to this item of the application form to indicate a "N/A" response regarding days of operation of the closed Class I landfill is noted. **No additional information is requested.**
9. **B.15.:** The revision to this item of the application form to indicate a "N/A" response regarding the hours of operation of the closed Class I landfill is noted. **No additional information is requested.**
10. **B.21.:** The revision to this item of the application form to indicate a "None" response regarding the landfill bottom liner for the closed Class I landfill is noted. **No additional information is requested.**

Part C – Non-disposal Facility General Information

11. **C.1. through C.25.:** The revision to these items of the application form to indicate a "N/A" response is noted. **No additional information is requested.**

Part D – Prohibitions (Rule 62-701.300, F.A.C.)

12. **D.1. through D.11.:** The revision to these items of the application form to indicate a "N/A" response is noted. **No additional information is requested.**

Part L – Landfill Operation Requirements (Rule 62-701.500, F.A.C.)

13. **L.1. through L.13.:** The revision to these items of the application form to indicate a “N/A” response is noted. **No additional information is requested.**

Part M – Water Quality and Leachate Monitoring Requirements (Rule 62-701.510, F.A.C.)

14. **M.1.b.:** The revision to this item of the application form to reference Section 4 of the renewal application (*Engineering Report*) is noted. The revisions to the subsection entitled “Requirements of Section M” on page 6 of the *Engineering Report* that indicates all sample collection and analyses shall be performed in accordance with the Department’s Standard Operating Procedures that are referenced in Chapter 62-160, F.A.C., are noted. **No additional information is requested.**

15. **M.1.c.(1):** While this item to the application form was revised to reference Section 2.0 of the GWMPE as requested, it does not appear that the GWMPE was revised to address the review comment regarding the lateral distance from the detection wells to the edge of the disposal units for Phases I, II and III. The response to this review comment in the SEI letter does not specify the location of the response. The only response to this comment appears to be in Section 5.2 of the *Operations Manual* that references a new figure (“Monitoring Well Map”) presented in Appendix F. It is noted that this figure does not identify the location of the edge of the disposal units for the closed landfill phases, so this figure is not adequate to determine the lateral distances between the landfill and the monitor wells as requested. Please provide a complete response to this review comment as presented in the March 25, 2003 RAI letter, (presented below in italics):

Please submit a revised application form that references Section 2.0 of the Ground Water Monitoring Plan Evaluation (GWMPE), prepared by CTL. Please submit revisions to the GWMPE to demonstrate that the locations designated as detection wells in Specific Condition No. 20 of permit No. 22926-002-SF (MW-1, MW-2, MW-4, MW-7, MW-8 and MW-9) are within 50 feet of the edge of the disposal unit in the downgradient direction. Please submit a scale-drawn figure that shows the waste footprint in Phases I, II and III and the distances from the edge of waste to each monitor well. (Rule 62-701.510(3), F.A.C.)

16. **M.1.c.(3):** The revision to this item of the application form to reference Section 2.0 of the GWMPE is noted. The revision to Section 2.0 of the GWMPE to address the adequacy of using well MW-6A as the background well is noted. **No additional information is requested.**

17. **M.1.c.(4):** The revision to this item of the application form to reference Section 2.0 of the GWMPE is noted. The revision to Section 2.0 of the GWMPE (Table 1) to provide the latitude and longitude coordinates for each of the existing monitor wells is noted. **No additional information is requested.**

18. **M.1.c.(5):** While this item of the application form was revised to reference Section 2.0 of the GWMPE as requested, it does not appear that the GWMPE was revised to address the review comment regarding the lateral spacing between monitor wells on the downgradient side of the facility. Rather, the response to this review comment in the SEI letter indicates that the lateral distances between monitor wells are presented on the figures (“Monitoring Well Map” and “Overall Site Plan”) provided in Appendix F of the *Operations Manual*. Please submit a revised application form that references Appendix F of the *Operations Manual*.

19. **M.1.c.(6):** While this item of the application form was revised to reference Section 2.0 of the GWMPE as requested, it does not appear that the GWMPE was revised to address the review comment regarding the adequacy of the well screen locations. The requested revisions to Table A (“Monitor Well Construction Details”) were provided in the CTL transmittal letter, however this summary table was not incorporated into or referenced by the GWMPE. Please revise the appropriate section of the GWMPE to provide an evaluation of the adequacy of the well screens of the existing wells to monitor the saturated thickness of the uppermost aquifer within the zone of discharge (Rule 62-701.510(3)(d)4, F.A.C.), using the information provided in Table A (elevations for top of limestone unit, ground water elevation range and wells screen elevations). Please specifically evaluate the ability to sample well MW-2A during dry season conditions and compare the top of screen elevations at wells MW-7 and MW-9 with the top of the limestone unit encountered in the boring logs to determine if the depth of the wells is appropriate. Please also submit a revised application form that references the revised section of the GWMPE.

20. **M.1.f.(3):** Please submit a revised application form that references Section 2.0 of the GWMPE. The Department does not object to deleting many of the parameters from the quarterly sampling events as suggested in the revision to Section 2.0 of the GWMPE, however it is considered appropriate to maintain two indicator parameters that are characteristic of landfill leachate (chloride and sodium) and one parameter (fluoride) that has been reported to exceed the ground water standard in a previous sampling event. The anticipated list of parameters for routine quarterly events follows:

<u>Field Parameters</u>	<u>Laboratory Parameters</u>		
Static water levels	Chlorides	Aluminum	Mercury
before purging	Fluoride	Antimony	Silver
Specific conductivity	Nitrate	Cadmium	Sodium
pH	Total ammonia	Chromium	Thallium
Temperature	Total dissolved solids (TDS)	Iron	
Turbidity	Gross alpha	Lead	
Dissolved oxygen	Radium 226 + 228	Manganese	
Colors & sheens (by observation)			

The revised list of parameters for the annual sampling event (during fourth quarter of each year) provided in the revision to Section 2.0 of the GWMPE appears to be somewhat inconsistent with Rule 62-701.510(8)(a), F.A.C., and does not address some of the parameters that have been reported to exceed ground water standards in previous sampling events. The anticipated list of parameters for the annual sampling events follows:

<u>Field Parameters</u>	<u>Laboratory Parameters</u>	
Static water levels	Chlorides	Aluminum
before purging	Fluoride	Iron
Specific conductivity	Nitrate	Manganese
pH	Total ammonia	Mercury
Temperature	Total dissolved solids (TDS)	Sodium
Turbidity	<u>Those parameters listed in 40 CFR</u>	
Dissolved oxygen	<u>Part 258, Appendix I</u>	
Colors & sheens (by observation)	Gross alpha	
	Radium 226 + 228	

Please submit revisions to Section 2.0 of the GWMPE to include the lists of parameters for the quarterly and annual sampling events.

21. **M.1.g.:** Please submit a revised application form that references Section 6.0 of the GWMPE. The revisions to Section 6.0 and the addition of Appendix VIII of the GWMPE that present the procedures for implementing evaluation monitoring, prevention measures, and corrective action are noted.

22. **M.1.h. and M.1.h.(1):** The revision to this item of the application form to reference the *Engineering Report* is noted. Please submit additional revisions to the *Engineering Report* subsection entitled "Requirements of Section M" that reference the changes to Section 2.0 of the GWMPE regarding the anticipated parameters for the quarterly and annual ground water sampling events as requested in review comment No. 20.

23. **M.1.h.(2): Bi-annual report requirements signed, dated and sealed by P.G. or P.E.**
(Rule 62-701.510.(9)(b), F.A.C.)

a. The revision to this item of the application form to reference the GWMPE is noted. **No additional information is requested.**

b. **GWMPE – Section 2.0:** The revised GWMPE does not include the well location map referenced as Figure 1 as requested in the March 25, 2003 RAI letter. The response to this review comment in the SEI letter references the attached maps without specifying their location in the submittal. It is assumed that the response refers to Appendix F of the *Operations Manual* that includes the figure entitled "Monitoring Well Map" and the drawing entitled "Overall Site Plan". It is noted that the figure and the drawing do not identify the location of the edge of the disposal units for the closed landfill phases or the compost pads as requested. Please submit revisions to the referenced figure and drawing to show the omitted information.

c. **GWMPE – Section 3.0**

- 1) The revisions to the ground water elevations provided in Table 1 are noted. **No additional information is requested.**
- 2) The revision to Table A (Monitor Well Construction Details) that indicate the ground water elevation reported for well MW-2 for the July 2001 sampling event (36.64 ft NGVD) was within the screened interval of the well is noted. **No additional information is requested.**
- 3) The revisions to the hydrograph provided in Appendix V of the revised GWMPE are noted. **No additional information is requested.**
- 4) The response in the CTL letter that references the revised sampling procedure is noted. **No additional information is requested.**

d. **GWMPE – Section 4.0**

- 1) The response in the CTL letter that indicates the extreme hydraulic gradient was measured during Quarter 4, 2002 is noted. **No additional information is requested.**
- 2) The response in the CTL letter that the horizontal hydraulic conductivity value used in the ground water velocity calculation was obtained from slug tests conducted on monitor wells located at the Sumter Recycling C&D facility (formerly known as the D&C facility) is noted. Please note that in the absence of site specific data to characterize hydraulic conductivity, quarterly ground water sampling frequency shall be required. **No additional information is requested.**

e. **GWMPE – Section 5.0:**

- 1) The revisions to the summary of analytical results in Appendix II for the specified ground water quality analyses are noted, however additional revisions are required to be consistent with the reports for the routine sampling events provided to the Department. Please review the apparent inconsistencies for the following sampling events and submit revisions to the quarterly reports or to the summary tables in Appendix II, as appropriate:

October 2000 -- pH at MW-2 (7.57 SU), MW-4 (5.53 SU), MW-6A (6.43 SU), MW-7 (7.02),
MW-8 (6.44 SU), and MW-9 (5.92 SU)
Ammonia at MW-8 (0.171 mg/L)

April 2001 -- Ammonia at MW-1 (0.036 mg/L), MW-2 (<0.02 mg/L), MW-4 (<0.02 mg/L),
MW-6A (<0.02 mg/L), MW-7 (0.041 mg/L), MW-8 (0.029 mg/L), and
MW-9 (0.12 mg/L)

- 2) The response in the SEI letter that references the drainfield locations on the attached figure (Appendix F of the *Operations Manual*, figure entitled "Monitoring Well Map" and drawing entitled "Overall Site Plan") is noted. However, the requested information to substantiate the potential for the septic drainfields to impact ground water quality at well MW-4 was not provided in Section 5.0 of the GWMPE, including: the direction of ground water flow between the drainfields and well MW-4; the calculation of the time required for ground water to migrate from the drainfields to well MW-4; and, the distance between the drainfields and well MW-4. In the absence of the requested information, the source of elevated nitrate at well MW-4 is considered to be the closed Class I landfill areas or the activities conducted with the processing of MSW at the facility, and it appears that evaluation monitoring is appropriate (Rule 62-701.510(7), F.A.C.). Please submit a site map that provides the proposed locations for additional monitor wells to determine the extent of the elevated nitrate at the facility and submit construction details for these proposed well locations (screen top/bottom elevation, screen slot size, sand pack size, method of installation and development, and distance from the edge of the landfill phases).

3) The response in the CTL letter that concentrations reported for nitrate and TDS at well MW-2 have declined during the sampling events conducted during 2003 is noted. Provided the results reported for future sampling events at well MW-2 continue to be below the ground water standard it is not considered appropriate to initiate evaluation monitoring for nitrate and TDS at this time. Please note the requirement of Rule 62-701.510(7)(a), F.A.C., that it is the permittee's responsibility to provide notification to the Department within 14 days of the receipt of data that indicates exceedances of ground water standards. Failure to provide timely notification of impacts to ground water quality is a violation of the solid waste rule and may be the basis for enforcement actions. This comment is provided for informational purposes and does not require a response. **No additional information is requested.**

Part N – Special Waste Handling Requirements (Rule 62-701.520, F.A.C.)

24. **N.1. through N.5.:** The revision to these items of the application form to indicate a "N/A" response is noted. **No additional information is requested.**

Part O – Gas Management System Requirements (Rule 62-701.530, F.A.C.)

25. **O.2.:** **Provide documentation that will describe locations, construction details and procedures for monitoring gas at ambient monitoring points and with soil monitoring probes** (Rule 62-701.530(2), F.A.C.)

a. The revision to this item of the application form to reference the *Engineering Report* is noted. It is also noted that the revisions to the "Supplemental Information for Long Term Care" subsection of the *Engineering Report* indicate that a supplemental study is being performed at the gas vents to determine if gas is still being generated within the closed landfill cells. Please submit an evaluation and the results of this supplemental study with the responses to this RAI letter and submit revisions to the *Engineering Report* regarding recommendations to maintain or terminate gas monitoring at the facility.

b. It is noted that the revisions to the Supplemental Information for Long Term Care subsection of the *Engineering Report* indicate that the perimeter gas probes do not extend to the depth of the waste in the landfill cells, however the requested discussion of the adequacy of these monitoring locations was not provided in the response to this review comment. Please submit an evaluation of the results of the supplemental gas study referenced in review comment No. 25.a. with the responses to this RAI letter and submit revisions to the *Engineering Report* regarding the adequacy of the existing perimeter gas probes and include recommendations regarding the need to install deeper gas probes. If appropriate, please submit a site map showing the existing and any proposed gas probe locations on a scale-drawn site map (no larger than 11x17 inches in a black and white format), and include identification numbers.

c. It is noted that the revisions to the Supplemental Information for Long Term Care subsection of the *Engineering Report* indicate that a supplemental gas study will include all site structures. Please submit an evaluation of the results of the supplemental gas study referenced in review comment No. 25.a. with the responses to this RAI letter and submit revisions to the *Engineering Report* regarding the ambient monitoring points at the facility. Please submit a site map showing the existing and any proposed ambient gas monitoring locations on a scale-drawn site map (no larger than 11x17 inches in a black and white format), and include identification numbers.

d. The checklist provided for the gas migration report conducted during 2002 in Attachment II of the GWMPE is noted. **No additional information is requested.**

Part P – Landfill Final Closure Requirements (Rule 62-701.600, F.A.C.)

26. **P.2.b.(5):** The revision to this item of the application form to reference the *Operations Manual* is noted. The addition of Section 5.0 (Long Term Care) to the *Operations Manual* is also noted. Please submit additional revisions to Section 5.3 of the *Operations Manual* to delete the reference to the Department's SOPs and insert a description of the procedures used to conduct the gas monitoring events at the facility (perimeter gas probes, gas vents, and ambient locations). Please ensure that the gas monitoring procedures address the requirements of Rule 62-701.530(2), F.A.C.

27. **P.3.d.:** The revision to this item of the application form to reference the *Engineering Report* is noted. It is noted that the revisions to the "Supplemental Information for Long Term Care" subsection of the *Engineering Report* indicate that a supplemental study is being performed at the gas vents to determine if gas is still being generated within the closed landfill cells. Please submit an evaluation and the results of this supplemental study with the responses to this RAI letter and submit revisions to the *Engineering Report* to substantiate the statement that the "gas vents are in proper working order".

28. **P.3.e.:** The revision to this item of the application form to reference the *Engineering Report* is noted. Please submit revisions to the *Engineering Report* subsections entitled "Report of Effectiveness of Landfill Design" and "General Maintenance for the Covered Area's of the Closed Class I Landfill" to respond to comment Nos. 5, 6 and 7 in Steve Morgan's letter dated November 7, 2003, provided under separate cover.

Part Q – Closure Procedures (Rule 62-701.610, F.A.C.)

29. **Q.3.:** The submittal of copies of the closure documents to Phases I, II and III in Section 7 of the submittal is noted. **No additional information is requested.**

30. **Q.4. through Q.7.:** The revision to these items of the application form to indicate a "N/A" response is noted. **No additional information is requested.**

Part R – Long Term Care Requirement (Rule 62-701.620, F.A.C.)

31. **R.3.:** The revision to this item of the application form to indicate a "N/A" response is noted. **No additional information is requested.**

32. **R.5.:** Please submit a revised application form for this item that indicates a "N/A" response since the long term care period has not been completed for the facility.

Part S – Financial Responsibility Requirements (Rule 62-701.630, F.A.C.)

33. **S.1.:** Please submit revisions to the Financial Responsibility (Section 8 of the renewal application) that respond to comment No. 15. in Steve Morgan's letter dated November 7, 2003, provided under separate cover.

NOTICE OF APPLICATION

34. The submittal of proof of publication of the Notice of Application via facsimile (received October 15, 2003) is noted. **No additional information is requested.**

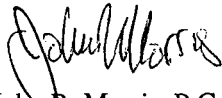
"NOTICE! Pursuant to the provisions of Section 120.60, F.S., if the Department does not receive a complete response to this request for information within 90 days of the date of this letter, the Department may issue a final order denying your application. You need to **respond within 30 days** after 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. Failure to comply with a time table accepted by the Department may 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 may reapply as soon as the requested information is available."

Mr. Garry Breeden
Sumter County Closed Class I Landfill, Pending Permit No. 22926-003-SF

November 7, 2003
Page 8 of 8

It is strongly recommended that you contact the Department as soon as possible to set up a meeting to discuss this letter and subsequent submittals. Please provide three copies of all permit application responses to the Department for review. Please provide all responses that relate to engineering or geological interpretation signed and sealed by the respective Florida-licensed professional. Please contact me at (813) 744-6100, extension 336, to discuss questions you may have about this letter.

Sincerely,



John R. Morris, P.G.
Solid Waste Section

cc: David Springstead, P.E., Springstead Engineering, Inc., 727 So. 14th Street, Leesburg, FL 34748
Ted Strouse, P.E., Central Testing Laboratories, Inc., 723 So. 14th Street, Leesburg, FL 34748
Virginia Watson, Sumter County, 209 N. Florida Street, Bushnell, FL 33513
Susan Pelz, P.E., FDEP Tampa
Steve Morgan, FDEP Tampa



**Springstead
Engineering, Inc.**

SPRINGSTEAD ENGINEERING, INC.
727 S. 14TH STREET
LEESBURG, FLORIDA 34748
(352) 787-1414
FAX: (352) 787-7221

EMAIL ADDRESS:
staff@springsteadeng.com
sprengstaf@aol.com

Memorandum

To: Steven Morgan, P.E.
Department of Environmental Protection

From: David W. Springstead, P.E.

Date: October 15, 2003

Re: Sumter County Composting, Processing, & Recycling Facility,
Sumterville, Sumter County
Pending Permit No.: 126940-010-SO - Composting Facility
Pending Permit No.: 126941-003-SO - Material Processing Facility
Pending Permit No.: 22926-003-SF - Closed Class I Long-Term Care
SEI File No. 921100.020

☒ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Please find attached the Notice of Publications as per Response No. 1 of our letter dated October 8, 2003. We will forward the original to you today.

Should you have any questions or require additional information, please contact our office.

DWS/jal

PROOF OF PUB
NOT. OF APP.
10/15/03

the Village DAILY SUN

**Published Daily
Lady Lake, Florida
State of Florida
County of Lake**

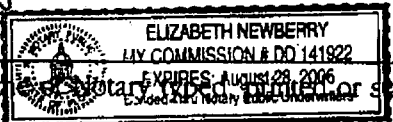
Before the undersigned authority personally appeared
Linda B. Mobley, who on oath
says that she is Legal Ad Coordinator of the DAILY SUN,
a daily newspaper published at Lady Lake in Lake
County, Florida; that the attached copy of
advertisement, being a Legal Ad # 04528089
in the matter of Notice of Application

in the _____ court, was published in said
newspaper in the issues of April 24, 2003

Affiant further says that the said Daily Sun is a
newspaper published at Lady Lake in said Lake
County, Florida, and that the said newspaper has
heretofore been continuously published in said Lake
County, Florida, each week and has been entered as
second class mail matter at the post office in Lady
Lake, in said Lake County, Florida, for a period of one
year next preceding the first publication of the attached
copy of advertisements; and affiant further says that she
has neither paid nor promised any person, firm or
corporation any discount, rebate, commission or refund
for the purpose of securing this advertisement for
publication in the said newspaper.

Linda B. Mobley
(Signature Of Affiant)

Sworn to and subscribed before me this 28th
day of April, 2003

(Name of Notary typed, printed or stamped)


Personally Known _____ or
Production Identification _____
Type of Identification Produced _____

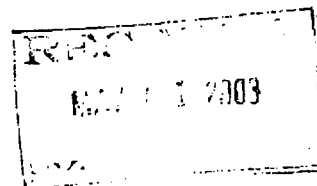
Elizabeth R. Newberry

Attach Notice Here

STATE OF FLORIDA Department of Environmental Protection Notice of Application

The Department announces receipt of applications for permit renewal from the Sumter County Public Works Department for a permits to operate a Waste Processing Facility and Solid Waste Composting Facility and a permit for long-term care, monitoring, and maintenance of a closed Class I Landfill, subject to Department rules, at the Sumter County Recycling, Processing, and Composting Facility located at 835 C.R. 529, Sumterville, in Sumter 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 33619-1352.





Department of Environmental Protection

Jeb Bush
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

David B. Struhs
Secretary

CERTIFIED MAIL 7001 1940 0006 5800 9695
RETURN RECEIPT REQUESTED

Mr. Garry Breeden, Director
Sumter County Public Works Department
319 E. Anderson Avenue
Bushnell, Fl. 34513

October 6, 2003

RE: Sumter County Composting, Processing, and Recycling Facility
Sumterville, Sumter County
Pending Permit No.: 126940-010-SO - Composting Facility
Pending Permit No.: 126941-003-SO - Materials Processing Facility
Pending Permit No.: 22926-003-SF - Closed Class I Long-Term Care

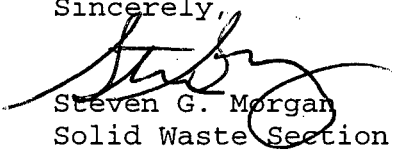
Dear Mr. Breeden:

On March 25, 2003, you were notified that your applications for permit renewal were incomplete. The required information necessary to complete your applications was itemized (copies attached).

When a permit application is incomplete, all processing of the application is suspended. Pursuant to Section 120.60, Florida Statutes, the Department may deny a permit application if the applicant, after receiving timely notice, fails to correct errors, omissions, or supply additional information within a reasonable period of time.

It has been 195 days since we notified you of the deficiencies in your application. Please provide a response sufficient to complete the pending applications, or your notice withdrawing the pending applications, by October 17, 2003. In the event that a sufficient response is not received by this date, the Department may deny the pending permit applications. Please remember that a permit must be obtained from this Department before you undertake the proposed work. If you should have any questions concerning this matter, please contact me at (813) 744-6100, extension 385.

Sincerely,


Steven G. Morgan
Solid Waste Section
Southwest District

sgm

Attachments

cc: David Springstead, P.E., Springstead Engineering 727 South 14th Street,
Leesburg, Fl. 34748
Francine Joyal, FDEP Tallahassee
William Kutash, FDEP Tampa
Susan Pelz, P.E., FDEP Tampa
John Morris, P.G., FDEP Tampa

"More Protection, Less Process"



Springstead Engineering, Inc.

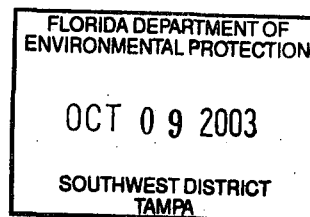
Consulting Engineers - Architects - Planners - Surveyors

EB - 0001723
AA - 0002820
LB - 0001723

727 South 14th Street
Leesburg, Florida 34748

October 7, 2003

Lake (352) 787-1414
Sumter (352) 793-3639
Fax (352) 787-7221



SUPPORTING MATERIALS
CONTAINED IN 3-RING
BINDER, FILED WITH
OVERSIZED MATERIALS

Mr. John R. Morris, P.G.
Solid Waste Section
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619

Re: Sumter County Closed Class I Landfill
Long-term Care Permit Renewal, Pending Permit No. 22926-003-SF
SEI File No. 921100.020

Dear Mr. Morris:

We are in receipt of your Request for Additional Information dated March 25, 2003 for the above referenced project. Please find the following responses:

Part A - General Information

1. A.1.: Please submit a revised application form that indicates the type of facility as a Class I landfill.
1. This has been changed on the application.
2. A.2.: Please submit a revised application form that indicates the type of application as closure.
2. This has been changed on the application.
3. A.4.: Please submit a revised application form that indicates the facility name as the Sumter County closed Class I landfill.
3. This has been changed.
4. A.5.: Please submit a revised application form that indicates the DEP ID Number is SWD/60/53008.
4. This has been changed.
5. A.17.: Please submit a revised application form that indicates no waste (0 tons/day) is expected to be received in association with the long term care permit.
5. This has been changed.

Part B - Disposal Facility General Information

6. B.10.: Please submit a revised application form that indicates a "N/A" response regarding the presence of an attendant and trained operator at the closed Class I landfill.

s_w/jrm/sumter/corresp/sumter1.303

Member of American Consulting Engineers Council

RESPONSES TO
RAI #1
10/9/03

6. **This has been changed.**
7. **B.11.:** Please submit a revised application form that indicates a "N/A" response regarding the presence of spotters at the closed Class I landfill.
7. **This has been changed.**
8. **B.14.:** Please submit a revised application form that indicates a "N/A" response regarding days of operation of the closed Class I landfill.
8. **This has been changed.**
9. **B.15.:** Please submit a revised application form that indicates a "N/A" response regarding the hours of operation of the closed Class I landfill.
9. **This has been changed.**
10. **B.21.:** Please submit a revised application form that indicates a "None" response regarding the landfill bottom liner for the closed Class I landfill.
10. **This has been changed.**

Part C – Non-disposal Facility General Information

11. **C.1. through C.25.:** Please submit a revised application form that indicates a "N/A" response for this part.
11. **This has been changed.**

Part D – Prohibitions (Rule 62-701.300, F.A.C.)

12. **D.1. through D.11.:** Please submit a revised application form that indicates a "N/A" response for this part.
12. **This has been changed.**

Part L – Landfill Operation Requirements (Rule 62-701.500, F.A.C.)

13. **L.1. through L.13.:** Please submit a revised application form that indicates a "N/A" response for this part.
13. **This has been changed.**

Part M – Water Quality and Leachate Monitoring Requirements (Rule 62-701.510, F.A.C.)

14. **M.1.b.:** Please submit a revised application form that references the Engineering Report (Section 4 of the renewal application) prepared by SEI. Please submit revisions to the Engineering Report (Section 4, "Requirements of Section M") that indicates all sample collection and analyses shall be performed in accordance with the Department's Standard Operating Procedures that are referenced in Chapter 62-160, F.A.C. (Rule 62-701.510(2)(b), F.A.C.)
14. **Please see the revised report and application.**

15. **M.1.c.(1):** Please submit a revised application form that references Section 2.0 of the Ground Water Monitoring Plan Evaluation (GWMPE), prepared by CTL. Please submit revisions to the GWMPE to demonstrate that the locations designated as detection wells in Specific Condition No. 20 of permit No. 22926-002-SF (MW-1, MW-2, MW-4, MW-7, MW-8 and MW-9) are within 50 feet of the edge of the disposal unit in the downgradient direction. Please submit a scale-drawn figure that shows the waste footprint in Phases I, II and III and the distances from the edge of waste to each monitor well. (Rule 62-701.510(3), F.A.C.)
15. **Please see the revised report and application.**
16. **M.1.c.(3):** Please submit a revised application form that references Section 2.0 of the GWMPE prepared by CTL. Please submit revisions to the GWMPE to demonstrate that the location designated as the background well in Specific Condition No. 20 of permit No. 22926-002-SF (MW-6A) is screened in all aquifers below the landfill that may be affected by the landfill. (Rule 62-701.510(3), F.A.C.)
16. **Please see the revised application and report.**
17. **M.1.c.(4):** Please submit a revised application form that references Section 2.0 of the GWMPE prepared by CTL. Please submit revisions to the GWMPE (Table 1) to provide the latitude and longitude coordinates for each of the existing monitor wells. (Rule 62-701.510(3), F.A.C.)
17. **Please see the revised application and report.**
18. **M.1.c.(5):** Please submit a revised application form that references the appropriate section of the GWMPE prepared by CTL. Please submit revisions to the GWMPE to demonstrate that the existing monitor well locations are adequate to meet the spacing requirements of Rule 62-701.510(3), F.A.C., regarding detection wells (500 feet apart) and background wells (1500 feet apart). Please include the well spacing information on the scale-drawn figure requested in comment No. 15, above.
18. **Please see the revised application. The wells are spaced as permitted for the closure of the cells. The distances between the wells have been included on the attached overall site plan. The separation between the wells ranges from 440 to 760 feet. The separation of the downgradient ranges from 520 feet to 620 feet. Based on the closure approvals, the well locations are satisfactory for permitting 4 down-gradient wells to intercept potential contamination phases.**
19. **M.1.c.(6):** Please submit a revised application form that references Section 2.0 of the GWMPE prepared by CTL. It is noted that Section 2.0 of the GWMPE refers to the monitor well construction details and soil lithologies (Appendix I) that appear to indicate wells MW-1, MW-2, MW-4, MW-6A and MW-7 were constructed with 2 feet of slotted well screen, and wells MW-8 and MW-9 were installed with 5 feet of well screen. However, this conflicts with the information provided by SEI dated and received July 29, 1992, that indicated wells MW-1, MW-2, MW-4, MW-6A and MW-7 were installed with 5 feet of well screen. Table A (attached) has been prepared as a supplement to the information provided in Section 2.0 of the GWMPE to allow comparison of well screens with ground water elevations. Please review Table A, provide any missing information (for MW-8 and MW-9) and indicate any appropriate changes to fully describe the construction details of the existing monitor wells, including top of casing elevations, ground surface elevations, top/bottom screened interval elevations, maximum/minimum ground water elevations measured at each location, screen lengths, and total depths. Please provide copies of all documentation of monitor well construction details if available and conduct supplemental field activities to verify the total depths of each of the monitor wells. The adequacy of the existing monitor wells will be evaluated upon receipt of the requested information. (Rule 62-701.510(3), F.A.C.)

19. **Please see the revised application and report.**
20. **M.1.f.(3):** Please submit a revised application form that references the appropriate section of the GWMPE prepared by CTL. Please submit revisions to the GWMPE to demonstrate that the reduced list of parameters conducted during routine ground water sampling events at the Sumter County closed Class I landfill as indicated in Specific Condition No. 13.a., of permit No. 22926-002-SF remains appropriate. Please note that it is the Department's intention to prepare a specific condition of the new permit that requires annual analysis of the parameters listed in Rule 62-701.510(8)(a), F.A.C., to replace the parameters listed in Specific Condition No. 13.b. of the referenced permit. It is intended that the parameters in this new condition will be more representative of previous solid waste disposal at the facility. Please submit revisions to the GWMPE to reference this revised list of annual parameters. (Rule 62-701.510(3), F.A.C.)
20. **Please see the revised application and report.**
21. **M.1.g.:** Please submit a revised application form that references the appropriate section of the supporting document (Engineering Report or the GWMPE) to discuss the procedures for implementation of evaluation monitoring, prevention measures, and corrective action. Please submit revisions to the supporting document to include the procedures for implementation of evaluation monitoring, prevention measures, and corrective action. (Rule 62-701.510(7), F.A.C.)
21. **Please see the revised application and report.**
22. **M.1.h. and M.1.h.(1):** Please submit a revised application form that references the Engineering Report (Section 4 of the renewal application) prepared by SEI. Please submit revisions to the Engineering Report (Section 4, "Requirements of Section M") that describes the quarterly ground water sampling events to be consistent with the response to review comment No. 20, above. (Rule 62-701.510(9)(a), F.A.C.)
22. **Please see the revised application and report.**
23. **M.1.h.(2): Bi-annual report requirements signed, dated and sealed by P.G. or P.E.**
(Rule 62-701.510(9)(b), F.A.C.)
 - a. Please submit a revised application form that references the GWMPE prepared by CTL.
 - a. **Please see the revised application and report.**
 - b. **GWMPE – Section 2.0:** Please submit a revised GWMPE that includes the well location map that is referenced as Figure 1. Please show the existing and any proposed monitor well locations on a scale-drawn site map (no larger than 11x17 inches in a black and white format), include identification numbers, and features at the facility including Phases I/II/III limits of waste disposal, compost pads, scale house and other structures, former leachate pond, stormwater ponds, and the property boundary.
 - b. **Please see the attached maps.**
 - c. **GWMPE – Section 3.0**
 - 1) Several of the ground water elevations provided in Table 1 appear to be inconsistent with the reports for the quarterly monitoring events submitted to the Department by CTL. The ground water elevation reported for well MW-9 for the April 2001 sampling event was indicated to be 40.96 ft NGVD, while Table 1 indicates 42.96 ft NGVD. The ground water elevation reported for well MW-2 for the October 2002 sampling event was indicated to be 46.32 ft NGVD, while Table 1 indicates 38.49 ft NGVD. Please review and revise these apparent inconsistencies and submit revisions to the quarterly reports or to Table 1, as appropriate. In

the event that revisions to the quarterly report are required, please provide copies of field notes to document any changes.

- 1) Please see the revised GWMPE.
- 2) The ground water elevation reported for well MW-2 for the July 2001 sampling event (36.64 ft NGVD) was included in the Department's letter dated November 5, 2001 (Appendix VI). The comparison of this reported ground water elevation with the monitor well construction details provided in attached Table A appears to indicate that the reported water elevation was below the bottom of the well. Please review the field notes for this sampling event and submit a corrected ground water elevation for well MW-2 for the July 2001 sampling event. In the event that supplemental information is not available to provide a corrected elevation, the ground water level measurement for the July 2001 sampling event shall not be considered to be representative of site conditions.
- 2) Please see the revised GWMPE.
- 3) Please submit revisions to the hydrographs and contour maps provided in Appendix IV as required to be consistent with any changes in ground water elevations in response to comment Nos. 23.c.1) and 23.c.2).
- 3) Please see the revised GWMPE.
- 4) It is indicated that the inability to collect a ground water sample from well MW-6A during the July 2001 sampling event was related to the prolonged drought. However, it is noted that there were three sampling events when lower ground water elevations were reported for well MW-6A (April 2000, July 2000 and January 2001) when samples were successfully collected. Please note that the Department considers the inability to sample a monitor well as a failure of one of the landfill systems that requires notification as described in Specific Condition No. 7.b. of permit No. 22926-002-SF.
- 4) Comment is noted. Please see the revised GWMPE report.

d. **GWMPE – Section 4.0**

- 1) Please specify the sampling events that were used to characterize the seasonal extremes in the hydraulic gradient across the facility that are referenced in this section. Please submit ground water contour maps for the seasonal extremes that have been annotated to show the section location where the gradient has been calculated.
- 1) Please see the revised GWMPE.
- 2) Please describe the source of the hydraulic conductivity data (slug tests or aquifer tests), describe how the data was collected, and what locations were tested. Please provide copies of the raw data and the data evaluation, including method of analysis, for the facility.
- 2) Please see the revised GWMPE.

e. **GWMPE – Section 5.0:**

- 1) The results for selected ground water quality analyses provided in Appendix II appear to be inconsistent with the reports for the quarterly monitoring events submitted to the Department

by CTL. Please review the apparent inconsistencies for the following sampling events and submit revisions to the quarterly reports or to Appendix II, as appropriate.

February 2000 --	ammonia at MW-2
October 2000 --	pH at MW-2, MW-4, MW-6A, MW-7, MW-8 and MW-9 ammonia at MW-8
January 2001 --	pH at MW-1, MW-2, MW-4, MW-6A, MW-7 and MW-8 iron at MW-4, MW-6A and MW-8 manganese at MW-4 total dissolved solids at MW-6A and MW-7
April 2001 --	ammonia at all wells
July 2001 --	field turbidity at wells MW-1 and MW-2 iron at well MW-1 ammonia at wells MW-1, MW-2, MW-4, MW8 and MW-9
October 2001 --	ammonia at all wells (<u>ammonium</u> reported at all wells instead of <u>ammonia</u>)

- 1) Please see the provided CTL response.
- 2) It is indicated that the upward trend of nitrate at well MW-4 has been explored by performance of expanded parameters and it is believed that this location is being influenced by septic drainfields in close proximity to this well. Please submit revisions to this section of the GWMPE to describe the location of these septic drainfields, characterize the direction of ground water flow between these drainfields and well MW-4, and provide a calculation of the time required for ground water to migrate from the drainfields to well MW-4. Please submit a scale-drawn figure that shows the location of the drainfields and well MW-4 and include the distance between these features.
- 2) Please see the drainfield locations on the attached figure.
- 3) It is indicated that the sharp upward trend in nitrate and TDS concentrations at well MW-2 is attributed to the grade changes associated with construction activities that exposed subgrade soils. It is difficult to understand how the removal of approximately 6 feet of surface sands would affect ground water quality for these parameters in a Floridan aquifer monitor well where the depth to water has been measured between about 23 and 35 feet below grade. In the absence of more complete documentation to characterize the recent increases in nitrate and TDS concentrations at well MW-2, the Department may require the initiation of evaluation monitoring in accordance with Rule 62-701.510(7), F.A.C.
- 3) This is noted. In the past, the removal of the top 10 feet of soil south of the closed site initiated changes in the groundwater results of the adjacent wells for approximately 6-12 months following the construction. After this time the water parameters returned to more typical concentrations.

Part N – Special Waste Handling Requirements (Rule 62-701.520, F.A.C.)

24. N.1. through N.5.: Please submit a revised application form that indicates a "N/A" response for this part.

24. Please see the revised application.

Part O – Gas Management System Requirements (Rule 62-701.530, F.A.C.)

25. **O.2.: Provide documentation that will describe locations, construction details and procedures for monitoring gas at ambient monitoring points and with soil monitoring probes (Rule 62-701.530(2), F.A.C.)**
- a. Please submit a revised application form that references the Engineering Report (Section 4 of the renewal application) prepared by SEI. It is noted that the application form indicates a "N/C" response for this item while the Engineering Report (Section 4, "Supplemental Information for Long Term Care") states that the annual gas migration reports indicate landfill gas is not present in the closed landfill and includes a request to terminate annual gas monitoring activities. It is the Department's position that the results of the annual landfill gas monitoring at the existing gas probes indicate that gas is not migrating across the property boundary, but they do not characterize the generation of landfill gas within the disposal areas. Supplemental data collection activities would be required to demonstrate that the passive gas vents continue to operate as designed and that landfill gas is not detected at the gas vents. In the absence of data that demonstrates that the buried waste is not generating landfill gas, the request to terminate gas monitoring at the Sumter County closed Class I landfill is not considered to be appropriate. Please submit revisions to the Supplemental Information for Long Term Care attachment to the Engineering Report that delete the request to terminate gas monitoring.
 - a. Please see the revised application and engineering report.
 - b. The Gas Migration Survey prepared by CTL dated October 13, 1994, received October 17, 1994, provided construction details for perimeter gas probes designated M-1 through M-29 (attached). Please submit revisions to the Supplemental Information for Long Term Care attachment to the Engineering Report that specifies the depth of the existing gas probes and includes a discussion of the adequacy of these monitoring locations. Please note that the gas probes must extend to a depth equal to the thickness of buried waste or to the first occurrence of ground water, whichever is shallower. Please submit a site map showing the existing and any proposed gas probe locations on a scale-drawn site map (no larger than 11x17 inches in a black and white format), and include identification numbers.
 - b. Please see the revised engineering report.
 - c. Specific Condition No. 18 of permit No. 22926-002-SF requires annual gas migration survey at all enclosed site structures. It appears that the annual gas migration reports either do not provide data for any ambient locations or provide data for different locations from year to year. Please submit revisions to the Supplemental Information for Long Term Care attachment to the Engineering Report that address the requirements for ambient monitoring points to comply with Rule 62-701.530(2)(a), F.A.C. Please submit a site map showing the existing and any proposed ambient gas monitoring locations on a scale-drawn site map (no larger than 11x17 inches in a black and white format), and include identification numbers.
 - c. Please see the revised engineering report and attached figure.
 - d. It appears that the annual gas migration reports prepared by CTL for 2001 and 2002 (received November 15, 2001 and February 5, 2003, respectively) provide identical data. Please submit copies of the field notes for these referenced gas migration reports.
 - d. Please see the attached information submitted by CTL.

Part P – Landfill Final Closure Requirements (Rule 62-701.600, F.A.C.)

26. **P.2.b.(5):** Please submit a revised application form that references the Operations Manual (Section 5 of the renewal application) prepared by SEI. Please submit revisions to the Operations Manual to include a new

section that describes the activities to be conducted as part of the long-term care plan for the Sumter County closed Class I Landfill. Please address monitoring and maintenance of the following, including their frequency of implementation: final cover condition (settlement areas, erosional areas, and regrading); vegetative cover condition (mowing, reseeding, sodding, and fertilization); asphalt cover condition (inspection for cracking/subsidence and repair activities); ground water monitoring system (well locations, sample collection, well maintenance, and well repair/replacement); landfill gas monitoring system (gas probe/gas vent locations, sample collection, gas probe/gas vent maintenance, and gas probe/vent repair); stormwater drainage features condition (swale and retention pond maintenance); and, contingency plan for emergencies (fires, severe weather events).

- 26. Please see the revised Operations Manual.
- 27. P.3.d.: Please submit a revised application form that references the Engineering Report (Section 4 of the renewal application) prepared by SEI. Please submit revisions to the Report of Effectiveness of Landfill Design attachment to the Engineering Report that provides the basis for the statement that the "gas vents are in proper working order".
- 27. Please see the revised engineering report.
- 28. P.3.e.: Please submit a revised application form that references the Engineering Report (Section 4 of the renewal application) prepared by SEI. Please submit revisions to the Report of Effectiveness of Landfill Design attachment to the Engineering Report and the General Maintenance for the Covered Area's of the Closed Class I Landfill attachments to the Engineering Report that respond to comment Nos. 7, 8 and 9 in Steve Morgan's letter dated March 25, 2003, provided under separate cover.
- 28. Please see the revised engineering report.

Part Q – Closure Procedures (Rule 62-701.610, F.A.C.)

- 29. Q.3.: The Department's files contain a copy of the certification of closure construction completion letter that was prepared for Phase III, dated March 5, 1990. Please submit copies of the certification of closure construction completion letters that were prepared for Phases I and II. It is the Department's intention to use copies of letters for all three phases as permit attachments.
- 29. Please see the attached copies of the closure documents.
- 30. Q.4. through Q.7.: Please submit a revised application form that indicates "N/C" responses for these items.
- 30. Please see the revised application.

Part R – Long Term Care Requirement (Rule 62-701.620, F.A.C.)

- 31. R.3.: Please submit a revised application form that indicates a "N/C" response to this item.
- 31. Please see the revised application.
- 32. R.5.: Please submit a revised application form that indicates a "N/A" response to this item.
- 32. Please see the revised application form.

Part S – Financial Responsibility Requirements (Rule 62-701.630, F.A.C.)

33. S.1.: Please submit revisions to the Financial Responsibility (Section 8 of the renewal application) that respond to comment No. 21.c. in Steve Morgan's letter dated March 25, 2003, provided under separate cover.

33. Please see the revised financial responsibility section.

NOTICE OF APPLICATION

34. Please publish the Notice of Application attached to Steve Morgan's letter dated March 25, 2003, provided under separate cover, in a newspaper of general circulation in the area of the project, and provide proof of publication to the Department.

34. This has been performed and the notice is attached.

I trust this information meets your needs at this time. Should you have any questions or require additional information, please contact our office.

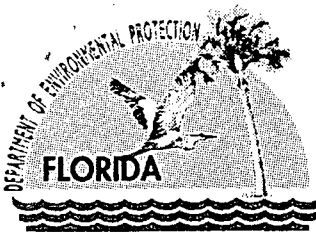
Very truly yours,
Springstead Engineering, Inc.

 10/8/03
David W. Springstead, P.E.
Florida Registration No. 48229

DWS/jal

Attachments

cc: Garry Breeden, Director of Public Works



Department of Environmental Protection

Jeb Bush
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

David B. Struhs
Secretary

March 25, 2003

Mr. Garry Breeden
Sumter County Department of Public Works
319 E. Anderson Ave.
Bushnell, FL 33513

Re: Sumter County Closed Class I Landfill
Long-term Care Permit Renewal, Pending Permit No. 22926-003-SF

Dear Mr. Breeden:

This letter has been prepared to acknowledge that an application for permit renewal and supporting information were received by the Department for the referenced facility, as follows:

- Application fee for permit renewal, received February 24, 2003 (small county waiver)
- Supporting information prepared by Springstead Engineering, Inc. (SEI), received February 24, 2003, including:
 - Section 1 -- DEP Form No. 62-701.900(1), Solid Waste Management Facility
 - Section 2 -- DEP Form No. 62-701.900(4), Waste Processing Facility
 - Section 3 -- DEP Form No. 62-701.900(10), Production of Compost
 - Section 4 -- Engineering Report
 - Section 5 -- Operations Manual
 - Section 6 -- Water Quality Reports
 - Section 7 -- Waste Quantity Reports
 - Section 8 -- Financial Assurance Cost Estimates
- Ground Water Monitoring Plan Evaluation, 1998 -- 2002, prepared by Central Testing Laboratory (CTL), dated March 3, 2003, received March 5, 2003

This letter also constitutes notice that a permit will be required for your project pursuant to Chapter 403, Florida Statutes. Your application for a permit renewal is incomplete. This letter represents the first request for additional information in support of your permit application. Evaluation of your proposed project will be delayed until all requested information have been received. The following information is needed in support of the solid waste application [Chapter 62-701, Florida Administrative Code (F.A.C.)].

Please provide revised submittals, or replacement pages to the submittals, that use a ~~striketrough~~ and underline format, or similar format, to facilitate review. Please also include the revision date as part of the header/footer for all revised pages. The information requests have been referenced to the permit application form and sections of the supporting information, as presented below:

DEP FORM NO. 62-701.900(1), SOLID WASTE MANAGEMENT FACILITY PERMIT FORM

Please note that the information provided on DEP Form No. 62-701.900(1) should be limited to the renewal of the long term care permit for the closed Class I landfill. References to the operation of the materials recovery/waste processing facility or to the compost facility are not appropriate for the renewal of the long term care permit. Please provide the information indicated in Parts A, B, M, and O through T to describe the Sumter County closed Class I landfill or to describe the long-term care activities at the facility, as noted in the instructions provided on page 2 of the application form. For all items identified with a "N/C" notation, please identify the document in which the subject information was originally submitted (prepared by, date of preparation, date received by the Department) and verify that the document is located in the Department's file, otherwise please resubmit the information.

"More Protection, Less Process"

Part A – General Information

1. **A.1.:** Please submit a revised application form that indicates the type of facility as a Class I landfill.
2. **A.2.:** Please submit a revised application form that indicates the type of application as closure.
3. **A.4.:** Please submit a revised application form that indicates the facility name as the Sumter County closed Class I landfill.
4. **A.5.:** Please submit a revised application form that indicates the DEP ID Number is SWD/60/53008.
5. **A.17.:** Please submit a revised application form that indicates no waste (0 tons/day) is expected to be received in association with the long term care permit.

Part B – Disposal Facility General Information

6. **B.10.:** Please submit a revised application form that indicates a “N/A” response regarding the presence of an attendant and trained operator at the closed Class I landfill.
7. **B.11.:** Please submit a revised application form that indicates a “N/A” response regarding the presence of spotters at the closed Class I landfill.
8. **B.14.:** Please submit a revised application form that indicates a “N/A” response regarding days of operation of the closed Class I landfill.
9. **B.15.:** Please submit a revised application form that indicates a “N/A” response regarding the hours of operation of the closed Class I landfill.
10. **B.21.:** Please submit a revised application form that indicates a “None” response regarding the landfill bottom liner for the closed Class I landfill.

Part C – Non-disposal Facility General Information

11. **C.1. through C.25.:** Please submit a revised application form that indicates a “N/A” response for this part.

Part D – Prohibitions (Rule 62-701.300, F.A.C.)

12. **D.1. through D.11.:** Please submit a revised application form that indicates a “N/A” response for this part.

Part L – Landfill Operation Requirements (Rule 62-701.500, F.A.C.)

13. **L.1. through L.13.:** Please submit a revised application form that indicates a “N/A” response for this part.

Part M – Water Quality and Leachate Monitoring Requirements (Rule 62-701.510, F.A.C.)

14. **M.1.b.:** Please submit a revised application form that references the Engineering Report (Section 4 of the renewal application) prepared by SEI. Please submit revisions to the Engineering Report (Section 4, “Requirements of Section M”) that indicates all sample collection and analyses shall be performed in accordance with the Department’s Standard Operating Procedures that are referenced in Chapter 62-160, F.A.C. (Rule 62-701.510(2)(b), F.A.C.)

15. **M.1.c.(1):** Please submit a revised application form that references Section 2.0 of the Ground Water Monitoring Plan Evaluation (GWMPE), prepared by CTL. Please submit revisions to the GWMPE to demonstrate that the locations designated as detection wells in Specific Condition No. 20 of permit No. 22926-002-SF (MW-1, MW-2, MW-4, MW-7, MW-8 and MW-9) are within 50 feet of the edge of the disposal unit in the downgradient direction. Please submit a scale-drawn figure that shows the waste footprint in Phases I, II and III and the distances from the edge of waste to each monitor well. (Rule 62-701.510(3), F.A.C.)

16. **M.1.c.(3):** Please submit a revised application form that references Section 2.0 of the GWMPE prepared by CTL. Please submit revisions to the GWMPE to demonstrate that the location designated as the background well in Specific Condition No. 20 of permit No. 22926-002-SF (MW-6A) is screened in all aquifers below the landfill that may be affected by the landfill. (Rule 62-701.510(3), F.A.C.)
17. **M.1.c.(4):** Please submit a revised application form that references Section 2.0 of the GWMPE prepared by CTL. Please submit revisions to the GWMPE (Table 1) to provide the latitude and longitude coordinates for each of the existing monitor wells. (Rule 62-701.510(3), F.A.C.)
18. **M.1.c.(5):** Please submit a revised application form that references the appropriate section of the GWMPE prepared by CTL. Please submit revisions to the GWMPE to demonstrate that the existing monitor well locations are adequate to meet the spacing requirements of Rule 62-701.510(3), F.A.C., regarding detection wells (500 feet apart) and background wells (1500 feet apart). Please include the well spacing information on the scale-drawn figure requested in comment No. 15, above.
19. **M.1.c.(6):** Please submit a revised application form that references Section 2.0 of the GWMPE prepared by CTL. It is noted that Section 2.0 of the GWMPE refers to the monitor well construction details and soil lithologies (Appendix I) that appear to indicate wells MW-1, MW-2, MW-4, MW-6A and MW-7 were constructed with 2 feet of slotted well screen, and wells MW-8 and MW-9 were installed with 5 feet of well screen. However, this conflicts with the information provided by SEI dated and received July 29, 1992, that indicated wells MW-1, MW-2, MW-4, MW-6A and MW-7 were installed with 5 feet of well screen. Table A (attached) has been prepared as a supplement to the information provided in Section 2.0 of the GWMPE to allow comparison of well screens with ground water elevations. Please review Table A, provide any missing information (for MW-8 and MW-9) and indicate any appropriate changes to fully describe the construction details of the existing monitor wells, including top of casing elevations, ground surface elevations, top/bottom screened interval elevations, maximum/minimum ground water elevations measured at each location, screen lengths, and total depths. Please provide copies of all documentation of monitor well construction details if available and conduct supplemental field activities to verify the total depths of each of the monitor wells. The adequacy of the existing monitor wells will be evaluated upon receipt of the requested information. (Rule 62-701.510(3), F.A.C.)
20. **M.1.f.(3):** Please submit a revised application form that references the appropriate section of the GWMPE prepared by CTL. Please submit revisions to the GWMPE to demonstrate that the reduced list of parameters conducted during routine ground water sampling events at the Sumter County closed Class I landfill as indicated in Specific Condition No. 13.a., of permit No. 22926-002-SF remains appropriate. Please note that it is the Department's intention to prepare a specific condition of the new permit that requires annual analysis of the parameters listed in Rule 62-701.510(8)(a), F.A.C., to replace the parameters listed in Specific Condition No. 13.b. of the referenced permit. It is intended that the parameters in this new condition will be more representative of previous solid waste disposal at the facility. Please submit revisions to the GWMPE to reference this revised list of annual parameters. (Rule 62-701.510(3), F.A.C.)
21. **M.1.g.:** Please submit a revised application form that references the appropriate section of the supporting document (Engineering Report or the GWMPE) to discuss the procedures for implementation of evaluation monitoring, prevention measures, and corrective action. Please submit revisions to the supporting document to include the procedures for implementation of evaluation monitoring, prevention measures, and corrective action. (Rule 62-701.510(7), F.A.C.)
22. **M.1.h. and M.1.h.(1):** Please submit a revised application form that references the Engineering Report (Section 4 of the renewal application) prepared by SEI. Please submit revisions to the Engineering Report (Section 4, "Requirements of Section M") that describes the quarterly ground water sampling events to be consistent with the response to review comment No. 20, above. (Rule 62-701.510(9)(a), F.A.C.)

23. **M.1.h.(2): Bi-annual report requirements signed, dated and sealed by P.G. or P.E.**
(Rule 62-701.510.(9)(b), F.A.C.)

a. Please submit a revised application form that references the GWMPE prepared by CTL.

b. **GWMPE – Section 2.0:** Please submit a revised GWMPE that includes the well location map that is referenced as Figure 1. Please show the existing and any proposed monitor well locations on a scale-drawn site map (no larger than 11x17 inches in a black and white format), include identification numbers, and features at the facility including Phases I/II/III limits of waste disposal, compost pads, scale house and other structures, former leachate pond, stormwater ponds, and the property boundary.

c. **GWMPE – Section 3.0**

1) Several of the ground water elevations provided in Table 1 appear to be inconsistent with the reports for the quarterly monitoring events submitted to the Department by CTL. The ground water elevation reported for well MW-9 for the April 2001 sampling event was indicated to be 40.96 ft NGVD, while Table 1 indicates 42.96 ft NGVD. The ground water elevation reported for well MW-2 for the October 2002 sampling event was indicated to be 46.32 ft NGVD, while Table 1 indicates 38.49 ft NGVD. Please review and revise these apparent inconsistencies and submit revisions to the quarterly reports or to Table 1, as appropriate. In the event that revisions to the quarterly report are required, please provide copies of field notes to document any changes.

2) The ground water elevation reported for well MW-2 for the July 2001 sampling event (36.64 ft NGVD) was included in the Department's letter dated November 5, 2001 (Appendix VI). The comparison of this reported ground water elevation with the monitor well construction details provided in attached Table A appears to indicate that the reported water elevation was below the bottom of the well. Please review the field notes for this sampling event and submit a corrected ground water elevation for well MW-2 for the July 2001 sampling event. In the event that supplemental information is not available to provide a corrected elevation, the ground water level measurement for the July 2001 sampling event shall not be considered to be representative of site conditions.

3) Please submit revisions to the hydrographs and contour maps provided in Appendix IV as required to be consistent with any changes in ground water elevations in response to comment Nos. 23.c.1) and 23.c.2).

4) It is indicated that the inability to collect a ground water sample from well MW-6A during the July 2001 sampling event was related to the prolonged drought. However, it is noted that there were three sampling events when lower ground water elevations were reported for well MW-6A (April 2000, July 2000 and January 2001) when samples were successfully collected. Please note that the Department considers the inability to sample a monitor well as a failure of one of the landfill systems that requires notification as described in Specific Condition No. 7.b. of permit No. 22926-002-SF.

d. **GWMPE – Section 4.0**

1) Please specify the sampling events that were used to characterize the seasonal extremes in the hydraulic gradient across the facility that are referenced in this section. Please submit ground water contour maps for the seasonal extremes that have been annotated to show the section location where the gradient has been calculated.

2) Please describe the source of the hydraulic conductivity data (slug tests or aquifer tests), describe how the data was collected, and what locations were tested. Please provide copies of the raw data and the data evaluation, including method of analysis, for the facility.

e. **GWMPE – Section 5.0:**

1) The results for selected ground water quality analyses provided in Appendix II appear to be inconsistent with the reports for the quarterly monitoring events submitted to the Department by CTL. Please review the apparent inconsistencies for the following sampling events and submit revisions to the quarterly reports or to Appendix II, as appropriate.

February 2000 -- ammonia at MW-2

October 2000 -- pH at MW-2, MW-4, MW-6A, MW-7, MW-8 and MW-9
ammonia at MW-8

January 2001 -- pH at MW-1, MW-2, MW-4, MW-6A, MW-7 and MW-8
iron at MW-4, MW-6A and MW-8
manganese at MW-4
total dissolved solids at MW-6A and MW-7

April 2001 -- ammonia at all wells

July 2001 -- field turbidity at wells MW-1 and MW-2
iron at well MW-1
ammonia at wells MW-1, MW-2, MW-4, MW8 and MW-9

October 2001 -- ammonia at all wells (ammonium reported at all wells instead of ammonia)

2) It is indicated that the upward trend of nitrate at well MW-4 has been explored by performance of expanded parameters and it is believed that this location is being influenced by septic drainfields in close proximity to this well. Please submit revisions to this section of the GWMPE to describe the location of these septic drainfields, characterize the direction of ground water flow between these drainfields and well MW-4, and provide a calculation of the time required for ground water to migrate from the drainfields to well MW-4. Please submit a scale-drawn figure that shows the location of the drainfields and well MW-4 and include the distance between these features.

3) It is indicated that the sharp upward trend in nitrate and TDS concentrations at well MW-2 is attributed to the grade changes associated with construction activities that exposed subgrade soils. It is difficult to understand how the removal of approximately 6 feet of surface sands would affect ground water quality for these parameters in a Floridan aquifer monitor well where the depth to water has been measured between about 23 and 35 feet below grade. In the absence of more complete documentation to characterize the recent increases in nitrate and TDS concentrations at well MW-2, the Department may require the initiation of evaluation monitoring in accordance with Rule 62-701.510(7), F.A.C.

Part N – Special Waste Handling Requirements (Rule 62-701.520, F.A.C.)

24. **N.1. through N.5.:** Please submit a revised application form that indicates a “N/A” response for this part.

Part O – Gas Management System Requirements (Rule 62-701.530, F.A.C.)

25. **O.2.:** **Provide documentation that will describe locations, construction details and procedures for monitoring gas at ambient monitoring points and with soil monitoring probes** (Rule 62-701.530(2), F.A.C.)

a. Please submit a revised application form that references the Engineering Report (Section 4 of the renewal application) prepared by SEI. It is noted that the application form indicates a “N/C” response for this item while the Engineering Report (Section 4, “Supplemental Information for Long Term Care”) states that the annual gas migration reports indicate landfill gas is not present in the closed landfill and includes a request to terminate annual gas monitoring activities. It is the Department’s position that the results of the annual landfill gas monitoring at the existing gas probes indicate that gas is not migrating across the property boundary, but they do not characterize the generation of landfill gas within the disposal areas. Supplemental data collection activities would be required to demonstrate that the passive gas vents continue to operate as designed and that landfill gas is not detected at the gas vents. In the absence of data that demonstrates that the buried waste is not generating landfill gas, the request to terminate gas monitoring at the Sumter County closed Class I landfill is not considered to be appropriate. Please submit revisions to the Supplemental Information for Long Term Care attachment to the Engineering Report that delete the request to terminate gas monitoring.

- b. The Gas Migration Survey prepared by CTL dated October 13, 1994, received October 17, 1994, provided construction details for perimeter gas probes designated M-1 through M-29 (attached). Please submit revisions to the Supplemental Information for Long Term Care attachment to the Engineering Report that specifies the depth of the existing gas probes and includes a discussion of the adequacy of these monitoring locations. Please note that the gas probes must extend to a depth equal to the thickness of buried waste or to the first occurrence of ground water, whichever is shallower. Please submit a site map showing the existing and any proposed gas probe locations on a scale-drawn site map (no larger than 11x17 inches in a black and white format), and include identification numbers.
- c. Specific Condition No. 18 of permit No. 22926-002-SF requires annual gas migration survey at all enclosed site structures. It appears that the annual gas migration reports either do not provide data for any ambient locations or provide data for different locations from year to year. Please submit revisions to the Supplemental Information for Long Term Care attachment to the Engineering Report that address the requirements for ambient monitoring points to comply with Rule 62-701.530(2)(a), F.A.C. Please submit a site map showing the existing and any proposed ambient gas monitoring locations on a scale-drawn site map (no larger than 11x17 inches in a black and white format), and include identification numbers.
- d. It appears that the annual gas migration reports prepared by CTL for 2001 and 2002 (received November 15, 2001 and February 5, 2003, respectively) provide identical data. Please submit copies of the field notes for these referenced gas migration reports.

Part P – Landfill Final Closure Requirements (Rule 62-701.600, F.A.C.)

26. **P.2.b.(5):** Please submit a revised application form that references the Operations Manual (Section 5 of the renewal application) prepared by SEI. Please submit revisions to the Operations Manual to include a new section that describes the activities to be conducted as part of the long-term care plan for the Sumter County closed Class I Landfill. Please address monitoring and maintenance of the following, including their frequency of implementation: final cover condition (settlement areas, erosional areas, and regrading); vegetative cover condition (mowing, reseeding, sodding, and fertilization); asphalt cover condition (inspection for cracking/subsidence and repair activities); ground water monitoring system (well locations, sample collection, well maintenance, and well repair/replacement); landfill gas monitoring system (gas probe/gas vent locations, sample collection, gas probe/gas vent maintenance, and gas probe/vent repair); stormwater drainage features condition (swale and retention pond maintenance); and, contingency plan for emergencies (fires, severe weather events).

27. **P.3.d.:** Please submit a revised application form that references the Engineering Report (Section 4 of the renewal application) prepared by SEI. Please submit revisions to the Report of Effectiveness of Landfill Design attachment to the Engineering Report that provides the basis for the statement that the “gas vents are in proper working order”.

28. **P.3.3.:** Please submit a revised application form that references the Engineering Report (Section 4 of the renewal application) prepared by SEI. Please submit revisions to the Report of Effectiveness of Landfill Design attachment to the Engineering Report and the General Maintenance for the Covered Area's of the Closed Class I Landfill attachments to the Engineering Report that respond to comment Nos. 7, 8 and 9 in Steve Morgan's letter dated March 25, 2003, provided under separate cover.

Part Q – Closure Procedures (Rule 62-701.610, F.A.C.)

29. **Q.3.:** The Department's files contain a copy of the certification of closure construction completion letter that was prepared for Phase III, dated March 5, 1990. Please submit copies of the certification of closure construction completion letters that were prepared for Phases I and II. It is the Department's intention to use copies of letters for all three phases as permit attachments.

30. **Q.4. through Q.7.:** Please submit a revised application form that indicates “N/C” responses for these items.

Part R – Long Term Care Requirement (Rule 62-701.620, F.A.C.)

31. **R.3.:** Please submit a revised application form that indicates a "N/C" response to this item.
32. **R.5.:** Please submit a revised application form that indicates a "N/A" response to this item.

Part S – Financial Responsibility Requirements (Rule 62-701.630, F.A.C.)

33. **S.1.:** Please submit revisions to the Financial Responsibility (Section 8 of the renewal application) that respond to comment No. 21.c. in Steve Morgan's letter dated March 25, 2003, provided under separate cover.

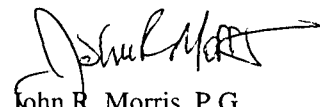
NOTICE OF APPLICATION

34. Please publish the Notice of Application attached to Steve Morgan's letter dated March 25, 2003, provided under separate cover, in a newspaper of general circulation in the area of the project, and provide proof of publication to the Department.

"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 90 days of the date of this letter, the Department may issue a final order denying your application. You need to **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. Failure to comply with a time table accepted by the Department may 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 may reapply as soon as the requested information is available."

It is strongly recommended that you contact the Department as soon as possible to set up a meeting to discuss this letter and subsequent submittals. Please provide three copies of all permit application responses to the Department for review. Please provide all responses that relate to engineering or geological interpretation signed and sealed by the respective Florida-licensed professional. Please contact me at (813) 744-6100, extension 336, to discuss questions you may have about this letter.

Sincerely,



John R. Morris, P.G.
Solid Waste Section

Attachments – Table A – Monitor Well Construction Details
Perimeter Gas Probe Construction Details, prepared by CTL, dated October 13, 1994

cc: David Springstead, P.E., Springstead Engineering, Inc., 727 So. 14th Street, Leesburg, FL 34748
Ted Strouse, P.E., Central Testing Laboratories, Inc., 723 So. 14th Street, Leesburg, FL 34748
Virginia Watson, Sumter County, 209 N. Florida Street, Bushnell, FL 33513
Susan Pelz, P.E., FDEP Tampa
Steve Morgan, FDEP Tampa

TABLE A -- Monitor Well Construction Details, Sumter County Closed Class I Landfill

Well #	Elevation (feet NGVD)						Screen Length (ft)	Total Depth (ft)	Lithology Encountered (feet below land surface)
	Top of Casing	Ground Surface	Top of Screen	Bottom of Screen	Maximum Water Level	Minimum Water Level			
MW-1	70.17	69	44.9	39.9	48.19	41.17	5	30.27	0 - 10 Sand
									10 - 15 Sandy clay
									15 - 22 Clay
									22 - 32 Limestone
MW-2	74.14	72.47	44.07	39.07	48.83	36.64	5	35.07	0 - 10 Sand
	(69.13)*	(69.13)*						(30.06)*	10 - 18 Sandy clay
									18 - 30 Clay
									30 - 37 Limestone
MW-4	70.36	68.48	40.67	35.67	48.41	41.28	5	34.69	0 - 10 Sand
									10 - 20 Sandy clay
									20 - 30 Clay
									30 - 37 Limestone
MW-6A	77.34	75.67	25.47	20.47	49.17	41.12	5	56.87	0 - 20 Sand
									20 - 29 Clay with limestone fragments
									29 - 51 Limestone
MW-7	73.14	71.27	22.28	17.28	48.84	41.47	5	55.68	0 - 20 Sand
									20 - 25 Sand and clay
									25 - 28 Clay and sand
									28 - 31 Limestone
									31 - 34 Clay
									34 - 51 Limestone
MW-8	69.26				50.24	42.06	5	41	0 - 24 Sand
									24 - 34 Sandy clay
									34 - 41 Limestone
MW-9	71.95				49.68	41.55	5	46.0	0 - 26 Sand
									26 - 32 Sandy clay
									32 - 46 Limestone

Notes:

- Top of casing elevations and screen lengths from Central Testing Laboratory, Ground Water Monitoring Plan Evaluation (Section 2.0, Table 1), received March 5, 2003
 - Ground surface elevations for MW-1, MW-2, MW-4, MW-6A and MW-7 from "Second Response to Request for Additional Information", prepared by Springstead Engineering, Inc., dated and received July 29, 1992, Appendix B.
 - Top/bottom of screen elevations for MW-1, MW-2, MW-4, MW-6A and MW-7 calculated using ground surface elevations and well construction details from "Second Response to Request for Additional Information", prepared by Springstead Engineering, Inc., dated and received July 29, 1992, Appendix B.
 - Maximum/minimum water elevations measured during sampling events conducted between Quarter 1, 1998 and Quarter 4, 2002, from Central Testing Laboratory, Ground Water Monitoring Plan Evaluation (Section 3.0, Table 1), received March 5, 2003
 - Screen length and total depth for MW-1, MW-2, MW-4, MW-6A and MW-7 from "Second Response to Request for Additional Information", prepared by Springstead Engineering, Inc., dated and received July 29, 1992, Appendix B.
 - Screen length and total depth for MW-8 and MW-9 from Central Testing Laboratory, Ground Water Monitoring Plan Evaluation (Section 2.0, Table 1), received March 5, 2003
 - Lithology encountered from Central Testing Laboratory, Ground Water Monitoring Plan Evaluation (Appendix I), received March 5, 2003
- * = new top of casing elevation at well MW-2 following excavation activities; land surface elevation and total depth adjusted to reflect the new well configuration

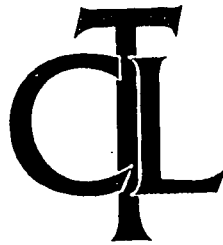
GAS MIGRATION SURVEY

AT

**THE SUMTER COUNTY
SOLID WASTE MANAGEMENT FACILITY
SUMTER COUNTY, FLORIDA**

FOR

**SUMTER COUNTY BOARD OF COUNTY COMMISSIONERS
PUBLIC WORKS DEPARTMENT**



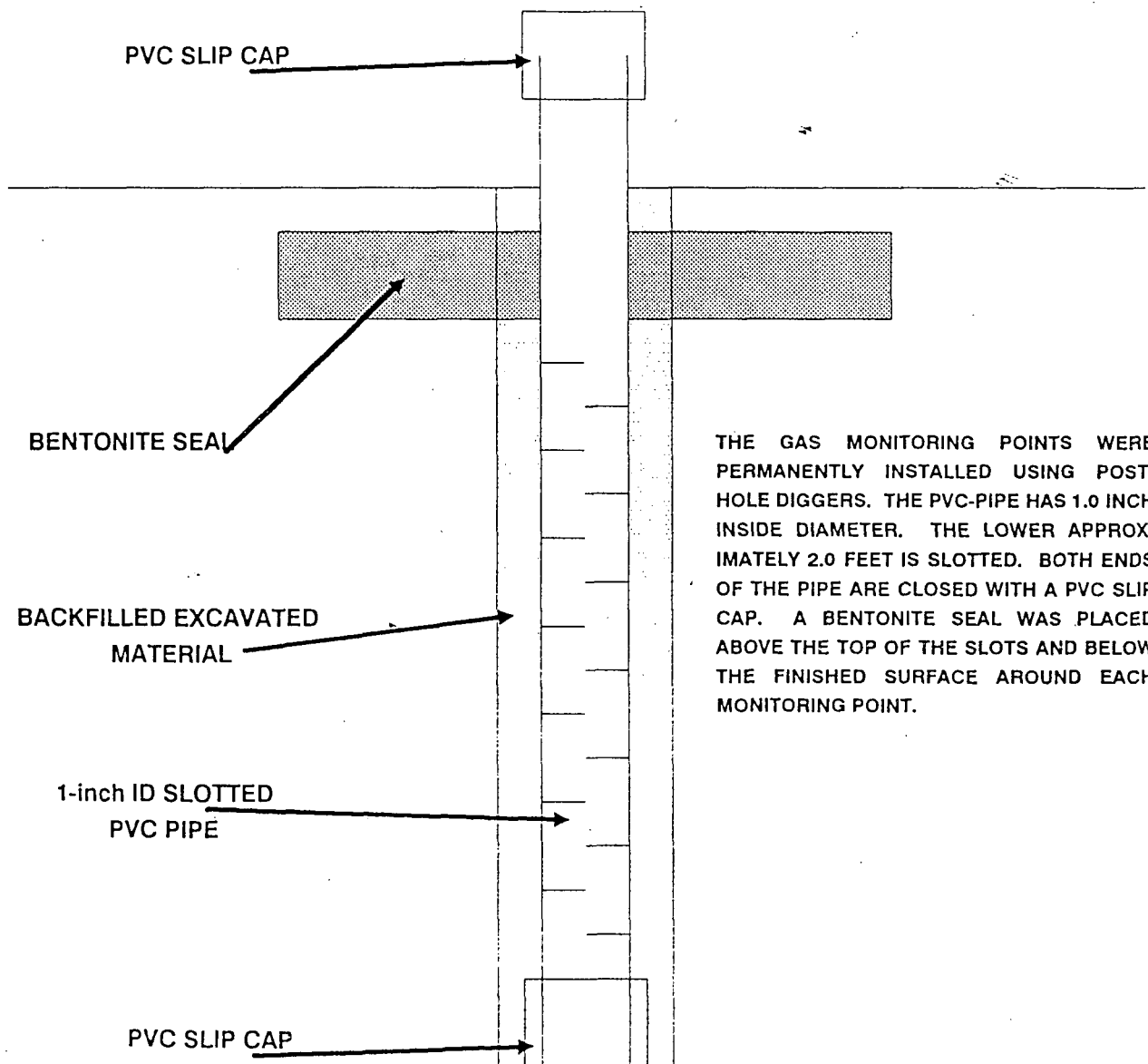
**CENTRAL TESTING LABORATORY
LEESBURG, FLORIDA**

**OCTOBER 13, 1994
97077.400**

**7:11 P.
OCT 17 1994
SUMTER COUNTY
TAMPA**

Central Testing Laboratory

TYPICAL GAS MONITORING POINT CONSTRUCTION





**Springstead
Engineering, Inc.**

Consulting Engineers - Architects - Planners - Surveyors

EB - 0001723

AA - 0002820

LB - 0001723

727 South 14th Street
Leesburg, Florida 34748

Lake (352) 787-1414

Sumter (352) 793-3639

Fax (352) 787-7221

February 21, 2003

Mr. Steven G. Morgan
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619

**RE: SUMTER COUNTY MATERIALS RECOVERY AND VOLUME REDUCTION
COMPOSTING AND RECYCLING FACILITY
SEI File 921100.020**

Dear Mr. Morgan:

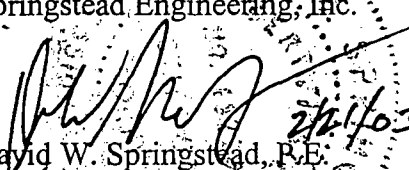
Please find enclosed an application for permit to operate a solid waste management facility, application for permit to operate a waste processing facility, and an application for permit to operate a solid waste management facility for the production of compost. These applications are being submitted in order to renew our existing permits for the above referenced project.

Included with this application is an Engineers Report, Operations Manual, financial responsibility and other necessary documentation for this application.

Checks are included for the fees necessary for these applications.

I trust this information meets your needs at this time. Should you have any questions, please contact our office.

Very truly yours,
Springstead Engineering, Inc.


David W. Springstead, P.E.
Florida Registration No. 48229

Attachments

cc: Garry Breeden, Director of Public Works

DWS/jal

NOTE: MATERIALS SUBMITTED IN
SUPPORT OF LONG TERM
CARE PERMIT FOR THE
CLOSED CLASS I LANDFILL
PROVIDED IN A 3-RING
BINDER, FILED BY
OVERSIZED MATERIALS

PERMIT RENEWAL
APPLICATION
2/24/03

JRM
3/3/03

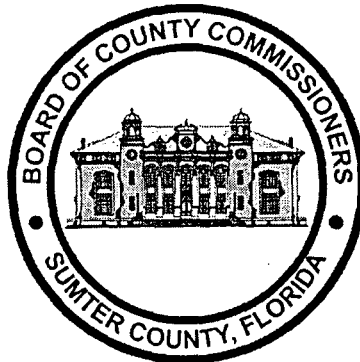
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

APPLICATION FOR PERMIT TO CONSTRUCT, OPERATE, MODIFY OR CLOSE A SOLID
WASTE MANAGEMENT FACILITY

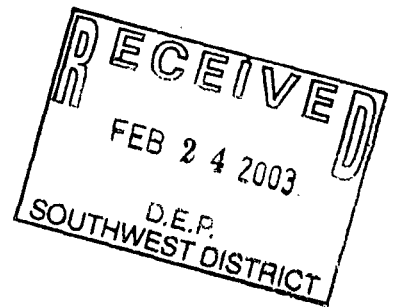
APPLICATION FOR PERMIT TO CONSTRUCT, OPERATE OR MODIFY A
WASTE PROCESSING FACILITY

APPLICATION FOR PERMIT TO CONSTRUCT OR OPERATE A
SOLID WASTE MANAGEMENT FACILITY
FOR THE PRODUCTION OF COMPOST

PREPARED FOR:



SUMTER COUNTY BOARD OF COUNTY COMMISSIONERS
209 NORTH FLORIDA STREET
BUSHNELL, FLORIDA 33513



February, 2003

SEI File No. 921100.020

DEPARTMENT OF ENVIRONMENTAL PROTECTION
MATERIALS RECOVERY AND VALUE REDUCTION COMPOSTING
AND RECYCLING FACILITY



Table of Contents

Section 1	Application for Permit to Construct, Operate, Modify or Close a Solid Waste Management Facility
Section 2	Application for permit to Construct, Operate or Modify a Waste Processing Facility
Section 3	Application for Permit to Construct or Operate a Solid Waste Management Facility for the Production of Compost
Section 4	Engineers Report
Section 5	Sumter County Solid Waste Facility Operations Manual
Section 6	Water Quality
Section 7	Total Amount of Actual Solid Waste Accepted to the Facility
Section 8	Financial Responsibility