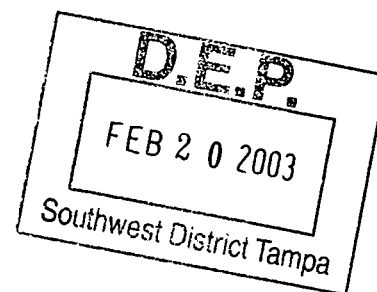


**SCS ENGINEERS**

February 14, 2003  
File No. 09200020.23

Mr. Kim B. Ford, P.E.  
Solid Waste Section  
Division of Waste Management  
Florida Department of Environmental Protection  
3804 Coconut Palm Drive  
Tampa, Florida 33619



Re: Southeast County Landfill, Surface Impoundment – Pond B  
Construction Permit No. 35435-005-SC.

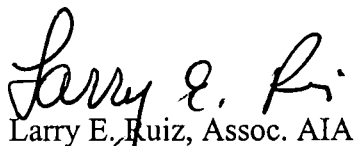
Dear Mr. Ford:

As discussed during the site inspection on February 13, 2003, The Hillsborough County Solid Waste Management Department (SWMD) will perform the following operational tasks:

- Mount wind gage at the Pond B pump station to monitor wind speed. This was completed on February 14, 2003 (Photo No. 1).
- An additional concrete pad 5 feet by 6 feet was installed in the middle of Pond B. This pad was installed without a rub sheet; therefore, the SWMD will continue to monitor the leak detection system and if any leaks develop due to this pad, the SWMD will repair the liner if necessary.
- Lock valves P-8 and P-9. This was completed on February 14, 2003 (Photo No. 2).
- In Pond A extend the tip of the mixing head such that any drip will fall within the lined area. This was completed on February 14, 2003 (Photo No. 3).

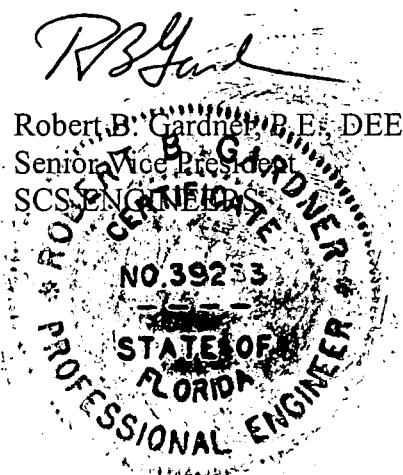
Please call if you have any questions or need additional information.

Sincerely,

  
Larry E. Ruiz, Assoc. AIA  
Project Manager  
SCS ENGINEERS

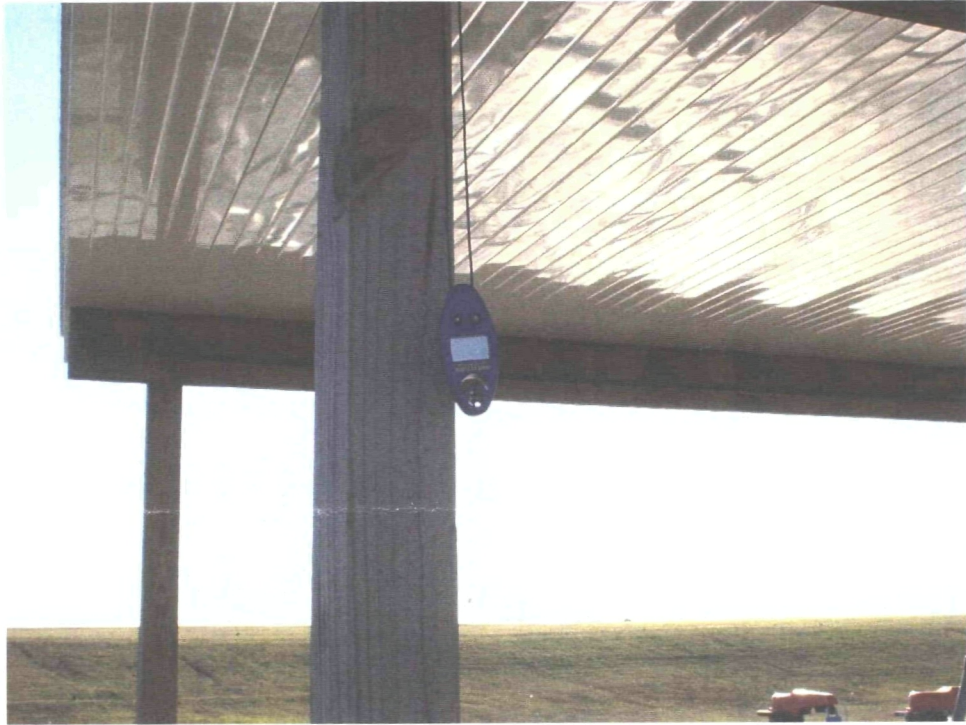
LER/RBG:lr  
Attachments:

cc: Patricia Berry, SWMD  
Susan Pelz, FDEP  
Ron Cope, HCEPC

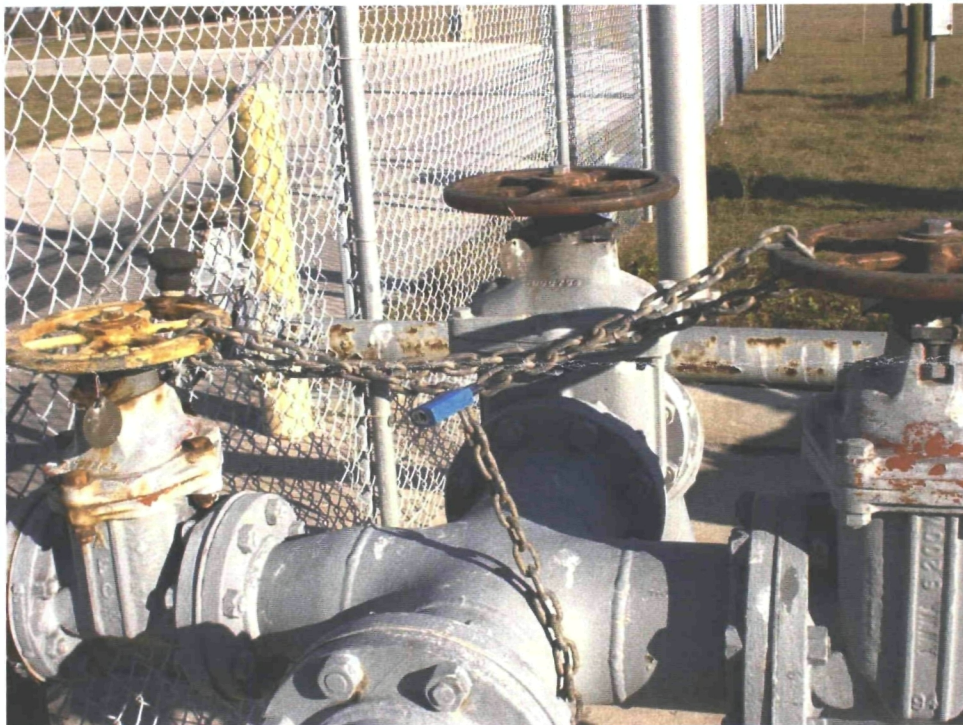


## **PHOTOGRAPHY**





**Photograph 1. Wind Gauge**



**Photograph 2. Valve P-8 Lock**



**Photograph 3. Mixing Head Tip**

**Ford, Kim**

---

**From:** Larry E. Ruiz [Lruiz@scsengineers.com]  
**Sent:** Friday, February 14, 2003 11:52 AM  
**To:** Ford, Kim  
**Subject:** Pond B Letter



PondAmix.JPG



PondBP8lock.JPG



PondBwind.JPG



PondBrubsheet.JPG

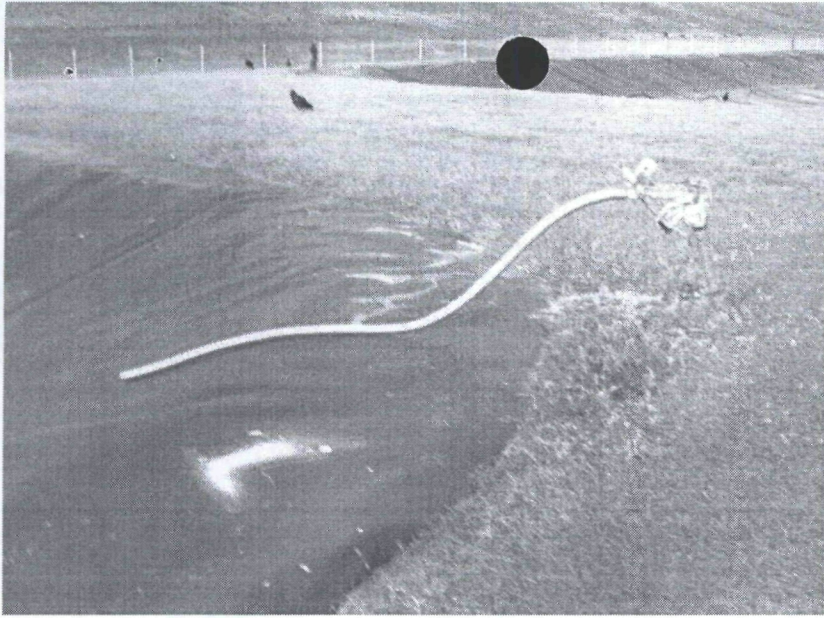
Hello Kim, I just faxed the letter

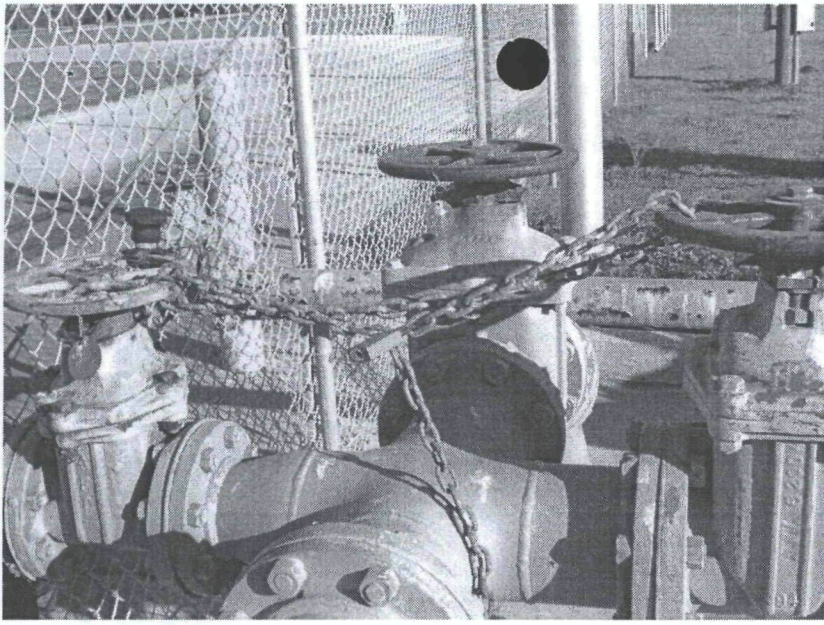
as we discussed. Attached find the pictures referenced in the letter and a picture showing the rub sheet under the suction line intake.

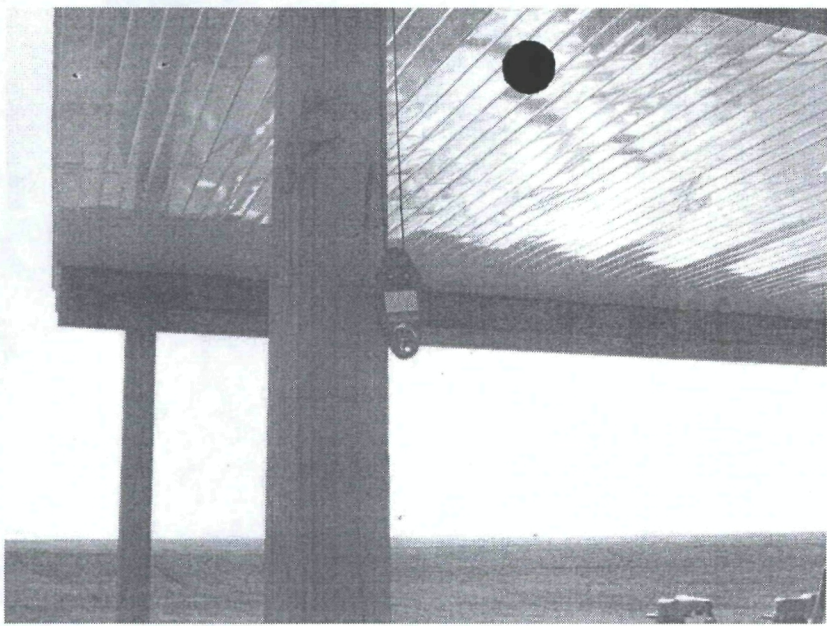
Please call if you have any question.

-----  
Larry E. Ruiz, Assoc. AIA  
SCS Engineers, Tampa, FL.  
Voice: (813) 621-0080  
Fax: (813) 623-6757

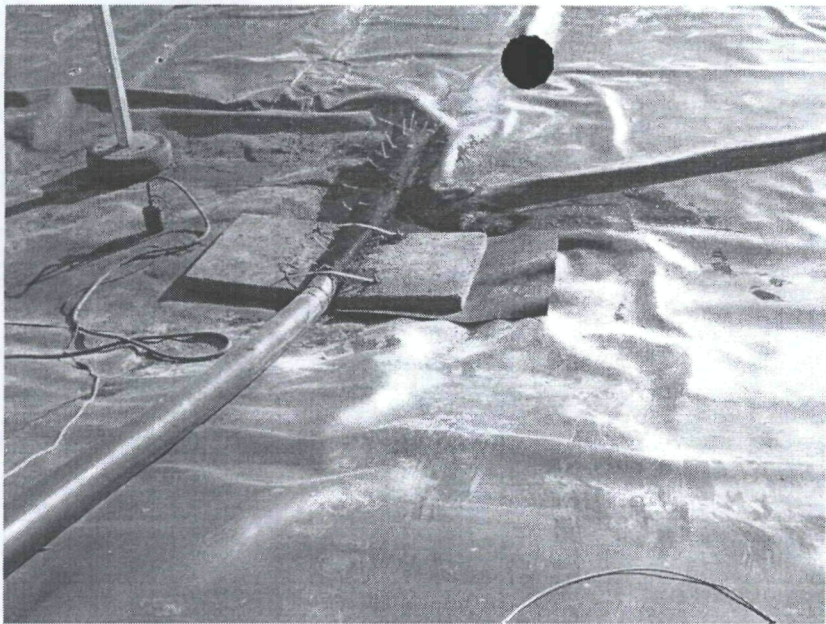


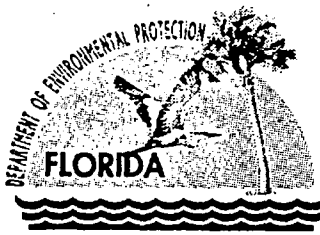












Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

David B. Struhs  
Secretary

February 13, 2003

Mr. Daryl Smith  
Hillsborough County  
Solid Waste Management Department  
P. O. Box 1110  
Tampa, FL 33601

**Re: Pond B - Southeast County Landfill  
Certification of Construction Completion  
Permit No.: 35435-005-SC, Hillsborough County**

Dear Mr. Smith:

On February 13, 2003, an inspection of the above referenced facility relative to construction completion and adherence to the permit issued by the Florida Department of Environmental Protection (FDEP) was made by Matt Matthews (Hillsborough County), Larry Ruiz (SCS), and Kim Ford (FDEP).

Certification of Construction Completion dated August 5, 2002 with related documents, was received by the Department on August 6, 2002. Additional information with replacement pages was received on February 12 and 13, 2003. Based on the Certification with related documents and additional information, and the inspection, FDEP approves the certification of construction of the effluent holding pond - Pond B.

Operation of Pond B is authorized by the current operation permit (#35435-006-SO) and is subject to the conditions.

If you have any questions you may call me at (813) 744-6100, extension 382.

Sincerely,

Kim B. Ford, P.E.  
Solid Waste Section  
Division of Waste Management

KBF/ab

cc: Robert Gardner, P.E., SCS Engineers  
Susan Pelz, P.E., FDEP Tampa  
Ron Cope, EPCHC

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**FIBER CONTENT.**



HILLSBOROUGH SELF POND B  
HILLSBOROUGH COUNTY

02/13/03  
KBF







HILLSBOROUGH SELF POND B  
HILLSBOROUGH COUNTY

02/13/03  
KBF

HILLSBOROUGH SELF POND B  
HILLSBOROUGH COUNTY

02/13/03  
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HILLSBOROUGH SELF POND B  
HILLSBOROUGH COUNTY

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HILLSBOROUGH COUNTY

02/13/03  
KBF

HILLSBOROUGH SELF POND B  
HILLSBOROUGH COUNTY

02/13/03  
KBF

55mm

Solid Waste Permit  
QA/QC Construction Inspection Form

Facility: Pond B SE Landfill

Inspecting Engineer: E. Ford

Date Inspected: 2/13/03

Inspection Type:                      Construction  
   Permitting                      QA/QC  
   [ ]                      [ ]

Facility Type: Effluent Pond

Observed ponds and each valve —  
No Rob Sheet under one concrete pad  
(Action will be monitor for leaks and  
repair if necessary)  
Woods have to be monitored February 2/14  
Will chain valves p-8 and p-9 together  
closed since both to be kept  
normally closed

Fill out the above documenting all inspections of facilities for permitting and/or construction QA/QC purposes. Please place in my basket within 3 days of inspections.

**JOB NUMBER**

28451

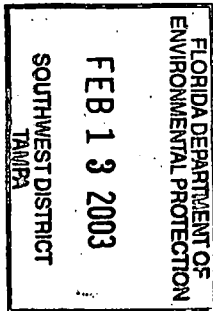
**Bay Area Environmental Services, Inc.**

P.O. Box 13018  
Tampa, Florida 33681  
(813) 677-7655

<b>NAME</b> <i>Hickory Creek Substation</i>		<b>PHONE</b> <i>765-8651</i>	<b>DATE</b> <i>1-2-03</i>	
<b>ADDRESS</b>		<b>CITY</b>	<b>STATE</b>	<b>ZIP</b>

**JOB DESCRIPTION**

*28.9 FT.*  
*↑*  
*Perforated*



*Inspected 28.9 ft of 6" H.D.P.E.  
H.D.P.E. manhole  
to check Perforated holes at end of pipe  
EFFLUENT/LEACHATE POND B.*

LS. *7:00*  
OS. *7:45*  
LS. *9:00*  
AS.

*gave customer Tape and Report*

**Date** *2-6-03* **Hr. Work Completed** \_\_\_\_\_

**Service Technician** *Raul, Robert H.*

**Service Work Authorized by**

<i>Matt</i>

A Service Charge of 1.5% Per Month  
Will Be Charged.  
(18% Per Annum) On Amounts  
30 Days Past Due.

**AMOUNT DUE** \_\_\_\_\_

**PAID VIA** **CASH** ☐  
**CONTRACT/PURCHASE ORDER** ☐  
**OTHER** ☐

Upon my request the above services were rendered in a  
satisfactory manner. The charges have been accepted as  
as stated. Please Print

**Customer Signature** *Matt W. [Signature]*



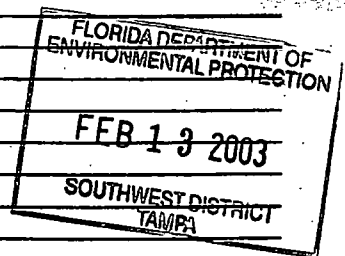
## INVESTIGATION REPORT

JOB# EFFLUENTINSPECTOR: LeachPIPE SIZE: 6"STREET: B.END M/H# Bottom EndDATE: 2/6/03

FT	JT#	FT	JT#	FT	JT#	FT
21		31		41		
22		32		42		
23		33		43		
24		34		44		
25		35		45		
26		36		46		
27		37		47		
28		38		48		
29		39		49		
30		40		50		

Comments require comment are circled and comments listed below  
 number; laterals are indicated by total footage from  
 manhole.

CONDITION

End of Run

GENERAL PIPE CONDITION: \_\_\_\_\_

MANHOLE CONDITION: \_\_\_\_\_

GRADE CONDITION: \_\_\_\_\_

MANDRELL CONDITION: \_\_\_\_\_

MEASURED DISTANCE ON GROUND BETWEEN MANHOLES: 28.9 FT.

M/H#

OE

SECTION LENGTH: \_\_\_\_\_

BE

M/H#

DEPTH OF M/H \_\_\_\_\_

DEPTH OF M/H \_\_\_\_\_

OPERATOR SIGNATURE: Randy Johnson



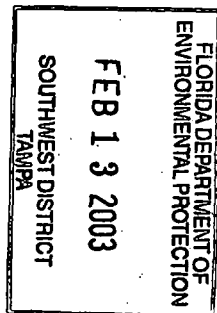
**TABLE 3. 2002 MONTHLY LEACHATE BALANCE SUMMARY (revised February 2003)**  
**CAPACITY EXPANSION AREA**  
**SOUTHEAST COUNTY LANDFILL**  
**HILLSBOROUGH COUNTY, FLORIDA**

Month	Rainfall (in.)	Leachate Arriving at LTRF			Leachate Leaving LTRF			Effluent Disposal			Inflow / Outflow For LTRF		
		Leachate Hauled to LTRF from HHLF/TRLF (gal.)	Leachate from Section 7 Pumped to LTRF (gal.)	Leachate from SCLF Pumped to LTRF (gal.)	Total Leachate Hauled from LTRF (gal.)	Leachate Dust Control (Sprayed) (gal.)	Leachate Treated at LTRF (gal.)	Total Effluent Hauled (gal.)	Effluent Dust Control (Sprayed) (gal.)	Effluent Irrigation (gal.)	Total Arriving at LTRF (gal.)	Total Leaving LTRF (gal.)	Balance <sup>3</sup> (gal.)
January	1.32		0	1,383,233	1,537,172	96,147	0	0	0	0	1,383,233	1,633,319	-250,086
February	3.88	0	0	1,166,415	1,082,345	102,189	0	0	0	0	1,166,415	1,184,534	-18,119
March	0.73	0	0	1,225,193	1,137,036	138,240	0	0	0	0	1,225,193	1,275,276	-50,083
April	6.48	0	0	1,106,482	1,118,233	66,166	0	0	0	0	1,106,482	1,184,399	-77,917
May	2.40	0	0	1,153,613	970,556	240,509	0	0	0	0	1,153,613	1,211,065	-57,452
June	8.05	0	0	1,292,430	1,379,660	72,158	0	0	0	0	1,292,430	1,451,818	-159,388
July	9.03	0	0	2,117,337	2,426,241	0	0	0	0	0	2,117,337	2,426,241	-308,904
August	10.96	0	0	2,394,923	2,177,705	0	0	0	0	0	2,394,923	2,177,705	217,218
September	6.61	0	0	1,956,023	2,126,668	6,061	0	0	0	0	1,956,023	2,132,729	-176,706
October	3.13	0	0	1,608,854	1,552,490	147,350	0	0	0	0	1,608,854	1,699,840	-90,986
November	4.27	0	0	1,580,635	1,546,767	240,484	0	0	0	0	1,580,635	1,787,251	-206,616
December	20.65	0	0	2,781,962	2,622,121	24,050	0	0	0	0	2,781,962	2,646,171	135,791
YTD Total	77.51	0	0	19,767,100	19,676,994	1,133,354	0	0	0	0	19,767,100	20,810,348	-1,043,248

f:\project\Hillsborough\09200020.23\2002summary.xls (Revised to include Section 7 SCvD 2-10-03)

**Note:**

1. If the bypass at the effluent pond is ever used to pump effluent back to the LTRF, this table must be modified.
2. Leachate from the Hillsborough Heights and Taylor Road landfills is being hauled to the Faulkenburg Road Wastewater Treatment Facility.
3. Balance represents total inflow to LTRF minus total outflow from LTRF.



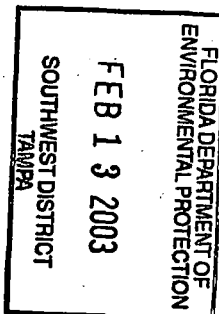
**TABLE 1. LEACHATE WATER BALANCE REPORT FORM**  
**DECEMBER 2002 (revised February 2003)**  
**SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX	XXI
Day	Rainfall (in.)	Depth in Pond A (in.)	Depth in Pond B (in.)	Estimated Depth at PS-B (in.)	Leachate Pumped to PS-B from TPS-6 (gal.)	Leachate Pumped to MLPS from Phases I-VI (gal.)	Leachate Pumped from Sec 7 Leak Det (gal.)	Leachate Pumped to MLPS from Section 7 (gal.)	Total Leachate Pumped to LTRF (gal.)	Leachate in 575K Tank (gal.)	Leachate Treated at LTRF (gal.)	Total Leachate Hauled (gal.)	Leachate Dust Control (Sprayed) (gal.)	Pond A Storage (gal.)	Pond B Storage (gal.)	Effluent Sprayed Pond B (gal.)	Effluent Irrigation (gal.)	Effluent Dust Control (Sprayed) (gal.)	Total Effluent Hauled (gal.)	Total Evaporation (gal.)
1	0.01	0.0	0.0	NR	38,955	49,591	0	0	49,591	NR	0	0	0	800	0	0	0	0	0	0
2	0.00	0.0	0.0	20.2	38,955	49,591	0	0	49,591	355,000	0	108,416	0	800	0	0	0	0	0	0
3	0.00	0.0	0.0	17.9	37,630	48,198	0	0	48,198	297,000	0	102,302	12,022	800	0	0	0	0	0	9,600
4	0.00	0.0	0.0	21.1	36,640	46,305	0	0	46,305	238,000	0	84,219	12,028	800	0	0	0	0	0	9,600
5	1.55	0.0	0.0	21.0	39,650	50,299	0	0	50,299	202,000	0	48,129	0	800	0	0	0	0	0	0
6	0.22	0.0	0.0	17.5	38,425	52,144	0	0	52,144	214,000	0	102,349	0	800	0	0	0	0	0	0
7	0.00	0.0	0.0	10.6	32,465	98,111	0	0	98,111	214,000	0	60,189	0	800	0	0	0	0	0	0
8	0.00	0.0	0.0	NR	35,493	56,381	0	0	56,381	NR	0	0	0	800	0	0	0	0	0	0
9	2.63	0.0	0.0	17.3	35,493	56,381	0	0	56,381	278,000	0	90,354	0	800	0	0	0	0	0	0
10	0.20	0.0	0.0	19.3	36,245	31,304	0	0	31,304	230,000	0	78,209	0	800	0	0	0	0	0	0
11	0.00	0.0	0.0	17.5	68,080	132,222	0	0	132,222	288,000	0	126,351	0	800	0	0	0	0	0	0
12	2.07	0.0	0.0	20.1	50,175	115,556	0	0	115,556	281,000	0	90,255	0	800	0	0	0	0	0	0
13	3.37	0.0	0.0	19.6	38,115	112,987	0	0	112,987	317,000	0	114,517	0	800	0	0	0	0	0	0
14	0.00	0.0	0.0	20.5	50,730	89,544	0	0	89,544	307,000	0	108,316	0	800	0	0	0	0	0	0
15	0.00	0.0	0.0	NR	37,470	103,169	0	0	103,169	NR	0	0	0	800	0	0	0	0	0	0
16	0.00	0.0	0.0	19.7	37,470	103,169	0	0	103,169	422,000	0	84,565	0	800	0	0	0	0	0	0
17	0.00	0.0	0.0	20.7	33,455	95,707	0	0	95,707	449,000	0	73,689	0	800	0	0	0	0	0	0
18	0.00	0.0	0.0	19.5	13,907	86,230	0	0	86,230	485,000	0	121,706	0	800	0	0	0	0	0	0
19	0.00	0.0	0.0	21.7	43,933	124,540	0	0	124,540	489,000	0	111,276	0	800	0	0	0	0	0	0
20	0.68	0.0	0.0	18.9	48,035	88,382	0	0	88,382	473,000	0	121,631	0	800	0	0	0	0	0	0
21	0.00	0.0	0.0	19.3	51,060	99,640	0	0	99,640	463,000	0	126,591	0	800	0	0	0	0	0	0
22	0.00	0.0	0.0	NR	38,625	84,742	0	0	84,742	NR	0	48,831	0	800	0	0	0	0	0	0
23	0.00	0.0	0.0	20.7	38,625	84,742	0	0	84,742	463,000	0	72,934	0	800	0	0	0	0	0	0
24	4.37	0.0	0.0	20.5	43,920	42,942	0	0	42,942	NR	0	78,587	0	800	0	0	0	0	0	0
25	0.00	0.0	0.0	NR	40,876	101,823	0	0	101,823	NR	0	24,055	0	800	0	0	0	0	0	0
26	0.00	0.0	0.0	21.0	40,876	101,823	0	0	101,823	403,000	0	79,152	0	800	0	0	0	0	0	0
27	0.00	0.0	0.0	20.7	39,193	110,673	0	0	110,673	497,000	0	72,450	0	800	0	0	0	0	0	0
28	0.00	0.0	0.0	21.0	91,675	58,366	0	0	58,366	499,000	0	152,854	0	800	0	0	0	0	0	0
29	0.00	0.0	0.0	NR	57,920	105,920	0	0	105,920	NR	0	98,292	0	800	0	0	0	0	0	0
30	0.00	0.0	0.0	19.1	57,920	105,920	0	0	105,920	473,000	0	132,897	0	800	0	0	0	0	0	0
31	5.55	0.0	0.0	19.7	47,795	95,563	0	0	95,563	446,000	0	109,005	0	800	0	0	0	0	0	0
Total	20.65				1,339,805	2,781,962	0	0	2,781,962		0	2,622,121	24,050				0	0	0	19,200
Daily Average		0.0	0.0	19.4	43,220	89,741	0	0	89,741	366,000	0	93,647		800	0	0				
Mo. Average									89,741		0	84,585	800				0	0	0	620

I:\project\hillsbor\09200020.23\LeachateData\2002\12\_02.xls (Revised by scv 2/10/03)

**Notes:**

1. NR = No Records, NA = Not Available.
2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values.
3. Daily average is calculated by dividing the total by the actual days measured in the month.
4. Monthly average calculated by dividing the total by the number of days of the month.
5. Column II, Trace is less than 0.01 inches and is not included in total.
6. Columns III and IV, field measured at staff gauges.
7. Column V, PPS-B sensor reading plus 9 inches.
8. Columns VIII & IX, Section 7 leak detection pumped into Section 7 leachate sump riser.
9. Column XI, calculated from depth in 575,000 gal. leachate tank.
10. Columns VI, VII, VIII, IX, XII, XIII, XIV, XVIII, and XIX, quantities from flow meters.
11. Column XXI includes 80% of the daily values from Columns XIV, XVIII, and XIX plus 5% of the daily values from column XVII.



**TABLE 2. FIELD DATA ENTRY FORM**  
**DECEMBER 2002 (revised February 2003)**  
**SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

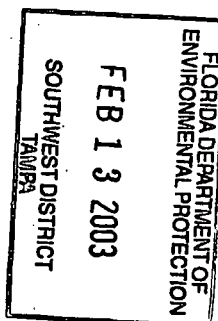
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVI	XVIII	XIX
Day	Reading PS-B (in.)	Section 7 Leak Det. (gal.)	Section 7 Flow Meter (gal.)	Flow Meter TPS-6 (gal.)	Flow Meter Pump Sta. A (gal.)	Depth in 575K Tank (ft.)	Leachate Hauled		Leachate Dust Control (Sprayed) (gal.)	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Effluent Sprayed (Pond B) (gal)	Leachate Treated at LTRF (gal.)	Effluent Irrigation (gal.)	Effluent Hauled		Effluent Dust Control (Sprayed) (gal)
							Contractor (gal.)	County (gal.)								Contractor (gal.)	County (gal.)	
1	NR	0	0	60,918,435	1,489,338	NR	0	0	0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	11.2	0	0	60,957,390	1,538,929	12.33	108,416	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	8.9	0	0	60,995,020	1,587,127	10.33	102,302	0	12,022	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	12.1	0	0	61,031,660	1,633,432	8.25	84,219	0	12,028	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	12.0	0	0	61,071,310	1,683,731	7.00	48,129	0	0	1.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	8.5	0	0	61,109,735	1,735,875	7.42	102,349	0	0	0.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	1.6	0	0	61,142,200	1,833,986	7.42	60,189	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	NR	0	0	61,177,693	1,890,367	NR	0	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	8.3	0	0	61,213,185	1,946,747	9.67	90,354	0	0	2.63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	10.3	0	0	61,249,430	1,978,051	8.00	78,209	0	0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	8.5	0	0	61,317,510	2,110,273	10.00	126,351	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	11.1	0	0	61,367,685	2,225,829	9.75	90,255	0	0	2.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	10.6	0	0	61,405,800	2,338,816	11.00	114,517	0	0	3.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	11.5	0	0	61,456,530	2,428,360	10.67	108,316	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	NR	0	0	61,494,000	2,531,529	NR	0	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	10.7	0	0	61,531,470	2,634,698	14.67	84,565	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	11.7	0	0	61,564,925	2,730,405	15.58	73,689	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	10.5	0	0	61,578,832	2,816,635	16.83	109,259	12,447	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	12.7	0	0	61,622,765	2,941,175	17.00	105,233	6,043	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	9.9	0	0	61,670,800	3,029,557	16.42	121,631	0	0	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	10.3	0	0	61,721,860	3,129,197	16.08	126,591	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	NR	0	0	61,760,485	3,213,939	NR	48,831	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	11.7	0	0	61,799,110	3,298,681	16.58	72,934	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	11.5	0	0	61,843,030	3,341,623	16.08	60,515	18,072	0	4.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	NR	0	0	61,883,906	3,443,446	NR	24,055	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	12.0	0	0	61,924,782	3,545,268	14.00	67,124	12,028	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	11.7	0	0	61,963,975	3,655,941	17.25	72,450	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	12.0	0	0	62,055,650	3,714,307	17.33	120,285	32,569	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	NR	0	0	62,113,570	3,820,227	NR	72,211	26,081	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	10.1	0	0	62,171,490	3,926,146	16.42	120,859	12,038	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	10.7	0	0	62,219,285	4,021,709	15.50	109,005	0	0	5.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

f:\project\hillsbor\09200020.23\LeachateData\2002\12\_02.xls (Revised by scv 2/10/03)

**Notes:**

1. NR = No Records, NA = Not Available.
2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values
3. Column IV includes quantities from leak detection system.
4. Column XI, trace is less than 0.01 inches.
5. Columns III, IV, V, VI, VIII, IX, X, XIV, XV, XVI, XVII and XVIII are quantities from flow meters.
6. Columns XII and XIII measured from staff gages in each pond.

Type of Cover	Phases I-VI acres	Section 7 acres
Open	7	0
Intermediate	133.4	0
Final	23	0
Not Opened	0	12.5



## Pond B Capacity

$$137.4 - 3 = 134.4$$

$$\boxed{134.4} - 130.8 = \underline{\underline{3.6'}}$$

AVERAGE Bottom El

$$\left( \frac{131.9 + 132.6}{2} \right) = \underline{\underline{132.25}}$$

AVERAGE DEPTH

$$134.4 - 132.3 = 2.1 \text{ Depth}$$

⇒ Capacity

$$(2.1' \times 230' \times 65') \times 7.48 \text{ Gal/CF} \\ = 234,835 \text{ gallons}$$

USE ⇒ 235,000 Gallons Capacity

for

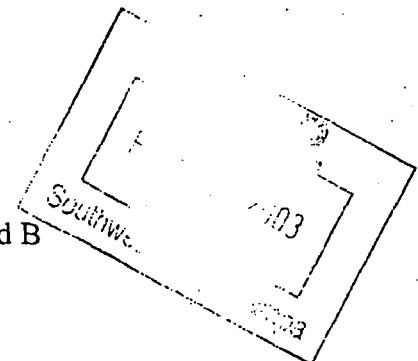
2/13/03

**SCS ENGINEERS**

February 12, 2003  
File No. 09200020.23

*Given  
FYI*

Mr. Kim B. Ford, P.E.  
Solid Waste Section  
Division of Waste Management  
Florida Department of Environmental Protection  
3804 Coconut Palm Drive  
Tampa, Florida 33619



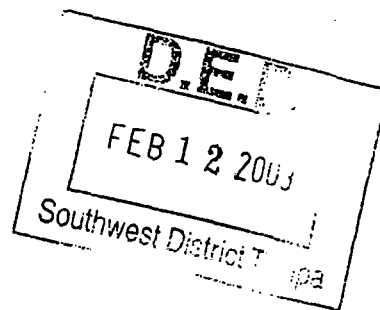
Re: Southeast County Landfill, Surface Impoundment – Pond B  
Construction Permit No. 35435-005-SC.

Dear Mr. Ford:

As discussed in our telephone conversation on February 4, 2003, SCS Engineers is presenting the following information as clarification to the Certification of Construction Report dated August 5, 2002. The following information is attached:

- Sheet 5 of 5 of the record set with revised elevations to match the as-built survey.
- Replacement pages to the Leachate Management Plan (LMP) to incorporate the as-built survey elevations and capacity.
- Replacement leachate report forms, Attachment C in LMP and Appendix G in Operations Plan.
- Report letter indicating that the leak detection riser was video inspected and is in good condition.

As described in the LMP, the Hillsborough County Solid Waste Management Department is monitoring the leak detection sump on a weekly basis and a leak has not been detected as of the day of this letter.



**SCS ENGINEERS**

February 12, 2003  
File No. 09200020.23

Mr. Kim B. Ford, P.E.  
Solid Waste Section  
Division of Waste Management  
Florida Department of Environmental Protection  
3804 Coconut Palm Drive  
Tampa, Florida 33619

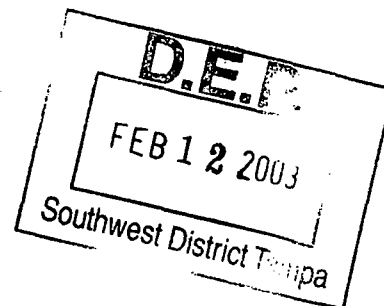
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Mr. Kim B. Ford, P.E.  
February 12, 2003  
Page 2

Please call if you have any questions.

Sincerely,

*Larry E. Ruiz*

Larry E. Ruiz, Assoc. AIA  
Project Manager

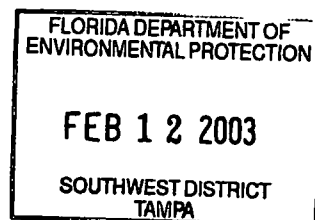
*Raymond J. Dever*

Raymond J. Dever, P.E., DEE  
Vice President  
SCS ENGINEERS

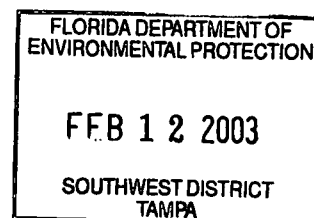
VER/RJD:LM

Attachments

cc: Susan Pelz, FDEP  
Ron Cope, HCEPC

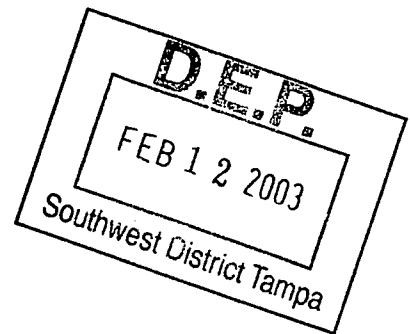


**RECORD DRAWING  
(Replacement Page)**





**LEACHATE MANAGEMENT PLAN  
(Replacement Pages)**



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### Attachments

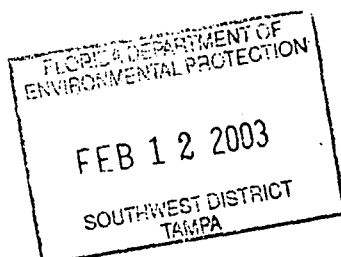
- A Settlement Data Form
- B Facility Inspection and Evaluation Forms
- C Leachate Balance Report Forms

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advantages of this method are the reduction of leachate by evaporation, the promotion of the decomposition of organic matter in the landfilled refuse, and dust control.

The HCSWMD will monitor the rate of application, soil moisture conditions, and the specific landfill areas used so that this leachate disposal method does not generate runoff. Leachate spray evaporation will be applied under the following conditions:

- Leachate will only be sprayed on active-fill areas, including the working face, and areas with the required 6 inches of initial cover.
- Leachate will not be sprayed on areas with intermediate or final cover, seeded or unseeded.
- The maximum grade leachate may be sprayed on is 10H:1V slope. Areas within 150 feet of a 4H:1V or steeper sideslope may not be sprayed on. At all times, areas receiving leachate will be controlled to prevent leachate runoff from entering the stormwater system.
- Leachate will not be sprayed during a rainfall event.
- The tank truck spray bar method maximizes evaporation. The application rate of leachate will be such that leachate does not accumulate on the landfill surface, nor infiltrate quickly into the covered refuse. It is evaporation that is the main goal of this leachate disposal method, rather than the actual recirculation of leachate.
- Leachate will not be sprayed at the end of the day on the initial cover of the working face or other areas. Spraying should be done early in the morning after any dew evaporates and continue until early afternoon or until all available areas have been utilized.

The HCSWMD will continue evaporating leachate and effluent in full conformance with Chapter 62-701, FAC. The HCSWMD will continue to notify the FDEP of all evaporated quantities in the monthly water balance reports.

### **3.2.3 Supplemental Effluent Evaporation at Pond B**

The HCSWMD plans include a new 0.6-acre, 266,236,000 gallon effluent/leachate storage pond, which is referred to as Pond B, adjacent to the existing effluent storage pond (Pond A).

Pond B is designed with an upper and a lower 60-mil HDPE geomembrane. An HDPE geonet is installed between the two liners. The subbase for the lower geomembrane consists of six inches of soil with a saturated hydraulic conductivity of  $1 \times 10^{-5}$  centimeters per second or less, installed over the on site soil cleared of vegetation and graded. A spray evaporation system is designed around the perimeter of the pond. The spray evaporation system consists of 30 nozzles, with an estimated flow capacity of 17 gallons per minute per nozzle and a 510 gallon per minute pump.

## SECTION 4

### SYSTEM COMPONENTS PROJECTED PERFORMANCE

A schematic of the leachate management system is shown on Figure 4-1. The LCRS removal rates, pump rates, and pump control settings are as follows:

#### 4.1 PERMANENT PUMP STATION "A" (PPS-A), CAPACITY 150 GPM

PPS-A consists of an 8-foot inside diameter below-grade concrete sump with a single submersible pump. The discharge from PPS-B is conveyed to PPS-A. From PPS-A, leachate is conveyed to the Main Leachate Pump Station via force main. The pump operation is set with the "on" float at 42 inches from the sump bottom and the "off" float at 18 inches the sump bottom. In case of unforeseen failure of Permanent Pump Station B (PPS-B), PPS-A may be used to remove leachate from the SCLF while PPS-B is under repairs. This can be accomplished by opening LCRS valve No. 5 (normally closed) which would allow gravity flow of leachate into PPS-A from the SCLF perimeter. LCRS valve No. 5 is on a non-perforated 8-inch diameter header that connects to the LCRS of Phase V.

In the event that a high level condition occurs, the PPS-A sump control panel will shut down PPS-B. It will also transmit a signal, via a transceiver, with the sump condition to the control computer in the Leachate Treatment and Reclamation Facility (LTRF) and the landfill administration office (Office).

#### 4.2 PERMANENT PUMP STATION "B" (PPS-B), CAPACITY 150 GPM

PPS-B sump (in Phase VI) is the primary leachate collection point in the SCLF. Upon consolidation of the phosphatic clay liner, the low point for the final collection and removal of leachate within the SCLF is projected to be at the PPS-B sump location. The leachate collection and removal system for the SCLF was designed to drain to the PPS-B sump.

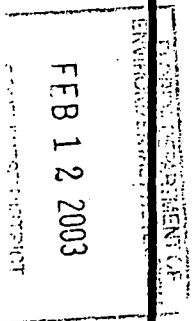
PPS-B sump consists of an 8-foot square (inside dimension) below-grade concrete vault with a single self-priming aboveground pump station (north of Phase V). The vault has two HDPE 18-inch diameter horizontal access pipes, the main access pipe leading to PPS-A and an alternate access pipe leading towards the western perimeter of the SCLF. PPS-B conveys leachate to PPS-A. The "on" sensor is set at 24 inches above the sump bottom and the "off" sensor is set at 15 inches from the bottom. The settings provide for free flow of leachate into the vault from the LCRS, thereby maximizing the LCRS performance.

The primary pump used to remove leachate from the PPS-B sump is a vacuum assisted Goulds Model 3657. The self-priming pump has a capacity of 150 gallons per minute (gpm). In the event of primary pump failure, the HCSWMD has stored on site an Acme-Sykes Model GP100 vacuum-assisted diesel pump that may be used as backup. The GP100 or an equal pump system will be on line within 8 hours. PPS-B sump is equipped with a level indicator located at the control panel near PPS-A and the HCSWMD monitors the

SCLF LMP

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

B 1 2 2003



**Figure 4–1. Leachate Management System Schematic.**

level on a daily basis to ensure that the levels noted above are maintained. Maintaining the operation of PPS-B as proposed will provide reasonable assurance that the SCLF will maintain a leachate head over the liner of 12 inches or less during routine landfill operation.

#### **4.3 MAIN LEACHATE PUMP STATION (MLPS), CAPACITY 240 GPM**

The MLPS consists of a 7-foot square, (inside dimension) below-grade concrete sump with dual submersible pumps (i.e., one operating and one stand by). From the MLPS, leachate is conveyed to the 575,000-gallon storage tank at the on-site LTRF. The pump in operation is set for a 24-hour operation cycle with the "on" float at 4 feet from the sump bottom and the "off" float at 2 feet from the sump bottom.

In the event that a high level condition occurs at the MLPS sump, the control panel will shut down PPS-A and PPS-B. It will also transmit a signal, via a transceiver, with the sump condition to the control computer in the LTRF and the Office.

#### **4.4 STORAGE TANK, CAPACITY 575,000 GALLONS**

The leachate level in the aboveground storage tank (AST) is maintained to provide for the maximum storage capacity possible. The AST is maintained with an average low level of 6 feet or 173,000 gallons (3 days storage) to ensure enough leachate is available for the LTRF to operate without interruptions. When levels below 6 feet are reached in the AST, leachate hauling and spray evaporation will be temporarily reduced or stopped. Similarly, an action level is established for high level of 11 feet (316,000 gallons) in the AST. A level of 11 feet provides for a remaining storage capacity in the AST of 259,000 gallons (4 days storage) to allow continuous operation of the SCLF pump stations. When levels are above 11 feet, treatment, hauling, and/or spray evaporation will be increased.

In the event that a high level condition occurs in the AST, the LTRF continues to operate, and the MLPS and the LTRF filtrate pumps will be shut down. A signal with the AST condition will be sent to the control computer in the LTRF and the Office.

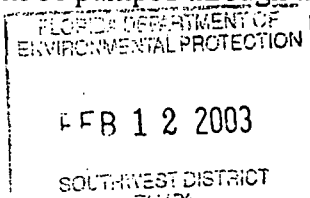
#### **4.5 LEACHATE TREATMENT AND RECLAMATION FACILITY AVERAGE CAPACITY 60,000 GALLONS PER DAY**

In December 1994, the HCSWMD constructed an on-site leachate treatment and reclamation facility (LTRF). The LTRF consists of a PACT carbon activated treatment system. The LTRF system and operation is described in detail in the following document:

- General Process and Operation Manual for the Pact Leachate Treatment System, Volume III, prepared by Zimpro Environmental, Inc dated March 1994.

Once the leachate has been treated, it will be pumped through a 4-inch diameter single-walled HDPE pipe to the treated effluent holding basin (Pond A described below). From Pond A, the treated effluent will be pumped through the spray irrigation system and used to water the areas of

SCLF LMP



the SCLF with fair grass cover that have not received final cover. In addition, the effluent can gravity flow into Pond B where it will be spray evaporated. Excess treated effluent is transported to two off-site County wastewater treatment plants.

#### **4.6 EFFLUENT STORAGE POND (POND A), CAPACITY 120,000 GALLONS**

The effluent storage pond (Pond A) receives treated leachate (effluent) from the LTRF. The pond is lined with 80-mil HDPE and provides for temporary effluent storage of 120,000 gallons plus 2 feet of freeboard. Using the existing staff gage in the pond, Pond A will be maintained at a maximum depth of 4.5 feet (elevation 137.0) and a minimum depth of 6 inches. Effluent evaporation on the landfill, Pond B evaporation, or off-site hauling will increase if levels in Pond A reach the maximum level of 4.5 feet during times when irrigation is not allowed. Similarly, if levels are below 6 inches then the irrigation, evaporation, and off-site hauling will be temporarily reduced.

#### **4.7 EFFLUENT/LEACHATE STORAGE POND (POND B), CAPACITY 266236,000 GALLONS**

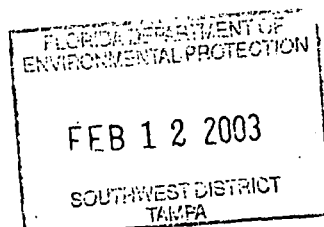
The effluent/leachate storage pond (Pond B) will provide an additional storage volume of 266236,000 gallons. The pond is designed with one foot of storage for the 25-year, 24-hour storm and two feet of freeboard. The pond is designed to store either raw leachate or effluent from the LTRF. However, Pond B primary use will be for additional storage of effluent from the LTRF. **If the need for leachate storage arises, the HCSWMD will provide notification to the Florida Department of Environmental Protection (FDEP) prior to use of the pond for leachate storage. The prior notification will include reason(s) for leachate storage in the pond and the projected duration.**

##### **4.7.1 Procedures for Effluent Storage and Evaporation in Pond B**

Under normal operations, Pond B will be used for effluent storage and evaporation, the following valve settings and activities are needed (See Figure 4-2.):

1. To fill the empty Pond B with effluent, Valve P-1 remains open.
2. Open Valve P-3 to allow gravity flow from Pond A into Pond B.
3. Open Valve P-4 to allow spray evaporation in Pond B.

When the effluent in Pond B reaches three feet in depth, as noted on the staff gauge in the pond, the pump for the spray evaporation system may be activated. The spray evaporation system will only be operated manually and will be monitored for changing weather conditions. Overspray outside the limits of geomembrane will not be allowed.





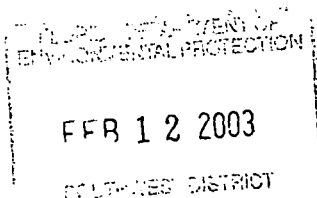
The spray evaporation system will only be operated during the hours the landfill is open. Using the staff gauge in the pond, Pond B is maintained at a maximum depth of 4.53.6 feet allowing two feet of freeboard.

If Pond B reaches the maximum level of 4.53.6 feet, valve P-3 will be closed, and spray irrigation, pond evaporation and hauling will be increased.

#### **4.7.2 Procedures for Leachate Storage In Pond B**

If leachate storage is required, the following activities and valve settings will be needed (See Figure 4-2):

1. Notify FDEP and EPC 24 hours prior. The notification must include reason(s) and projected duration.
2. Drain Pond B of effluent following steps 3 through 7 below. **All Steps 3 through 7 must be completed prior to filling Pond B with leachate.**
3. Close Valve P-1.
4. Close Valve P-3.
5. Close Valve P-4.
6. To pump the effluent back to Pond A,
  - (1) Open Valve P-5
  - (2) Open Valve P-6
  - (3) Start the evaporation pump at Pond B.
7. When Pond B is empty (6 inches depth on the bottom of the pond),
  - (1) Shut off the evaporation pump
  - (2) Close Valve P-5
  - (3) Close Valve P-6
- 8a. To fill Pond B with leachate coming from the LTRF, open Valve P-2.
- 8b. To fill Pond B with leachate coming from the landfill, close Valve P-11 and open Valve P-12.
9. When Pond B filling is completed (staff gauge depth of 4.53.6 feet or less)
  - (1) Close Valve P-2
  - (2) Open Valve P-11
  - (3) Close Valve P-12

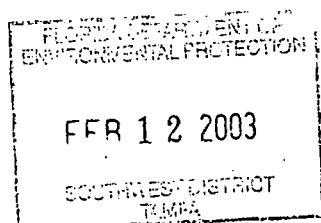


Maximum leachate depth in the pond is 4.53.6 feet. If Pond B reaches the maximum level of 4.53.6 feet, off-site hauling will be increased. **Spray evaporation of leachate is not allowed.**

#### 4.7.3 Procedures to Resume Effluent Storage and Evaporation in Pond B.

Before Pond B is used again for effluent storage and evaporation, the following valve settings and activities are needed (See Figure 4-2):

1. Drain Pond B of leachate following steps 2 through 8 below.
2. Close Valve P-10
3. Close Valve P-13.
4. Open Valve P-5.
5. Open Valve P-7.
- 6a. To pump leachate to the truck loading station,
  - (1) Open Valve P-9
  - (2) Close Valve P-8
  - (3) Start the evaporation pump at Pond B.
- 6b. To pump leachate to the 575,000 gallon tank,
  - (1) Open Valve P-8
  - (2) Close Valve P-9
  - (3) Start the evaporation pump at Pond B.
7. Pond B must be cleaned of leachate prior to resuming effluent storage. Before filling the pond with effluent, rinse the leachate off the geomembrane using effluent or clean water and pump out the rinse water to the truck loading station to be hauled off site as leachate. If the leachate was pumped from the LTRF, then open Valve P-2 and also pump out the first 18,000 gallons of effluent to the truck loading station to be hauled off site as leachate.
8. When Pond B is clean and empty (all leachate evacuated),
  - (1) Shut off the evaporation pump
  - (2) Close Valves P-2, P-5, and P-7.
9. Open Valves P-1, P-3, P-10, and P-13.
- 10H. Open Valve P-4. Resume normal operation per Section 4.9.1.



#### 4.8 IRRIGATION PUMP STATION, CAPACITY 250 GPM

The irrigation pump station consists of a 5-foot square, (inside dimension) below-grade concrete sump with dual vertical turbine pumps (one operating and one stand by). From the irrigation pump station, effluent is conveyed to the spray irrigation system on the landfill. The pump in operation will be set manually depending on weather conditions.

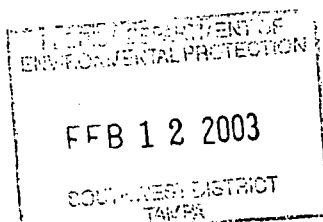
In the event that a high level condition occurs in the irrigation pump station sump, the LTRF continues to operate, and the effluent/influent pumps at the LTRF will be shut down. A signal with the sump condition will be sent to the control computer in the LTRF and the Office.

#### 4.9 TEMPORARY PUMP STATION 6 (TPS-6), CAPACITY 150 GPM

TPS-6 will consist of an above ground pump station to remove leachate from the Phase IV 8-inch diameter header line connected to cleanout 4-1. The leachate will be removed via a 4-inch diameter HDPE suction line that will be inserted 600 feet into the 8-inch header. TPS-6 will convey leachate to PPS-B through the west 18-inch diameter access pipe via a 4-inch diameter HDPE force main. The "on" sensor will be set at 12 inches and the "off" sensor will be set at 6 inches from the bottom of the 8-inch diameter header pipe.

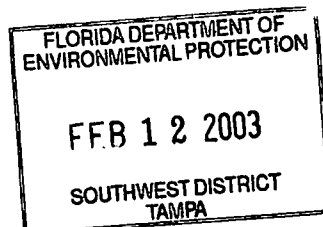
The primary pump that will be used is an electrical skid mounted vacuum assisted Goulds Model 3657 (same as PPS-B). The self-priming pump has a capacity of 150 gallons per minute (gpm). In the event of primary pump failure, the HCSWMD has stored on site an Acme-Sykes Model GP100 vacuum-assisted diesel pump that may be used as backup. The GP100 or an equal pump system will be on line within 48 hours. TPS-6 will be equipped with a bubbler level indicator (same as PPS-B) located at the control panel. The HCSWMD will monitor the level and flow on a daily basis to ensure that the levels noted above are maintained. Maintaining the operation of TPS-6 as proposed will provide reasonable assurance that leachate storage within Phases IV and VI is minimized. TPS-6 will remain in operation until the elevation of the PPS-B Sump settles further and becomes lower than the elevation in this area such that the leachate from Phases I, IV, and VI can gravity flow into the PPS-B sump.

SCLF LMP



February 12, 2003

**LEACHATE REPORT FORMS  
(Replacement Pages)**



**TABLE 1. LEACHATE WATER BALANCE REPORT FORM**  
**DECEMBER 2002 (revised February 2003)**  
**SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

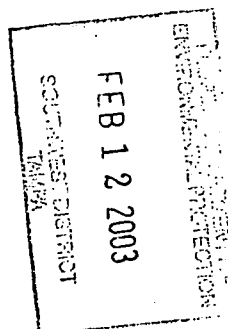
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX	XXI
Day	Rainfall (in.)	Depth in Pond A (in.)	Depth in Pond B (in.)	Estimated Depth at PS-B (in.)	Leachate Pumped to PS-B from TPS-6 (gal.)	Leachate Pumped to MLPS from Phases I-VI (gal.)	Leachate Pumped from Sec 7 Leak Det (gal.)	Leachate Pumped to MLPS from Section 7 (gal.)	Total Leachate Pumped to LTRF (gal.)	Leachate in 575K Tank (gal.)	Leachate Treated at LTRF (gal.)	Total Leachate Hauled (gal.)	Leachate Dust Control (Sprayed) (gal.)	Pond A Storage (gal.)	Pond B Storage (gal.)	Effluent Sprayed Pond B (gal.)	Effluent Irrigation (gal.)	Effluent Dust Control (Sprayed) (gal.)	Total Effluent Hauled (gal.)	Total Evaporation (gal.)
1	0.01	0.0	0.0	NR	38,955	49,591	0	0	49,591	NR	0	0	0	800	0	0	0	0	0	0
2	0.00	0.0	0.0	20.2	38,955	49,591	0	0	49,591	355,000	0	108,416	0	800	0	0	0	0	0	0
3	0.00	0.0	0.0	17.9	37,630	48,198	0	0	48,198	297,000	0	102,302	12,022	800	0	0	0	0	0	9,600
4	0.00	0.0	0.0	21.1	36,640	46,305	0	0	46,305	238,000	0	84,219	12,028	800	0	0	0	0	0	9,600
5	1.55	0.0	0.0	21.0	39,650	50,299	0	0	50,299	202,000	0	48,129	0	800	0	0	0	0	0	0
6	0.22	0.0	0.0	17.5	38,425	52,144	0	0	52,144	214,000	0	102,349	0	800	0	0	0	0	0	0
7	0.00	0.0	0.0	10.6	32,465	32,465	0	0	98,111	214,000	0	60,189	0	800	0	0	0	0	0	0
8	0.00	0.0	0.0	NR	35,493	56,381	0	0	56,381	NR	0	0	0	800	0	0	0	0	0	0
9	2.63	0.0	0.0	17.3	35,493	56,381	0	0	56,381	278,000	0	90,354	0	800	0	0	0	0	0	0
10	0.20	0.0	0.0	19.3	36,245	31,304	0	0	31,304	230,000	0	78,209	0	800	0	0	0	0	0	0
11	0.00	0.0	0.0	17.5	68,080	132,222	0	0	132,222	288,000	0	126,351	0	800	0	0	0	0	0	0
12	2.07	0.0	0.0	20.1	50,175	115,556	0	0	115,556	281,000	0	90,255	0	800	0	0	0	0	0	0
13	3.37	0.0	0.0	19.6	38,115	112,987	0	0	112,987	317,000	0	114,517	0	800	0	0	0	0	0	0
14	0.00	0.0	0.0	20.5	50,730	89,544	0	0	89,544	307,000	0	108,316	0	800	0	0	0	0	0	0
15	0.00	0.0	0.0	NR	37,470	103,169	0	0	103,169	NR	0	0	0	800	0	0	0	0	0	0
16	0.00	0.0	0.0	19.7	37,470	103,169	0	0	103,169	422,000	0	84,565	0	800	0	0	0	0	0	0
17	0.00	0.0	0.0	20.7	33,455	95,707	0	0	95,707	449,000	0	73,689	0	800	0	0	0	0	0	0
18	0.00	0.0	0.0	19.5	13,907	86,230	0	0	86,230	485,000	0	121,706	0	800	0	0	0	0	0	0
19	0.00	0.0	0.0	21.7	43,933	124,540	0	0	124,540	489,000	0	111,276	0	800	0	0	0	0	0	0
20	0.68	0.0	0.0	18.9	48,035	88,382	0	0	88,382	473,000	0	121,631	0	800	0	0	0	0	0	0
21	0.00	0.0	0.0	19.3	51,060	99,640	0	0	99,640	463,000	0	126,591	0	800	0	0	0	0	0	0
22	0.00	0.0	0.0	NR	38,625	84,742	0	0	84,742	NR	0	48,831	0	800	0	0	0	0	0	0
23	0.00	0.0	0.0	20.7	38,625	84,742	0	0	84,742	463,000	0	72,934	0	800	0	0	0	0	0	0
24	4.37	0.0	0.0	20.5	43,920	42,942	0	0	42,942	NR	0	78,587	0	800	0	0	0	0	0	0
25	0.00	0.0	0.0	NR	40,876	101,823	0	0	101,823	NR	0	24,055	0	800	0	0	0	0	0	0
26	0.00	0.0	0.0	21.0	40,876	101,823	0	0	101,823	403,000	0	79,152	0	800	0	0	0	0	0	0
27	0.00	0.0	0.0	20.7	39,193	110,673	0	0	110,673	497,000	0	72,450	0	800	0	0	0	0	0	0
28	0.00	0.0	0.0	21.0	91,675	58,366	0	0	58,366	499,000	0	152,854	0	800	0	0	0	0	0	0
29	0.00	0.0	0.0	NR	57,920	105,920	0	0	105,920	NR	0	98,292	0	800	0	0	0	0	0	0
30	0.00	0.0	0.0	19.1	57,920	105,920	0	0	105,920	473,000	0	132,897	0	800	0	0	0	0	0	0
31	5.55	0.0	0.0	19.7	47,795	95,563	0	0	95,563	446,000	0	109,005	0	800	0	0	0	0	0	0
Total	20.65				1,339,805	2,781,962	0	0	2,781,962		0	2,622,121	24,050				0	0	0	19,200
Daily Average		0.0	0.0	19.4	43,220	89,741	0	0	89,741	366,000	0	93,647		800	0	0				
Mo. Average									89,741		0	84,585	800				0	0	0	620

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**Notes:**

1. NR = No Records, NA = Not Available.
2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values.
3. Daily average is calculated by dividing the total by the actual days measured in the month.
4. Monthly average calculated by dividing the total by the number of days of the month.
5. Column II, Trace is less than 0.01 inches and is not included in total.
6. Columns III and IV, field measured at staff gauges.

7. Column V, PPS-B sensor reading plus 9 inches.
8. Columns VIII & IX, Section 7 leak detection pumped into Section 7 leachate sump riser.
9. Column XI, calculated from depth in 575,000 gal. leachate tank.
10. Columns VI, VII, VIII, IX, XII, XIII, XIV, XVIII, and XIX, quantities from flow meters.
11. Column XXI includes 80% of the daily values from Columns XIV, XVI, XVIII, and XIX plus 5% of the daily values from column XVII.



**TABLE 2. FIELD DATA ENTRY FORM**  
**DECEMBER 2002 (revised February 2003)**  
**SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

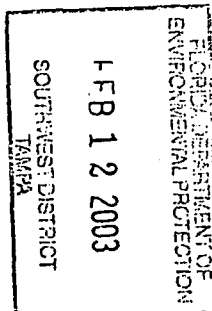
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVI	XVIII	XIX
Day	Reading PS-B (in.)	Section 7 Leak Det. (gal.)	Section 7 Flow Meter (gal.)	Flow Meter TPS-6 (gal.)	Flow Meter Pump Sta. A (gal.)	Depth in 575K Tank (ft.)	Leachate Hauled		Leachate Dust Control (Sprayed) (gal.)	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Effluent Sprayed (Pond B) (gal.)	Leachate Treated at LTRF (gal.)	Effluent Irrigation (gal.)	Effluent Hauled		Effluent Dust Control (Sprayed) (gal.)
							Contractor (gal.)	County (gal.)								Contractor (gal.)	County (gal.)	
1	NR	0	0	60,918,435	1,489,338	NR	0	0	0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	11.2	0	0	60,957,390	1,538,929	12.33	108,416	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	8.9	0	0	60,995,020	1,587,127	10.33	102,302	0	12,022	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	12.1	0	0	61,031,660	1,633,432	8.25	84,219	0	12,028	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	12.0	0	0	61,071,310	1,683,731	7.00	48,129	0	0	1.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	8.5	0	0	61,109,735	1,735,875	7.42	102,349	0	0	0.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	1.6	0	0	61,142,200	1,833,986	7.42	60,189	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	NR	0	0	61,177,693	1,890,367	NR	0	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	8.3	0	0	61,213,185	1,946,747	9.67	90,354	0	0	2.63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	10.3	0	0	61,249,430	1,978,051	8.00	78,209	0	0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	8.5	0	0	61,317,510	2,110,273	10.00	126,351	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	11.1	0	0	61,367,685	2,225,829	9.75	90,255	0	0	2.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	10.6	0	0	61,405,800	2,338,816	11.00	114,517	0	0	3.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	11.5	0	0	61,456,530	2,428,360	10.67	108,316	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	NR	0	0	61,494,000	2,531,529	NR	0	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	10.7	0	0	61,531,470	2,634,698	14.67	84,565	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	11.7	0	0	61,564,925	2,730,405	15.58	73,689	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	10.5	0	0	61,578,832	2,816,635	16.83	109,259	12,447	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	12.7	0	0	61,622,765	2,941,175	17.00	105,233	6,043	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	9.9	0	0	61,670,800	3,029,557	16.42	121,631	0	0	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	10.3	0	0	61,721,860	3,129,197	16.08	126,591	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	NR	0	0	61,760,485	3,213,939	NR	48,831	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	11.7	0	0	61,799,110	3,298,681	16.58	72,934	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	11.5	0	0	61,843,030	3,341,623	16.08	60,515	18,072	0	4.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	NR	0	0	61,883,906	3,443,446	NR	24,055	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	12.0	0	0	61,924,782	3,545,268	14.00	67,124	12,028	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	11.7	0	0	61,963,975	3,655,941	17.25	72,450	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	12.0	0	0	62,055,650	3,714,307	17.33	120,285	32,569	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	NR	0	0	62,113,570	3,820,227	NR	72,211	26,081	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	10.1	0	0	62,171,490	3,926,146	16.42	120,859	12,038	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	10.7	0	0	62,219,285	4,021,709	15.50	109,005	0	0	5.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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**Notes:**

1. NR = No Records, NA = Not Available.
2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values
3. Column IV includes quantities from leak detection system.
4. Column XI, trace is less than 0.01 inches.
5. Columns III, IV, V, VI, VIII, IX, X, XIV, XV, XVI, XVII and XVIII are quantities from flow meters.
6. Columns XII and XIII measured from staff gages in each pond.

Type of Cover	Phases I-VI acres	Section 7 acres
Open	7	0
Intermediate	133.4	0
Final	23	0
Not Opened	0	12.5



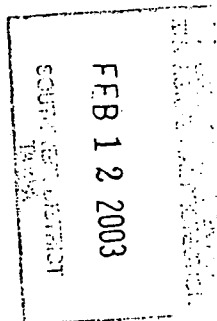
**TABLE 3. 2002 MONTHLY LEACHATE BALANCE SUMMARY (revised February 2003)**  
**CAPACITY EXPANSION AREA**  
**SOUTHEAST COUNTY LANDFILL**  
**HILLSBOROUGH COUNTY, FLORIDA**

Month	Rainfall (in.)	Leachate Arriving at LTRF			Leachate Leaving LTRF			Effluent Disposal			Inflow / Outflow For LTRF		
		Leachate Hauled to LTRF from HHLF/TRLF (gal.)	Leachate from Section 7 Pumped to LTRF (gal.)	Leachate from SCLF Pumped to LTRF (gal.)	Total Leachate Hauled from LTRF (gal.)	Leachate Dust Control (Sprayed) (gal.)	Leachate Treated at LTRF (gal.)	Total Effluent Hauled (gal.)	Effluent Dust Control (Sprayed) (gal.)	Effluent Irrigation (gal.)	Total Arriving at LTRF (gal.)	Total Leaving LTRF (gal.)	Balance <sup>3</sup> (gal.)
January	1.32		0	1,383,233	1,537,172	96,147	0	0	0	0	1,383,233	1,633,319	-250,086
February	3.88	0	0	1,166,415	1,082,345	102,189	0	0	0	0	1,166,415	1,184,534	-18,119
March	0.73	0	0	1,225,193	1,137,036	138,240	0	0	0	0	1,225,193	1,275,276	-50,083
April	6.48	0	0	1,106,482	1,118,233	66,166	0	0	0	0	1,106,482	1,184,399	-77,917
May	2.40	0	0	1,153,613	970,556	240,509	0	0	0	0	1,153,613	1,211,065	-57,452
June	8.05	0	0	1,292,430	1,379,660	72,158	0	0	0	0	1,292,430	1,451,818	-159,388
July	9.03	0	0	2,117,337	2,426,241	0	0	0	0	0	2,117,337	2,426,241	-308,904
August	10.96	0	0	2,394,923	2,177,705	0	0	0	0	0	2,394,923	2,177,705	217,218
September	6.61	0	0	1,956,023	2,126,668	6,061	0	0	0	0	1,956,023	2,132,729	-176,706
October	3.13	0	0	1,608,854	1,552,490	147,350	0	0	0	0	1,608,854	1,699,840	-90,986
November	4.27	0	0	1,580,635	1,546,767	240,484	0	0	0	0	1,580,635	1,787,251	-206,616
December	20.65	0	0	2,781,962	2,622,121	24,050	0	0	0	0	2,781,962	2,646,171	135,791
YTD Total	77.51	0	0	19,767,100	19,676,994	1,133,354	0	0	0	0	19,767,100	20,810,348	-1,043,248

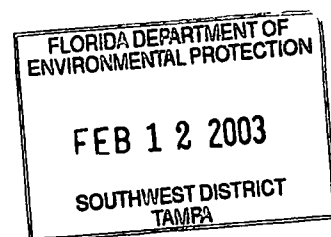
f:\project\Hillsborough\09200020.23\2002summary.xls (Revised to include Section 7 SCvD 2-10-03)

**Note:**

1. If the bypass at the effluent pond is ever used to pump effluent back to the LTRF, this table must be modified.
2. Leachate from the Hillsborough Heights and Taylor Road landfills is being hauled to the Faulkenburg Road Wastewater Treatment Facility.
3. Balance represents total inflow to LTRF minus total outflow from LTRF.



## **VIDEO INSPECTION REPORT**







February 6, 2003

**MATT MATTHEWS**  
Hillsborough County Solid Waste Management  
P.O. Box 1110  
Tampa, Florida 33601

**RE: EFFLUENT/LEACHATE POND B**

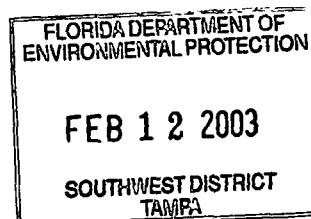
Dear Mr. Matthews,

Upon our televised inspection of the 6 inch HDPE pipe, the leak detection system for effluent/leachate Pond B appears to be clean, dry and perforation holes clear.

If you should required any additional information or have any further questions regarding this matter, please contact me at (813) 677-7655.

Sincerely,

Patty Lemanski



February 12, 2003  
File No. 09200020.23

Post-it® Fax Note	7671	Date	2/12	# of pages	20
To	Kim Ford	From	Larry		
Co./Dept.		Co.			
Phone #		Phone #			
Fax #		Fax #			

Mr. Kim B. Ford, P.E.  
Solid Waste Section  
Division of Waste Management  
Florida Department of Environmental Protection  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Re: Southeast County Landfill, Surface Impoundment – Pond B  
Construction Permit No. 35435-005-SC.

Dear Mr. Ford:

As discussed in our telephone conversation on February 4, 2003, SCS Engineers is presenting the following information as clarification to the Certification of Construction Report dated August 5, 2002. The following information is attached:

- Sheet 5 of 5 of the record set with revised elevations to match the as-built survey.
- Replacement pages to the Leachate Management Plan (LMP) to incorporate the as-built survey elevations and capacity.
- Replacement leachate report forms, Attachment C in LMP and Appendix G in Operations Plan.
- Report letter indicating that the leak detection riser was video inspected and is in good condition.

As described in the LMP, the Hillsborough County Solid Waste Management Department is monitoring the leak detection sump on a weekly basis and a leak has not been detected as of the day of this letter.

Mr. Kim B. Ford, P.E.

February 12, 2003

Page 2

Please call if you have any questions.

Sincerely,

Larry E. Ruiz, Assoc. AIA  
Project Manager

Robert B. Gardner, P.E., DEE  
Senior Vice President  
SCS ENGINEERS

LER/RBG:jlh

Attachments

cc: Susan Pelz, FDEP  
Ron Cope, HCEPC

**RECORD DRAWING**  
**(Replacement Page)**

**LEACHATE MANAGEMENT PLAN**  
**(Replacement Pages)**

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advantages of this method are the reduction of leachate by evaporation, the promotion of the decomposition of organic matter in the landfilled refuse, and dust control.

The HCSWMD will monitor the rate of application, soil moisture conditions, and the specific landfill areas used so that this leachate disposal method does not generate runoff. Leachate spray evaporation will be applied under the following conditions:

- Leachate will only be sprayed on active-fill areas, including the working face, and areas with the required 6 inches of initial cover.
- Leachate will not be sprayed on areas with intermediate or final cover, seeded or unseeded.
- The maximum grade leachate may be sprayed on is 10H:1V slope. Areas within 150 feet of a 4H:1V or steeper sideslope may not be sprayed on. At all times, areas receiving leachate will be controlled to prevent leachate runoff from entering the stormwater system.
- Leachate will not be sprayed during a rainfall event.
- The tank truck spray bar method maximizes evaporation. The application rate of leachate will be such that leachate does not accumulate on the landfill surface, nor infiltrate quickly into the covered refuse. It is evaporation that is the main goal of this leachate disposal method, rather than the actual recirculation of leachate.
- Leachate will not be sprayed at the end of the day on the initial cover of the working face or other areas. Spraying should be done early in the morning after any dew evaporates and continue until early afternoon or until all available areas have been utilized.

The HCSWMD will continue evaporating leachate and effluent in full conformance with Chapter 62-701, FAC. The HCSWMD will continue to notify the FDEP of all evaporated quantities in the monthly water balance reports.

### **3.2.3 Supplemental Effluent Evaporation at Pond B**

The HCSWMD plans include a new 0.6-acre, 266,236,000 gallon effluent/leachate storage pond, which is referred to as Pond B, adjacent to the existing effluent storage pond (Pond A).

Pond B is designed with an upper and a lower 60-mil HDPE geomembrane. An HDPE geonet is installed between the two liners. The subbase for the lower geomembrane consists of six inches of soil with a saturated hydraulic conductivity of  $1 \times 10^{-5}$  centimeters per second or less, installed over the on site soil cleared of vegetation and graded. A spray evaporation system is designed around the perimeter of the pond. The spray evaporation system consists of 30 nozzles, with an estimated flow capacity of 17 gallons per minute per nozzle and a 510 gallon per minute pump.



## SECTION 4

### SYSTEM COMPONENTS PROJECTED PERFORMANCE

A schematic of the leachate management system is shown on Figure 4-1. The LCRS removal rates, pump rates, and pump control settings are as follows:

#### 4.1 PERMANENT PUMP STATION "A" (PPS-A), CAPACITY 150 GPM

PPS-A consists of an 8-foot inside diameter below-grade concrete sump with a single submersible pump. The discharge from PPS-B is conveyed to PPS-A. From PPS-A, leachate is conveyed to the Main Leachate Pump Station via force main. The pump operation is set with the "on" float at 42 inches from the sump bottom and the "off" float at 18 inches the sump bottom. In case of unforeseen failure of Permanent Pump Station B (PPS-B), PPS-A may be used to remove leachate from the SCLF while PPS-B is under repairs. This can be accomplished by opening LCRS valve No. 5 (normally closed) which would allow gravity flow of leachate into PPS-A from the SCLF perimeter. LCRS valve No. 5 is on a non-perforated 8-inch diameter header that connects to the LCRS of Phase V.

In the event that a high level condition occurs, the PPS-A sump control panel will shut down PPS-B. It will also transmit a signal, via a transceiver, with the sump condition to the control computer in the Leachate Treatment and Reclamation Facility (LTRF) and the landfill administration office (Office).

#### 4.2 PERMANENT PUMP STATION "B" (PPS-B), CAPACITY 150 GPM

PPS-B sump (in Phase VI) is the primary leachate collection point in the SCLF. Upon consolidation of the phosphatic clay liner, the low point for the final collection and removal of leachate within the SCLF is projected to be at the PPS-B sump location. The leachate collection and removal system for the SCLF was designed to drain to the PPS-B sump.

PPS-B sump consists of an 8-foot square (inside dimension) below-grade concrete vault with a single self-priming aboveground pump station (north of Phase V). The vault has two HDPE 18-inch diameter horizontal access pipes, the main access pipe leading to PPS-A and an alternate access pipe leading towards the western perimeter of the SCLF. PPS-B conveys leachate to PPS-A. The "on" sensor is set at 24 inches above the sump bottom and the "off" sensor is set at 15 inches from the bottom. The settings provide for free flow of leachate into the vault from the LCRS, thereby maximizing the LCRS performance.

The primary pump used to remove leachate from the PPS-B sump is a vacuum assisted Goulds Model 3657. The self-priming pump has a capacity of 150 gallons per minute (gpm). In the event of primary pump failure, the HCSWMD has stored on site an Acme-Sykes Model GP100 vacuum-assisted diesel pump that may be used as backup. The GP100 or an equal pump system will be on line within 8 hours. PPS-B sump is equipped with a level indicator located at the control panel near PPS-A and the HCSWMD monitors the SCLF LMP

February 12, 2003

G:\PROJECT\Hillsborough\09200020,21\FIG4 1.dwg Feb 12, 2003 - 2:2pm By: 1012b11

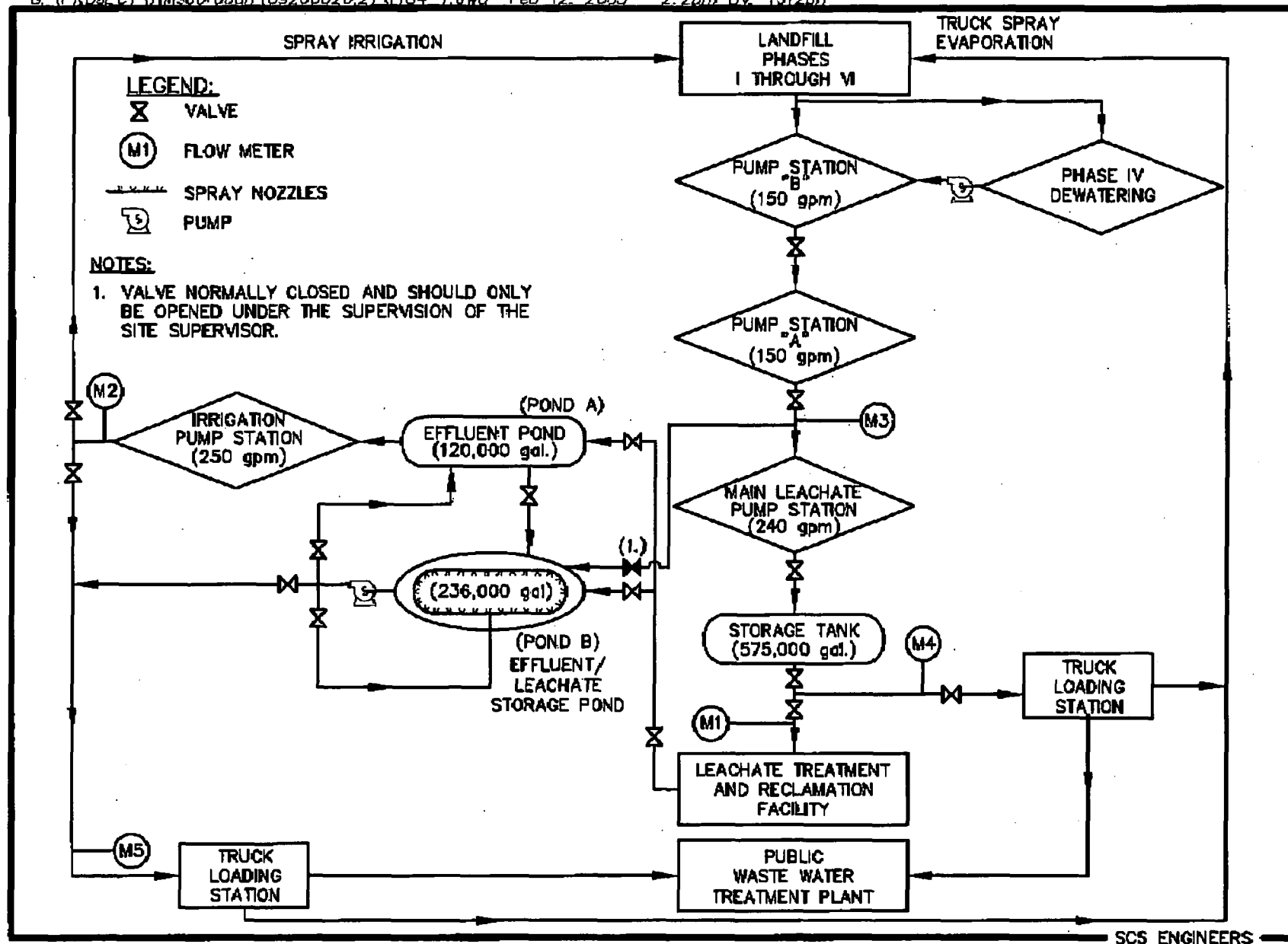


Figure 4-1. Leachate Management System Schematic.

level on a daily basis to ensure that the levels noted above are maintained. Maintaining the operation of PPS-B as proposed will provide reasonable assurance that the SCLF will maintain a leachate head over the liner of 12 inches or less during routine landfill operation.

#### **4.3 MAIN LEACHATE PUMP STATION (MLPS), CAPACITY 240 GPM**

The MLPS consists of a 7-foot square, (inside dimension) below-grade concrete sump with dual submersible pumps (i.e., one operating and one stand by). From the MLPS, leachate is conveyed to the 575,000-gallon storage tank at the on-site LTRF. The pump in operation is set for a 24-hour operation cycle with the "on" float at 4 feet from the sump bottom and the "off" float at 2 feet from the sump bottom.

In the event that a high level condition occurs at the MLPS sump, the control panel will shut down PPS-A and PPS-B. It will also transmit a signal, via a transceiver, with the sump condition to the control computer in the LTRF and the Office.

#### **4.4 STORAGE TANK, CAPACITY 575,000 GALLONS**

The leachate level in the aboveground storage tank (AST) is maintained to provide for the maximum storage capacity possible. The AST is maintained with an average low level of 6 feet or 173,000 gallons (3 days storage) to ensure enough leachate is available for the LTRF to operate without interruptions. When levels below 6 feet are reached in the AST, leachate hauling and spray evaporation will be temporarily reduced or stopped. Similarly, an action level is established for high level of 11 feet (316,000 gallons) in the AST. A level of 11 feet provides for a remaining storage capacity in the AST of 259,000 gallons (4 days storage) to allow continuous operation of the SCLF pump stations. When levels are above 11 feet, treatment, hauling, and/or spray evaporation will be increased.

In the event that a high level condition occurs in the AST, the LTRF continues to operate, and the MLPS and the LTRF filtrate pumps will be shut down. A signal with the AST condition will be sent to the control computer in the LTRF and the Office.

#### **4.5 LEACHATE TREATMENT AND RECLAMATION FACILITY AVERAGE CAPACITY 60,000 GALLONS PER DAY**

In December 1994, the HCSWMD constructed an on-site leachate treatment and reclamation facility (LTRF). The LTRF consists of a PACT carbon activated treatment system. The LTRF system and operation is described in detail in the following document:

- General Process and Operation Manual for the Pact Leachate Treatment System, Volume III, prepared by Zimpro Environmental, Inc dated March 1994.

Once the leachate has been treated, it will be pumped through a 4-inch diameter single-walled HDPE pipe to the treated effluent holding basin (Pond A described below). From Pond A, the treated effluent will be pumped through the spray irrigation system and used to water the areas of

the SCLF with fair grass cover that have not received final cover. In addition, the effluent can gravity flow into Pond B where it will be spray evaporated. Excess treated effluent is transported to two off-site County wastewater treatment plants.

#### **4.6 EFFLUENT STORAGE POND (POND A), CAPACITY 120,000 GALLONS**

The effluent storage pond (Pond A) receives treated leachate (effluent) from the LTRF. The pond is lined with 80-mil HDPE and provides for temporary effluent storage of 120,000 gallons plus 2 feet of freeboard. Using the existing staff gage in the pond, Pond A will be maintained at a maximum depth of 4.5 feet (elevation 137.0) and a minimum depth of 6 inches. Effluent evaporation on the landfill, Pond B evaporation, or off-site hauling will increase if levels in Pond A reach the maximum level of 4.5 feet during times when irrigation is not allowed. Similarly, if levels are below 6 inches then the irrigation, evaporation, and off-site hauling will be temporarily reduced.

#### **4.7 EFFLUENT/LEACHATE STORAGE POND (POND B), CAPACITY 266,236,000 GALLONS**

The effluent/leachate storage pond (Pond B) will provide an additional storage volume of 266,236,000 gallons. The pond is designed with one foot of storage for the 25-year, 24-hour storm and two feet of freeboard. The pond is designed to store either raw leachate or effluent from the LTRF. However, Pond B primary use will be for additional storage of effluent from the LTRF. If the need for leachate storage arises, the HCSWMD will provide notification to the Florida Department of Environmental Protection (FDEP) prior to use of the pond for leachate storage. The prior notification will include reason(s) for leachate storage in the pond and the projected duration.

##### **4.7.1 Procedures for Effluent Storage and Evaporation in Pond B**

Under normal operations, Pond B will be used for effluent storage and evaporation, the following valve settings and activities are needed (See Figure 4-2.):

1. To fill the empty Pond B with effluent, Valve P-1 remains open.
2. Open Valve P-3 to allow gravity flow from Pond A into Pond B.
3. Open Valve P-4 to allow spray evaporation in Pond B.

When the effluent in Pond B reaches three feet in depth, as noted on the staff gauge in the pond, the pump for the spray evaporation system may be activated. The spray evaporation system will only be operated manually and will be monitored for changing weather conditions. Overspray outside the limits of geomembrane will not be allowed.

The spray evaporation system will only be operated during the hours the landfill is open. Using the staff gauge in the pond, Pond B is maintained at a maximum depth of 4.53.6 feet allowing two feet of freeboard.

If Pond B reaches the maximum level of 4.53.6 feet, valve P-3 will be closed, and spray irrigation, pond evaporation and hauling will be increased.

#### **4.7.2 Procedures for Leachate Storage In Pond B**

If leachate storage is required, the following activities and valve settings will be needed (See Figure 4-2):

1. Notify FDEP and EPC 24 hours prior. The notification must include reason(s) and projected duration.
2. Drain Pond B of effluent following steps 3 through 7 below. **All Steps 3 through 7 must be completed prior to filling Pond B with leachate.**
3. Close Valve P-1.
4. Close Valve P-3.
5. Close Valve P-4.
6. To pump the effluent back to Pond A,
  - (1) Open Valve P-5
  - (2) Open Valve P-6
  - (3) Start the evaporation pump at Pond B.
7. When Pond B is empty (6 inches depth on the bottom of the pond),
  - (1) Shut off the evaporation pump
  - (2) Close Valve P-5
  - (3) Close Valve P-6
- 8a. To fill Pond B with leachate coming from the LTRF, open Valve P-2.
- 8b. To fill Pond B with leachate coming from the landfill, close Valve P-11 and open Valve P-12.
9. When Pond B filling is completed (staff gauge depth of 4.53.6 feet or less)
  - (1) Close Valve P-2
  - (2) Open Valve P-11
  - (3) Close Valve P-12

Maximum leachate depth in the pond is 4.53.6 feet. If Pond B reaches the maximum level of 4.53.6 feet, off-site hauling will be increased. **Spray evaporation of leachate is not allowed.**

#### **4.7.3 Procedures to Resume Effluent Storage and Evaporation in Pond B.**

Before Pond B is used again for effluent storage and evaporation, the following valve settings and activities are needed (See Figure 4-2):

1. Drain Pond B of leachate following steps 2 through 8 below.
2. Close Valve P-10
3. Close Valve P-13.
4. Open Valve P-5.
5. Open Valve P-7.
- 6a. To pump leachate to the truck loading station,
  - (1) Open Valve P-9
  - (2) Close Valve P-8
  - (3) Start the evaporation pump at Pond B.
- 6b. To pump leachate to the 575,000 gallon tank,
  - (1) Open Valve P-8
  - (2) Close Valve P-9
  - (3) Start the evaporation pump at Pond B.
7. Pond B must be cleaned of leachate prior to resuming effluent storage. Before filling the pond with effluent, rinse the leachate off the geomembrane using effluent or clean water and pump out the rinse water to the truck loading station to be hauled off site as leachate. If the leachate was pumped from the LTRF, then open Valve P-2 and also pump out the first 18,000 gallons of effluent to the truck loading station to be hauled off site as leachate.
8. When Pond B is clean and empty (all leachate evacuated),
  - (1) Shut off the evaporation pump
  - (2) Close Valves P-2, P-5, and P-7.
9. Open Valves P-1, P-3, P-10, and P-13.
- ~~10~~11. Open Valve P-4. Resume normal operation per Section 4.9.1.



#### **4.8 IRRIGATION PUMP STATION, CAPACITY 250 GPM**

The irrigation pump station consists of a 5-foot square, (inside dimension) below-grade concrete sump with dual vertical turbine pumps (one operating and one stand by). From the irrigation pump station, effluent is conveyed to the spray irrigation system on the landfill. The pump in operation will be set manually depending on weather conditions.

In the event that a high level condition occurs in the irrigation pump station sump, the LTRF continues to operate, and the effluent/influent pumps at the LTRF will be shut down. A signal with the sump condition will be sent to the control computer in the LTRF and the Office.

#### **4.9 TEMPORARY PUMP STATION 6 (TPS-6), CAPACITY 150 GPM**

TPS-6 will consist of an above ground pump station to remove leachate from the Phase IV 8-inch diameter header line connected to cleanout 4-1. The leachate will be removed via a 4-inch diameter HDPE suction line that will be inserted 600 feet into the 8-inch header. TPS-6 will convey leachate to PPS-B through the west 18-inch diameter access pipe via a 4-inch diameter HDPE force main. The "on" sensor will be set at 12 inches and the "off" sensor will be set at 6 inches from the bottom of the 8-inch diameter header pipe.

The primary pump that will be used is an electrical skid mounted vacuum assisted Goulds Model 3657 (same as PPS-B). The self-priming pump has a capacity of 150 gallons per minute (gpm). In the event of primary pump failure, the HCSWMD has stored on site an Acme-Sykes Model GP100 vacuum-assisted diesel pump that may be used as backup. The GP100 or an equal pump system will be on line within 48 hours. TPS-6 will be equipped with a bubbler level indicator (same as PPS-B) located at the control panel. The HCSWMD will monitor the level and flow on a daily basis to ensure that the levels noted above are maintained. Maintaining the operation of TPS-6 as proposed will provide reasonable assurance that leachate storage within Phases IV and VI is minimized. TPS-6 will remain in operation until the elevation of the PPS-B Sump settles further and becomes lower than the elevation in this area such that the leachate from Phases I, IV, and VI can gravity flow into the PPS-B sump.

**LEACHATE REPORT FORMS**  
**(Replacement Pages)**

**TABLE 1. LEACHATE WATER BALANCE REPORT FORM**  
**DECEMBER 2002 (revised February 2003)**  
**SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX	XXI
Day	Rainfall (in.)	Depth in Pond A (in.)	Depth in Pond B (in.)	Estimated Depth at PPS-B (in.)	Leachate Passed to PPS-B from TPS-6 (gal.)	Leachate Pumped to MLPs from Phases I-VI (gal.)	Leachate Pumped from See 7 Leak Det (gal.)	Leachate Pumped to MLPs from Section 7 (gal.)	Total Leachate Pumped to LTRF (gal.)	Leachate in 375K Tank (gal.)	Leachate Treated at LTRF (gal.)	Total Leachate Handled (gal.)	Leachate Dust Control (Sprayed) (gal.)	Pond A Storage (gal.)	Pond B Storage (gal.)	Effluent Sprayed Pond B (gal.)	Effluent Irrigation (gal.)	Effluent Dust Control (Sprayed) (gal.)	Total Effluent Handled (gal.)	Total Evaporation (gal.)
1	0.01	0.0	0.0	NR	38,953	49,591	0	0	49,591	NR	0	0	0	800	0	0	0	0	0	0
2	0.00	0.0	0.0	20.2	38,953	49,591	0	0	49,591	333,000	0	108,416	0	800	0	0	0	0	0	0
3	0.00	0.0	0.0	17.9	32,630	48,198	0	0	48,198	297,000	0	102,302	12,022	800	0	0	0	0	0	9,600
4	0.00	0.0	0.0	21.1	36,640	46,305	0	0	46,305	238,000	0	84,219	12,022	800	0	0	0	0	0	9,600
5	1.55	0.0	0.0	21.0	39,650	50,299	0	0	50,299	102,000	0	48,129	0	800	0	0	0	0	0	0
6	0.22	0.0	0.0	17.3	38,425	52,144	0	0	52,144	214,000	0	100,349	0	800	0	0	0	0	0	0
7	0.00	0.0	0.0	10.6	32,485	96,111	0	0	96,111	214,000	0	60,189	0	800	0	0	0	0	0	0
8	0.00	0.0	0.0	NR	35,393	56,381	0	0	56,381	NR	0	0	0	800	0	0	0	0	0	0
9	2.43	0.0	0.0	17.3	35,493	56,381	0	0	56,381	278,000	0	90,254	0	800	0	0	0	0	0	0
10	0.20	0.0	0.0	19.3	35,243	31,304	0	0	31,304	230,000	0	78,209	0	800	0	0	0	0	0	0
11	0.00	0.0	0.0	17.3	68,000	132,222	0	0	132,222	288,000	0	126,351	0	800	0	0	0	0	0	0
12	1.09	0.0	0.0	20.1	58,373	115,556	0	0	115,556	281,000	0	90,253	0	800	0	0	0	0	0	0
13	3.37	0.0	0.0	19.6	38,313	112,987	0	0	112,987	317,000	0	114,537	0	800	0	0	0	0	0	0
14	0.00	0.0	0.0	20.3	50,730	89,544	0	0	89,544	307,000	0	108,136	0	800	0	0	0	0	0	0
15	0.00	0.0	0.0	NR	37,470	109,169	0	0	109,169	NR	0	0	0	800	0	0	0	0	0	0
16	0.00	0.0	0.0	19.7	37,470	109,169	0	0	109,169	422,000	0	84,565	0	800	0	0	0	0	0	0
17	0.00	0.0	0.0	20.7	33,455	95,707	0	0	95,707	449,000	0	71,889	0	800	0	0	0	0	0	0
18	0.00	0.0	0.0	19.3	13,904	86,230	0	0	86,230	485,000	0	121,706	0	800	0	0	0	0	0	0
19	0.00	0.0	0.0	21.7	41,933	124,540	0	0	124,540	489,000	0	111,276	0	800	0	0	0	0	0	0
20	0.61	0.0	0.0	18.9	46,035	68,332	0	0	68,332	473,000	0	121,631	0	800	0	0	0	0	0	0
21	0.00	0.0	0.0	19.3	51,060	99,640	0	0	99,640	463,000	0	126,391	0	800	0	0	0	0	0	0
22	0.00	0.0	0.0	NR	38,623	84,742	0	0	84,742	NR	0	48,834	0	800	0	0	0	0	0	0
23	0.00	0.0	0.0	20.7	38,623	84,742	0	0	84,742	463,000	0	72,934	0	800	0	0	0	0	0	0
24	0.37	0.0	0.0	20.3	43,920	42,942	0	0	42,942	NR	0	78,567	0	800	0	0	0	0	0	0
25	0.00	0.0	0.0	NR	40,876	101,823	0	0	101,823	NR	0	24,055	0	800	0	0	0	0	0	0
26	0.00	0.0	0.0	21.0	40,876	101,823	0	0	101,823	401,000	0	79,152	0	800	0	0	0	0	0	0
27	0.00	0.0	0.0	20.7	39,193	110,673	0	0	110,673	497,000	0	72,450	0	800	0	0	0	0	0	0
28	0.08	0.0	0.0	21.0	91,675	53,366	0	0	53,366	499,000	0	152,853	0	800	0	0	0	0	0	0
29	0.00	0.0	0.0	NR	57,920	105,920	0	0	105,920	NR	0	98,292	0	800	0	0	0	0	0	0
30	0.00	0.0	0.0	19.1	57,920	105,920	0	0	105,920	473,000	0	132,897	0	800	0	0	0	0	0	0
31	5.55	0.0	0.0	19.7	47,753	95,563	0	0	95,563	446,000	0	109,005	0	800	0	0	0	0	0	0
Total	20.63				1,339,803	2,781,962	0	0	2,781,962		0	2,622,818	24,050					0	0	19,200
Daily Average		0.0	0.0	89.4	43,220	89,743	0	0	89,743	366,000	0	93,617		800	0	0	0	0	0	
Mo. Average									89,743		0	84,533	800					0	0	420

**Notes:**

1. NR = No Records, NA = Not Available
2. Values in bold are estimated; values in italics are substitutes for missing data and are based on averaged values
3. Daily average is calculated by dividing the total by the actual days measured in the month
4. Monthly average calculated by dividing the total by the number of days of the month
5. Column II, Trace is less than 0.01 inches and is not included in total
6. Columns III and IV, field measured at inlet gauges

7. Columns V, PPS-B sensor reading plus 9 inches
8. Columns VII & IX, Section 7 leak detection pumped into Section 71 recharge sump riser
9. Column XI, calculated from depth in 575,000 gal leachate tank
10. Columns VI, VII, VIII, IX, XII, XIII, XIV, XVII, and XIX, quantities from flow meters
11. Column XXI includes 80% of the daily values from Columns XIV, XVII, XVIII, and XIX plus 5% of the daily values from column XXII

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TABLE 2. FIELD DATA ENTRY FORM  
DECEMBER 2002 (revised February 2003)  
SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX
Day	Reading PS-9 (in.)	Section 7 Leak Det. (gal.)	Section 7 Flow Meter (gal.)	Flow Meter TPS-6 (gal.)	Flow Meter Pump Sta. A (gal.)	Depth in 575K Tank (ft.)	Leachate Hauled Contractor (gal.)	County (gal.)	Leachate Dust Control (Spreyed) (gal.)	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Effluent Spreyed (Pond B) (gal.)	Leachate Treated at LTRF (gal.)	Effluent Irrigation (gal.)	Effluent Hauled Contractor (gal.)	County (gal.)	Effluent Dust Control (Spreyed) (gal.)
1	NR	0	0	60,918,435	1,489,338	NR	0	0	0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	11.2	0	0	60,957,390	1,538,929	12.33	108,416	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	8.9	0	0	60,995,028	1,587,127	10.33	102,302	0	12,022	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	12.1	0	0	61,031,660	1,633,432	8.25	84,219	0	12,028	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	12.0	0	0	61,071,310	1,683,731	7.00	48,129	0	0	1.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	8.5	0	0	61,109,735	1,735,875	7.42	102,349	0	0	0.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	1.6	0	0	61,142,200	1,833,986	7.42	60,189	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	NR	0	0	61,177,693	1,890,367	NR	0	0	0	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	8.3	0	0	61,213,185	1,946,747	9.67	90,354	0	0	2.63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	10.3	0	0	61,249,430	1,978,051	8.00	78,209	0	0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	8.5	0	0	61,317,510	2,110,273	10.00	126,351	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	11.1	0	0	61,367,685	2,225,829	9.75	90,255	0	0	2.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	10.6	0	0	61,405,800	2,338,816	11.00	114,517	0	0	3.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	11.5	0	0	61,456,510	2,428,760	10.67	108,316	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	NR	0	0	61,494,000	2,531,529	NR	0	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	10.7	0	0	61,531,470	2,634,098	14.67	84,565	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	11.7	0	0	61,564,925	2,730,405	15.58	73,689	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	10.5	0	0	61,578,832	2,816,635	16.83	109,259	12,447	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	12.7	0	0	61,622,765	2,941,175	17.00	105,233	6,043	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	9.9	0	0	61,670,800	3,029,557	16.42	121,631	0	0	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	10.3	0	0	61,721,860	3,129,197	16.08	126,591	0	0	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	NR	0	0	61,760,485	3,213,939	NR	48,831	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	11.7	0	0	61,799,110	3,298,681	16.51	72,934	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	11.5	0	0	61,843,030	3,341,623	16.08	60,515	18,072	0	4.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	NR	0	0	61,883,906	3,443,446	NR	24,055	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	12.0	0	0	61,924,782	3,545,268	14.00	67,124	12,028	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	11.7	0	0	61,963,975	3,655,941	17.25	72,450	0	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	12.0	0	0	62,055,650	3,714,307	17.33	120,285	32,569	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	NR	0	0	62,113,570	3,820,227	NR	72,211	26,081	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	10.1	0	0	62,171,490	3,926,146	16.42	120,859	12,018	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	10.7	0	0	62,219,285	4,021,709	15.50	109,005	0	0	5.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

F:\project\hillsbor\09200020\_2\LeachateData\2002\12\_02.xls (Revised by sev 2/10/03)

## Notes:

1. NR = No Records, NA = Not Available.
2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values.
3. Column IV includes quantities from leak detection system.

4. Column XI, trace is less than 0.01 inches.
5. Columns III, IV, V, VI, VIII, IX, X, XIV, XV, XVI, XVII and XVIII are quantities from flow meters.
6. Columns XII and XIII measured from staff gages in each pond.

Type of Cover	Phases I-VI acres	Section 7 acres
Open	7	0
Intermediate	133.4	0
Final	23	0
Not Opened	0	12.5

**TABLE 3. 2002 MONTHLY LEACHATE BALANCE SUMMARY (revised February 2003)**  
**CAPACITY EXPANSION AREA**  
**SOUTHEAST COUNTY LANDFILL**  
**HILLSBOROUGH COUNTY, FLORIDA**

Month	Rainfall (in.)	Leachate Arriving at LTRF			Leachate Leaving LTRF			Effluent Disposal			Inflow / Outflow For LTRF		
		Leachate Hauled to LTRF from HMLF/TRLF (gal.)	Leachate from Section 7 Pumped to LTRF (gal.)	Leachate from SCLP Pumped to LTRF (gal.)	Total Leachate Hauled from LTRF (gal.)	Leachate Dust Control (Sprayed) (gal.)	Leachate Treated at LTRF (gal.)	Total Effluent Hauled (gal.)	Effluent Dust Control (Sprayed) (gal.)	Effluent Irrigation (gal.)	Total Arriving at LTRF (gal.)	Total Leaving LTRF (gal.)	Balance <sup>1</sup> (gal.)
January	1.32		0	1,383,233	1,537,172	96,147	0	0	0	0	1,383,233	1,633,319	-250,086
February	3.88	0	0	1,166,415	1,082,345	102,189	0	0	0	0	1,166,415	1,184,534	-18,119
March	0.73	0	0	1,225,193	1,137,036	138,240	0	0	0	0	1,225,193	1,275,276	-50,083
April	6.48	0	0	1,106,482	1,118,233	66,165	0	0	0	0	1,106,482	1,184,399	-77,917
May	2.40	0	0	1,153,613	970,556	240,509	0	0	0	0	1,153,613	1,211,065	-57,452
June	8.05	0	0	1,292,430	1,379,660	72,158	0	0	0	0	1,292,430	1,451,818	-159,388
July	9.03	0	0	2,117,337	2,426,241	0	0	0	0	0	2,117,337	2,426,241	-308,904
August	10.96	0	0	2,394,923	2,177,705	0	0	0	0	0	2,394,923	2,177,705	217,218
September	6.61	0	0	1,956,023	2,126,668	6,063	0	0	0	0	1,956,023	2,132,729	-176,706
October	3.13	0	0	1,608,854	1,552,490	147,350	0	0	0	0	1,608,854	1,699,840	-90,986
November	4.27	0	0	1,580,635	1,546,767	240,484	0	0	0	0	1,580,635	1,787,251	-206,616
December	20.63	0	0	2,781,962	2,622,821	24,050	0	0	0	0	2,781,962	2,646,171	135,791
YTD Total	77.51	0	0	19,767,100	19,676,994	1,133,354	0	0	0	0	19,767,100	20,810,348	-1,043,248

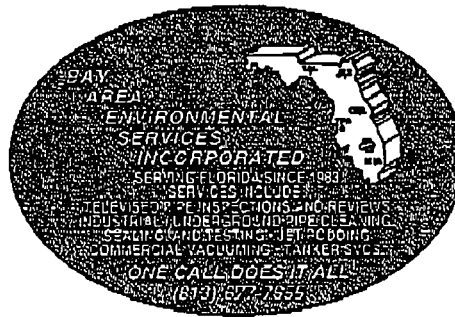
f:\projec\Hillsborough\092000\2002\summary.xls (Revised to include Section 7 SCvD 2-10-03)

**Note:**

1. If the bypass at the effluent pond is ever used to pump effluent back to the LTRF, this table must be modified.
2. Leachate from the Hillsborough Heights and Taylor Road landfills is being hauled to the Faulkenburg Road Wastewater Treatment Facility.
3. Balance represents total inflow to LTRF minus total outflow from LTRF.

## **VIDEO INSPECTION REPORT**





February 6, 2003

MATT MATTHEWS  
Hillsborough County Solid Waste Management  
P.O. Box 1110  
Tampa, Florida 33601

**RE: AFFLUENT/LEACHATE POND B**

Dear Mr. Matthews,

Upon our televised inspection of the 6 inch HDPE pipe, the leak detection system for affluent/leachate Pond B appears to be clean, dry and perforation holes clear.

If you should required any additional information or have any further questions regarding this matter, please contact me at (813) 677-7655.

Thank you for your time concerning this matter.

Sincerely,

Patty Lemanski

## Ford, Kim

---

**From:** Larry E. Ruiz [Lruiz@scsengineers.com]  
**Sent:** Friday, February 07, 2003 4:37 PM  
**To:** Ford, Kim  
**Cc:** Meredith M. Matthews (E-mail 3)  
**Subject:** Pond B Information: 09200020.23



PondBwell.jpg



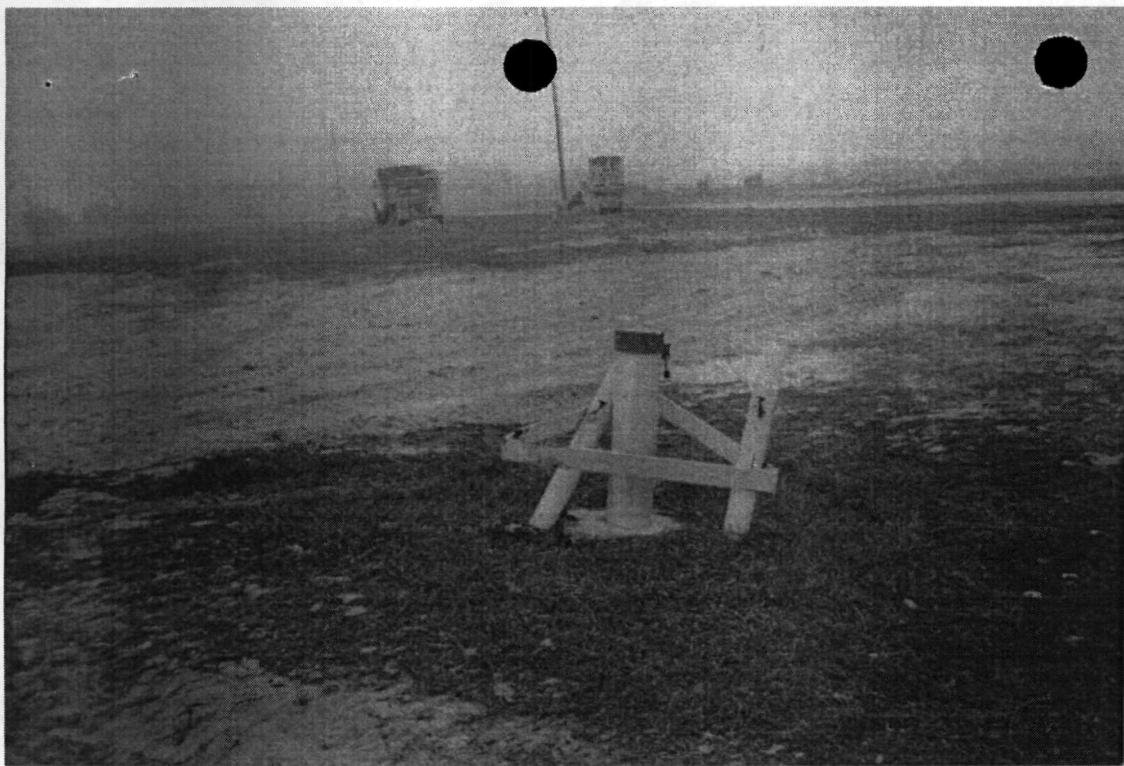
PondBPads.jpg

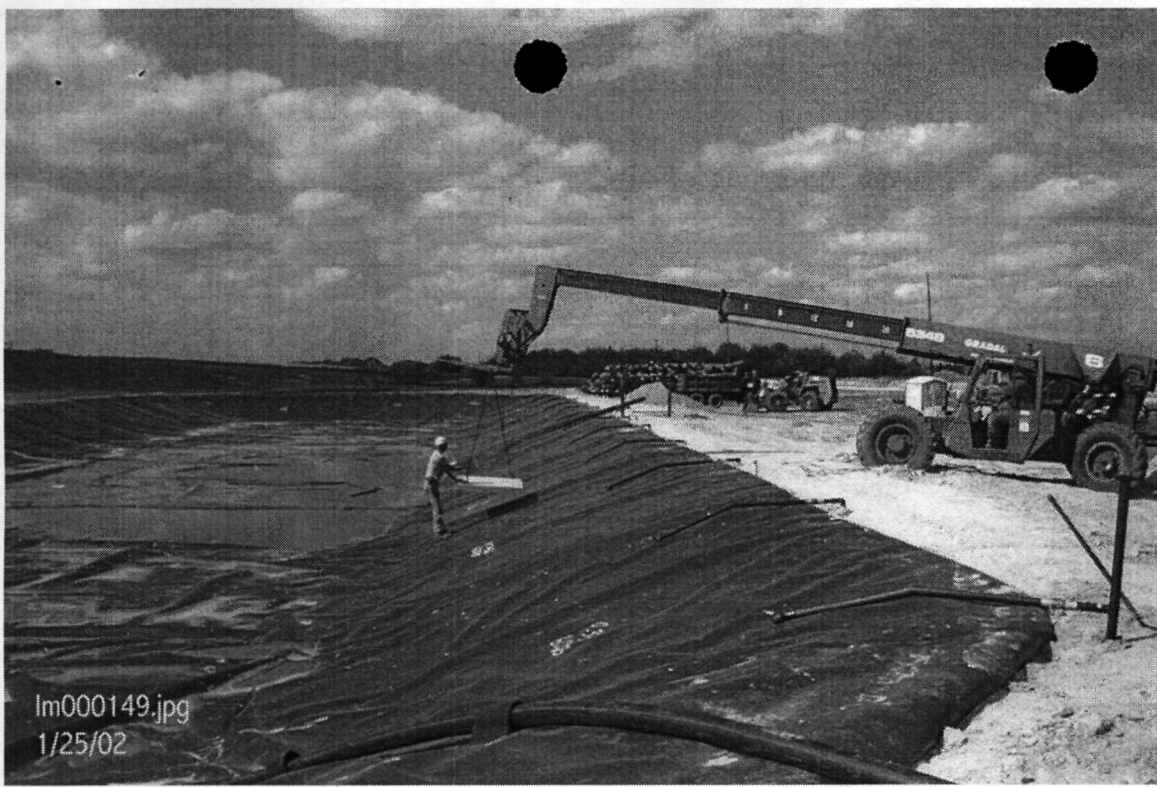
Hello Kim, as discussed attached find a picture showing:

1. Damage to monitoring well was external. Casing was straighten and bollards were fixed by Apollo Construction.
2. Concrete pads were precast and lowered with cranes.

Please call if you have any question.

-----  
Larry E. Ruiz, Assoc. AIA  
SCS Engineers, Tampa, FL.  
Voice: (813) 621-0080  
Fax: (813) 623-6757





Im000149.jpg  
1/25/02

**Ford, Kim**

---

**From:** Larry E. Ruiz [Lruiz@scsengineers.com]  
**Sent:** Thursday, February 06, 2003 11:03 AM  
**To:** Ford, Kim  
**Subject:** Leak Detection Data



LeakDetJan.2003.doc.

.xls Hello Kim, attached find the latest data that I have. When Matt sends the updated file, I will forward it to you.

Please call if you have any question.

-----  
Larry E. Ruiz, Assoc. AIA  
SCS Engineers, Tampa, FL.  
Voice: (813) 621-0080  
Fax: (813) 623-6757

Section 7 Capacity Expansion  
Leak Detection System

Date	Water Pumped (gal)	Rainfall (in)
01/01/03	0	0
01/02/03	2,070	0
01/03/03	1,512	0.01
01/04/03	958	0
01/05/03	0	0
01/06/03	pump down	0
01/07/03	"" ""	0
01/08/03	1,315	0
01/09/03	252	0
01/10/03	180	0
01/11/03	190	0
01/12/03	0	0
01/13/03	228	0
01/14/03	132	0
01/15/03	82	0
01/16/03	56	0
01/17/03	49	0.01
01/18/03	51	0
01/19/03	0	0
01/20/03	120	0
01/21/03	40	0
01/22/03	64	0
01/23/03	38	0
01/24/03	57	0
01/25/03		
01/26/03		
01/27/03		
01/28/03		
01/29/03		
01/30/03		
01/31/03		

Environmental Consultants

3012 U.S. Highway 301 North  
Suite 700  
Tampa, FL 33619813-621-0080  
FAX 813-623-6757**SCS ENGINEERS**TO FDEPSolid Waste Section3804 Coconut Palm DriveTampa, FL 33619**WE ARE SENDING YOU**

✓ Attached Under separate cover via

Shop drawings

Prints

Copy of letter

Change Order

The following items: Plans Samples

Specifications

DATE February 4, 2003JOB NO. 09200020.22ATTENTION Mr. Kim FordRe: Southeast County LandfillEffluent/Leachate Pond Sump Elevation

COPIES	DATE	DESCRIPTION
1	10-03-01	Revised pond elevations
1	10-05-01	SCS transmittal to FDEP

THESE ARE TRANSMITTED as check below:

For approval	Approved as submitted	Resubmit	Copies for approval
✓ For your use	Approved as noted	Submit	Copies distribution
As requested	Returned for corrections	Return	Corrected prints

For review and comment

FOR BIDS DUE \_\_\_\_\_ 19 \_\_\_\_\_

PRINTS RETURNED AFTER LOAN TO US

**REMARKS**

Kim, The Effluent/Leachate "Pond B" elevations as discussed in the attached SCS transmittal of 10-05-01 were proposed elevations. Upon further construction, a perched water table was discovered at approximately elevation 129 (see Field Daily of 10-8-01). Therefore, the sump was modified so the primary liner would be above elevation 129.

The elevations shown on the as built survey by Florida Design Consultants, Inc., dated 3-28-2002 are correct.

COPY TO FileSIGNED: Sheila Carpenter-van Dijk

If enclosures are not as noted, kindly notify us at once.





CONST CORRED

Environmental Consultants

3012 U.S. Highway 301 North  
Suite 700  
Tampa, FL 33619813-621-0080  
FAX 813-623-6757

SCS ENGINEERS

TO FDEP

Solid Waste Section

3804 Coconut Palm Drive

Tampa, FL 33619

WE ARE SENDING YOU

✓ Attached Under separate cover via

Shop drawings

Prints

Copy of letter

Change Order

The following items: Plans Samples

Specifications

DATE October 5, 2001

COPY

JOB NO. 09200020.22

ATTENTION Mr. Kim Ford

Re: Southeast County Landfill

Effluent/Leachate Pond Construction

COPIES	DATE	DESCRIPTION
1	10-03-01	Revised pond elevations

THESE ARE TRANSMITTED as check below:

For approval	Approved as submitted	Resubmit	Copies for approval
✓ For your use	Approved as noted	Submit	Copies distribution
As requested	Returned for corrections	Return	Corrected prints

For review and comment

FOR BIDS DUE

19

PRINTS RETURNED AFTER LOAN TO US

## REMARKS

Kim, As discussed in our telephone conversation on October 3, 2001:

Effluent/Leachate "Pond B" elevations were adjusted based on a field survey. The survey found the top of berm of the existing pond was 138 feet and not 140 feet as shown on the drawings.

The elevations were lowered by two feet in order to maintain freeboard and stormwater storage as permitted.

The seasonal high groundwater elevation in this area is 123.61 feet NGVD. The new elevation of the bottom of the detection sump will be 126 feet.

These changes will be included in the record drawings.

COPY TO File

SIGNED: Sheila Carpenter-van Dijk

If enclosures are not as noted, kindly notify us at once.





## SCS ENGINEERS

CLIENT
SUBJECT

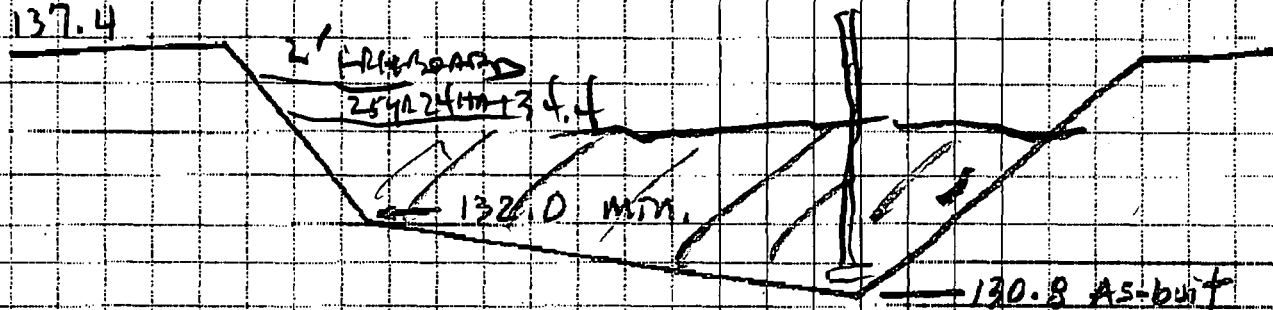
Post-it® Fax Note 7671

Date	2-3-03	# of pages	1
To	MR Kim FORD		
From	LARRY RUIZ		
Co./Dept.	Solid Waste		
Co.	SCS ENGINEERS		
Phone #	FDEP		
Phone #	621-0080		
Fax #			
Fax #			

SHEET \_\_\_\_\_ OF \_\_\_\_\_

DATE
DATE

Min. EL  
137.4



$$\begin{array}{c} \text{LMP} \\ 130.8 + 4.5 = 135.3 \end{array}$$

Therefore

$$137.4 - 135.3 = 2.1 \text{ freeboard}$$

would you like a revised Section A  
on Sheet 5 of as-builts?

Environmental Consultants

3012 U.S. Highway 301 North  
Suite 700  
Tampa, FL 33619

813-621-0080  
FAX 813-623-6757

**SCS ENGINEERS**

TO FDEP  
Solid Waste Section  
3804 Coconut Palm Drive  
Tampa, FL 33619

DATE August 6, 2002

JOB NO. 09200020.21

ATTENTION Mr. Kim Ford

Re: Southeast County Landfill

WE ARE SENDING YOU

Effluent/Leachate Pond Construction Certification

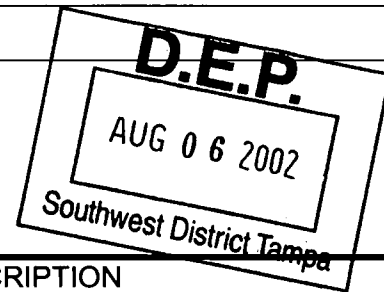
☒ Attached Under separate cover via

☐ Shop drawings ☐ Prints

☐ Copy of letter ☐ Change Order

The following items: ☐ Plans ☐ Samples

☐ Specifications ☐



COPIES	DATE	DESCRIPTION
1	August 5, 2002	Construction Certification Report

THESE ARE TRANSMITTED as check below:

- |  |   |   |                          |
|--|---|---|--------------------------|
| <input type="checkbox"/> For approval            | <input type="checkbox"/> Approved as submitted    | <input type="checkbox"/> Resubmit                         | ____ Copies for approval |
| <input checked="" type="checkbox"/> For your use | <input type="checkbox"/> Approved as noted        | <input type="checkbox"/> Submit                           | ____ Copies distribution |
| <input type="checkbox"/> As requested            | <input type="checkbox"/> Returned for corrections | <input type="checkbox"/> Return                           | ____ Corrected prints    |
| <input type="checkbox"/> For review and comment  | <input type="checkbox"/>                          |   |                          |
| <input type="checkbox"/> FOR BIDS DUE            | _____ 19 _____                                    | <input type="checkbox"/> PRINTS RETURNED AFTER LOAN TO US |                          |

REMARKS

Pursuant to the construction permit, specific conditions 7a, b, c and d, the report includes a Certification of Construction Completion, Record Drawings, narrative and testing results.

COPY TO File

SIGNED: Sheila Carpenter-van Dijk

*If enclosures are not as noted, kindly notify us at once.*



**Certification of  
Construction Completion Report  
Expansion of Surface Impoundment – Pond B  
Southeast County Landfill**



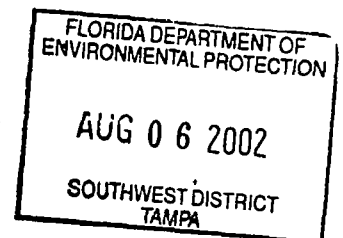
**SCS ENGINEERS**

**Prepared for:**

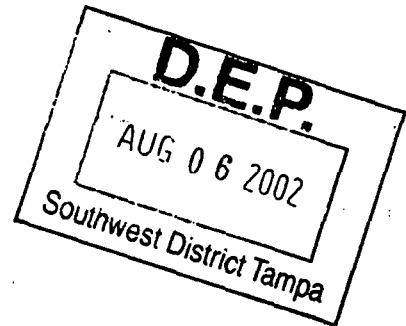
Hillsborough County  
Solid Waste Management Department  
P.O. Box 1110  
Tampa, Florida 33601  
(813) 276-5680

**Prepared by:**

SCS Engineers  
3012 U.S. Highway 301 N., Suite 700  
Tampa, Florida 33619  
(813) 621-0080



File No. 09200020.22  
August 5, 2002



**Certification of  
Construction Completion Report  
Expansion of Surface Impoundment - Pond B  
Southeast County Landfill**

**Prepared for:**

Hillsborough County Solid Waste Department  
P.O. Box 1110  
Tampa, Florida 33601

**Prepared by:**

SCS Engineers  
3012 U.S. Highway 301 North  
Suite 700  
Tampa, Florida 33619  
(813) 621-0080

August 5, 2002  
File No. 09200020.22





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

DEP Form # 62-701,900(2)  
Form Title Certification of Construction Completion  
Effective date May 19, 1994

DEP Application No. \_\_\_\_\_  
(Filed by DEP)

Certification of Construction Completion of a  
Solid Waste Management Facility

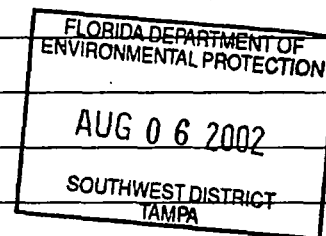
DEP Construction Permit No: 35435-005-SC County: Hillsborough  
Name of Project: Surface Impoundment - Pond B  
Name of Owner: Hillsborough County Solid Waste Management Department  
Name of Engineer: SCS Engineers  
Type of Project: Effluent-Leachate Holding Pond

Cost: Estimate \$ 220,000 Actual \$ 200,294

Site Design: Quantity: \_\_\_\_\_ ton/day Site Acreage: \_\_\_\_\_ Acres

Deviations from Plans and Application Approved by DEP: \_\_\_\_\_

Sump elevations were revised.



Address and Telephone No. of Site: P.O. Box 1110, Tampa, FL 33601 (813) 671-7707  
(8.8 miles east of US Hwy 301 on County Road 672)

Name(s) of Site Supervisor: Mr. Meredith M. Matthews

Date Site inspection is requested: September 1, 2002

This is to certify that, with the exception of any deviation noted above, the construction of the project has been completed in substantial accordance with the plans authorized by Construction

Permit No.: 35435-005-SC

Dated: 06/18/01

Date: August 5, 2002

*R. B. G.*  
Signature of Professional Engineer

Page 1 of 1

Northwest District  
160 Governmental Center  
Pensacola, FL 32501-5794  
850-595-8360

Northeast District  
7825 Baymeadows Way, Ste. B200  
Jacksonville, FL 32256-7590  
904-448-4300

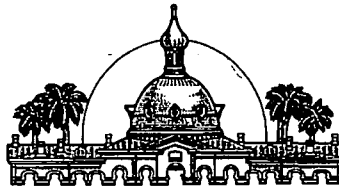
Central District  
3319 Maguire Blvd., Ste. 232  
Orlando, FL 32803-3767  
407-894-7555

Southwest District  
3804 Coconut Palm Dr.  
Tampa, FL 33619  
813-744-6100

South District  
2295 Victoria Ave., Ste. 364  
Fort Myers, FL 33901-3881  
941-332-6975

Southeast District  
400 North Congress Ave.  
West Palm Beach, FL 33401  
561-681-6600





Hillsborough County  
Florida

Office of the County Administrator  
Daniel A. Kleman

BOARD OF COUNTY COMMISSIONERS

Stacey L. Easterling  
Pat Frank  
Chris Hart  
Jim Norman  
Jan K. Platt  
Thomas Scott  
Ronda Storms

*Bob*  
*Susan*  
*AB*

Deputy County Administrator  
Patricia Bean

Assistant County Administrators  
Kathy C. Harris  
Edwin Hunzeker  
Anthony Shoemaker

**D.E.P.**  
**DEC 06 2001**  
**Southwest District Tampa**

December 3, 2001

State of Florida Department  
Of Environmental Protection  
C/O Mr. Kim Ford, Solid Waste Section  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Dear Mr. Ford:

As per required by Hillsborough County Solid Waste Management Department (SWMD) Permit Number 35435-005-SC for the Southeast County Landfill – Pond B Surface Impoundment; issued on June 18, 2001, we are giving ~~the giving~~ DEP one week notice for installation of the pond liner. The subcontractor, Comanco Environmental Corporation, for Apollo Construction (General) will be starting the installation of the liner the week of December 10, 2001.

If you should have any questions pertaining to this project notice, please contact Allen G. Munger, Project Manager for the SWMD at (813) 276-2933.

Hillsborough County Solid  
Waste Management Department

Allen G. Munger Sr. Eng. Tech.  
Project Manager

cc: Dennis Brown, SCS Engineers

Environmental Consultants

3012 U.S. Highway 301 North  
Suite 700  
Tampa, FL 33619813-621-0080  
FAX 813-623-6757

## SCS ENGINEERS

TO FDEP

Solid Waste Section

3804 Coconut Palm Drive

Tampa, FL 33619

WE ARE SENDING YOU

✓ Attached Under separate cover via

Shop drawings

Prints

Copy of letter

Change Order

The following items:

Plans

Samples

Specifications

DATE October 5, 2001

JOB NO. 09200020.22

ATTENTION Mr. Kim Ford

Re: Southeast County Landfill

Effluent/Leachate Pond Construction

COPIES	DATE	DESCRIPTION
1	10-03-01	Revised pond elevations

THESE ARE TRANSMITTED as check below:

For approval	Approved as submitted	Resubmit	Copies for approval
✓ For your use	Approved as noted	Submit	Copies distribution
As requested	Returned for corrections	Return	Corrected prints
For review and comment			

FOR BIDS DUE \_\_\_\_\_ 19 \_\_\_\_\_ PRINTS RETURNED AFTER LOAN TO US

## REMARKS

Kim, As discussed in our telephone conversation on October 3, 2001:

Effluent/Leachate "Pond B" elevations were adjusted based on a field survey. The survey found the top of berm of the existing pond was 138 feet and not 140 feet as shown on the drawings.

The elevations were lowered by two feet in order to maintain freeboard and stormwater storage as permitted.

The seasonal high groundwater elevation in this area is 123.61 feet NGVD. The new elevation of the bottom of the detection sump will be 126 feet.

These changes will be included in the record drawings.

COPY TO File

SIGNED: Sheila Carpenter-van Dijk

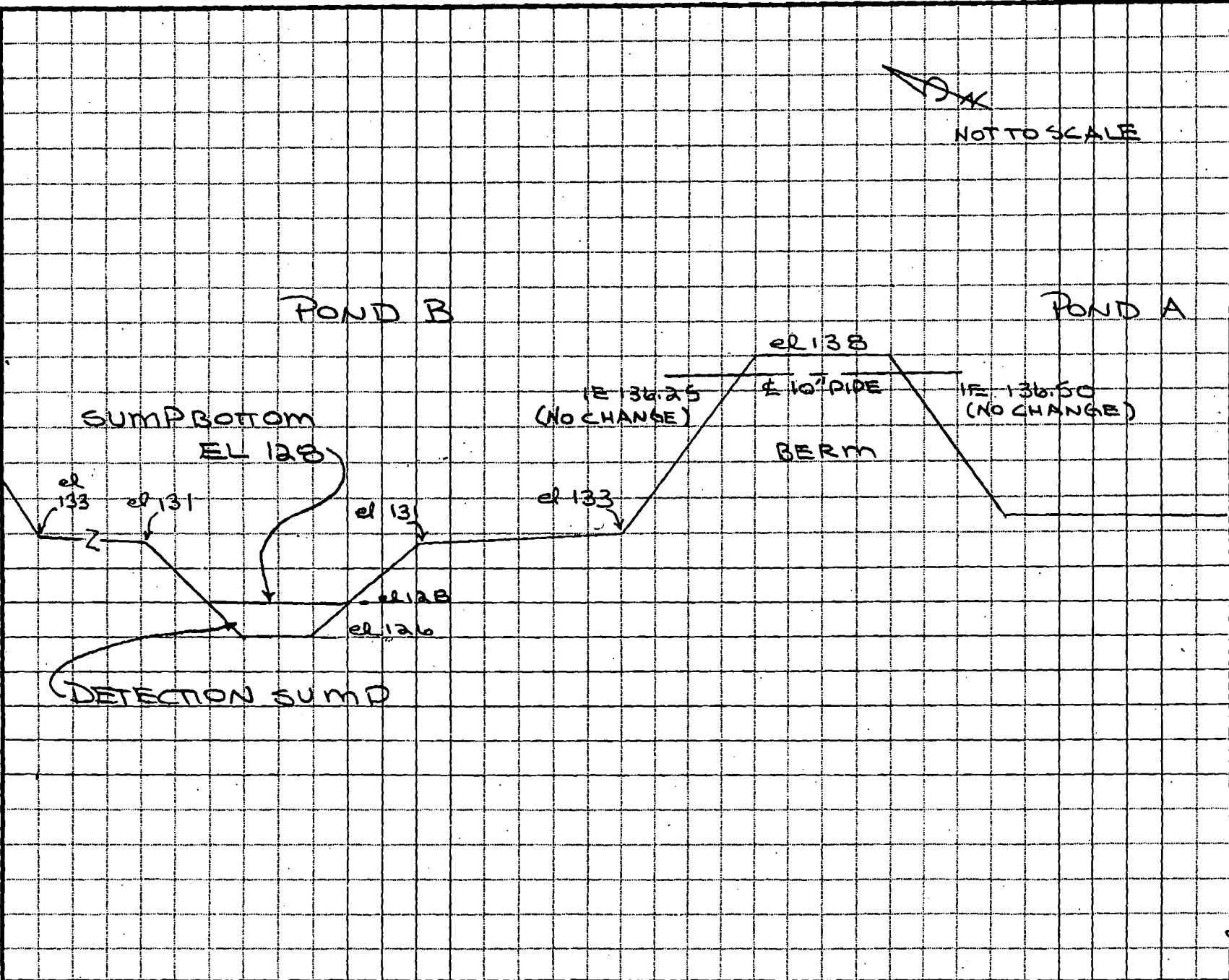
If enclosures are not as noted, kindly notify us at once.



# SCS ENGINEERS

SHEET 1 OF 1

CLIENT	HCSWMD	PROJECT	SCUF	JOB NO.	98A00020.22
SUBJECT	EFFLUENT LEACHATE "POND B"	BY	Shula	DATE	10-03-01
REVISED ELEVATIONS				CHECKED	10/3/01



Environmental Consultants

3012 U.S. Highway 301 North  
Suite 700  
Tampa, FL 33619

813-621-0080

FAX 813-623-6757

001

Hills SELF  
Construction Permit  
Pond B

SCS ENGINEERS

TO FDEP

Solid Waste Section

3804 Coconut Palm Drive

Tampa, FL 33619

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FOR BIDS DUE	19	PRINTS RETURNED AFTER LOAN TO US	

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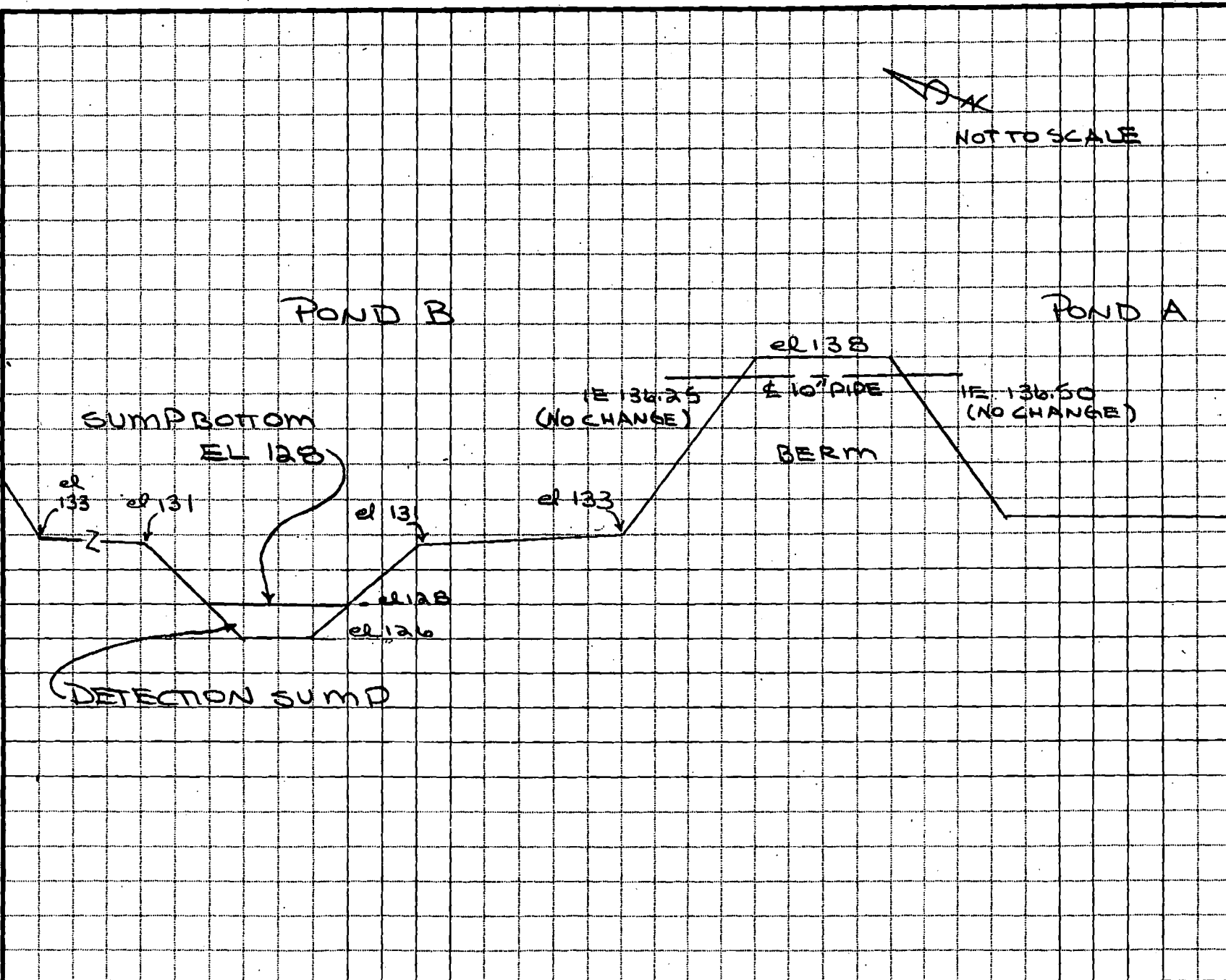
If enclosures are not as noted, kindly notify us at once.



# SCS ENGINEERS

SHEET 1 OF 1

CLIENT	HCSWMD	PROJECT	SLUF	JOB NO	6000 20, 22
SUBJECT	EFFLUENT LEACHATE "POND B"	BY	Shale	DATE	10-03-01
REVISED ELEVATIONS				CHECKED	10/3/01





Hillsborough  
County

*SUB* ROUTING SLIP

TO:

1. *Kim Ford* 6. \_\_\_\_\_  
2. \_\_\_\_\_ 7. \_\_\_\_\_  
3. \_\_\_\_\_ 8. \_\_\_\_\_  
4. \_\_\_\_\_ 9. \_\_\_\_\_  
5. \_\_\_\_\_ 10. \_\_\_\_\_

**REQUESTED ACTION**

- |  |  |
|--|--|
| <input type="checkbox"/> Advise of Status                | <input type="checkbox"/> Please Handle         |
| <input type="checkbox"/> Approval                        | <input type="checkbox"/> Place in Ticker File  |
| <input type="checkbox"/> Circulate                       | <input type="checkbox"/> Prepare Response for: |
| <input type="checkbox"/> Copy and Send To List           | <input type="checkbox"/> ACA                   |
| <input type="checkbox"/> File                            | <input type="checkbox"/> County Administrator  |
| <input checked="" type="checkbox"/> For Your Information | <input type="checkbox"/> My Signature          |
| <input type="checkbox"/> For Your Signature              | <input type="checkbox"/> Recommendation        |
| <input type="checkbox"/> Let's Discuss                   | <input type="checkbox"/> Review and Comment    |
| <input type="checkbox"/> Other: _____                    | <input type="checkbox"/> Respond Directly      |
|  | <input type="checkbox"/> Set Up Meeting        |

**ACTION DUE DATE:** \_\_\_\_\_

**REMARKS**

*Here is construction schedule for SELF  
Holding Pond expansion as required  
by Permit No. 35435-00-SC  
Specific Conditions Section 4.*

FROM: *Allen A. Mungue*

DATE: *9/24/01*

Permit No. 35435-005-SC

Job No.: 687

Name: HILLSBOROUGH COUNTY

Location: SOUTHEAST COUNTY LANDFILL HOLDING POND

D.E.P.

SEP 25 2001

ACTIVITY Southwest District Tampa

Apollo Construction & Engineering

P.O. Box 5848  
Sun City Center Florida 33571

Preliminary Construction Schedule

SHOP DRAWING REVIEW

REVIEW IS ONLY FOR GENERAL  
COMPLIANCE WITH DESIGN CONCEPT

- ☐ NO EXCEPTIONS TAKEN  
☒ MAKE CORRECTIONS NOTED  
☐ AMEND - RESUBMIT  
☐ REJECTED - RESUBMIT  
- SCS ENGINEERS - TAMPA -

DATE 9-10-01 BY DNB

CHECKED BY SCW

Date: SEPTEMBER 7, 2001

Hills SELF  
const permit  
Pond B

△ Apollo to provide  
Milestone Dates of  
Substantial completion and  
Final completion OF 1

Weeks Begin On Monday

ACTIVITY	Weeks Begin on Monday																																	
	September				October					November				December				January				February				March				April				
	3	10	17	24	1	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14	21	28	4	11	18	25	4	11	18	25	1	8	15	22
	1 19 29																																	
GENERAL CONDITION / MOBILIZATION																																		
SURVEY																																		
SITE CLEARING																																		
CONSTRUCT POND																																		
INSTALL LINER																																		
CONCRETE WORK																																		
INSTALL PUMP																																		
PIPING																																		
PIPE ACCESSORIES																																		
ELECTRICAL																																		
FENCE																																		
SITE WORK																																		
DEMOBILIZATION																																		
Note: Schedule is based on 8 hr/day 5 day/week.																																		



# ROUTING SLIP

TO:

1. Kim Ford 6
2. \_\_\_\_\_ 7
3. \_\_\_\_\_ 8
4. \_\_\_\_\_ 9
5. \_\_\_\_\_ 10

## REQUESTED ACTION

- |  |  |
|--|--|
| <input type="checkbox"/> Advise of Status                | <input type="checkbox"/> Please Handle         |
| <input type="checkbox"/> Approval                        | <input type="checkbox"/> Place in Ticker File  |
| <input type="checkbox"/> Circulate                       | <input type="checkbox"/> Prepare Response for: |
| <input type="checkbox"/> Copy and Send To List           | <input type="checkbox"/> ACA                   |
| <input type="checkbox"/> File                            | <input type="checkbox"/> County Administrator  |
| <input checked="" type="checkbox"/> For Your Information | <input type="checkbox"/> My Signature          |
| <input type="checkbox"/> For Your Signature              | <input type="checkbox"/> Recommendation        |
| <input type="checkbox"/> Let's Discuss                   | <input type="checkbox"/> Review and Comment    |
| <input type="checkbox"/> Other                           | <input type="checkbox"/> Respond Directly      |
|  | <input type="checkbox"/> Set Up Meeting        |

ACTION DUE DATE: \_\_\_\_\_

## REMARKS

Here is construction schedule for SELF  
Holding Pond expansion as required  
by Permit No. 35435-00-SC  
Specific Conditions Section 4.

FROM: Allan A. MungueDATE: 9/27/01

to provide  
one dates of  
initial completion and  
completion OF 1

SEPTEMBER 7, 2001

ch April

18 25 1 8 15 22 29

SITE WORK

DEMOBILIZATION

Note: Schedule is based on 8 hr/day 5



SUBMITTAL



Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

David B. Struhs  
Secretary

## NOTICE OF PERMIT

June 18, 2001

Hillsborough County  
Solid Waste Management Dept.  
c/o Mr. Daryl Smith, Director  
P.O. Box 1110  
Tampa, FL 33601

Dear Mr. Smith:

Enclosed is Permit Number 35435-005-SC, issued pursuant to Section(s) 403.087(1), Florida Statutes.

Any party to the Order (permit) 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, 2600 Blair Stone Road, Tallahassee, 32399-2400; 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.

Executed in Tampa Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

Kim B. Ford, P.E.  
Solid Waste Section  
Division of Waste Management

KBF/ab  
Attachment

cc: Robert Gardner, P.E., SCS Engineers  
Robert Butera, P.E., FDEP Tampa  
Susan Pelz, P.E., FDEP Tampa (permit notebook)  
Ron Cope, EPCHC

"More Protection, Less Process"

Printed on recycled paper.

Hillsborough County  
c/o Mr. Daryl Smith  
Permit No.: 35435-005-SC

Page Two

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on 6-18-01 to the listed persons.

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

Betty Rodgers 6-18-01  
Clerk Date



# Department of Environmental Protection

Jeb Bush  
Governor

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

David B. Struhs  
Secretary

## PERMITTEE

Hillsborough County  
Solid Waste Management Dept.  
Mr. Daryl Smith, Director  
P.O. Box 1110  
Tampa, FL 33601

## PERMIT/CERTIFICATION

WACS Facility ID No: SWD-29-41193  
Permit No: 35435-005-SC  
Date of Issue: 06/18/01  
Expiration Date: 06/18/03  
County: Hillsborough  
Lat/Long: 27°46'25"N  
82°11'15"W  
Sec/Town/Rge: 13, 14, 15,  
18, 19, 22,  
23, 24, 31,  
& 32S/21E  
Project: Southeast County  
Landfill - Pond B  
Surface Impoundment

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-4 and 62-701. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

To construct a surface impoundment of approximately 1/2 acre at the Southeast County Landfill, subject to the specific and general conditions attached, located 8.8 miles east of U.S. 301 on C.R. 672, southeast of Tampa, Hillsborough County, Florida. The specific conditions attached are for the construction of a:

1. Surface Impoundment - Pond B

General Information: The construction will include 1/2 acre surface impoundment with a double geomembrane liner system. The impoundment will be used for storage of effluent, or for storage of leachate as a contingency in case of an emergency.

**Replaces Permit No.: N/A, new**

This permit contains compliance items summarized in Attachment 1 that shall be complied with and 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 dates noted, enforcement action may be initiated to assure compliance with the conditions of this permit.

"More Protection, Less Process"

PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

PERMIT NO.: 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

**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 403.861, 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), F.S., 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 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.

PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

PERMIT NO.: 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

**GENERAL CONDITIONS:**

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.

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.

PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

PERMIT NO.: 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

**GENERAL CONDITIONS:**

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

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.

PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

PERMIT NO.: 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

**GENERAL CONDITIONS:**

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.



PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

PERMIT NO.: 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

**SPECIFIC CONDITIONS:**

1. **Permit Application Documentation.** This permit is valid for construction of the 1/2 acre surface impoundment - Pond B in accordance with the reports, plans and other information as follows:

- Application and supporting information received on January 4, 2001
- Additional supporting information and responses by SCS Engineers received on March 7 and April 25, 2001;
- Construction plans by SCS Engineers and replacement sheet 4 received April 16 and 24, 2001;
- Revised leachate management plan received on April 24, 2001;
- and in accordance with all applicable requirements of Department rules.

Upon receipt and approval of a request for a minor permit modification pursuant to FAC 62-4.050(4)(s) to operate the new components of the facility regulated by this permit, including Certification of Construction Completion for the impoundment and related improvements, and related supporting documents identified in this permit, the current landfill operation permit shall be modified to allow the operation of the new impoundment and related improvements.

2. **Permit Modifications.** Any construction subject to Department Solid Waste regulations not previously approved as part of this permit shall require a separate Department permit unless the Department determines a permit modification to be more appropriate, or unless otherwise approved in writing by the Department. Permits shall be modified in accordance with the requirements of 62-4.080, F.A.C. A modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review by the Department is considered a substantial modification.

3. **Permit Renewal.** No later than one hundred eighty (180) days before the expiration of the Department Permit, the permittee shall apply for a renewal of a permit, if necessary for continuing related activities, on forms and in a manner prescribed by the Department, in order to assure conformance with all applicable Department rules. Permits shall be renewed at least every five years as required by F.A.C. 62-4.070(4).

4. **Construction Schedule and Progress Report.** No later than two (2) weeks after the pre-construction conference, the owner or operator shall submit a construction schedule which includes estimated dates for related solid waste construction activities to the Department. The Engineer of Record or another qualified professional engineer shall make periodic inspections during construction to ensure that design integrity is maintained. An updated construction schedule and progress report shall be submitted to the Department monthly. Progress reports shall include a description of deviations from approved plans and specifications. Field changes shall be noted on construction plans kept at the project site. The Department shall be notified at least one week in advance of beginning liner installation.

PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

PERMIT NO.: 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

**SPECIFIC CONDITIONS:**

5. **Quality Assurance.** The construction quality assurance plan shall provide personnel with adequate information to achieve continuous compliance with the construction requirements. The plan shall include or refer to specifications and construction methods which use established engineering practices for construction and provide for quality control testing procedures and sampling frequencies, pursuant to F.A.C. 62-701.400(7) and (8). Sampling and testing shall be conducted by trained personnel during construction and after construction completion. Such personnel will be under the direction of the construction quality assurance professional engineer, to assure the project will comply with the standards. The engineer or his designee shall be on-site at all times during construction to monitor construction activities.

6. **Laboratory and Field Testing Requirements.** Field testing during the construction activities shall be conducted under the direct supervision of the Certifying Engineer or his designee representing the owner. A laboratory experienced in the testing of geosynthetics, independent of the liner manufacturer and installer, shall perform the required conformance testing and testing of seam shear and peel strength.

7. **Certification of Construction Completeness.** Within sixty (60) days after the specified construction has been completed for each part completed during a construction period, the following activities shall be completed:

a. The owner or operator shall submit a Certification of Construction Completion, Form 62-701.900(2), signed and sealed by the responsible professional engineer for the construction to the Department for approval, and shall arrange for Department representatives to inspect the construction in the company of the permittee, the engineer, and the facility operator.

b. The owner or operator shall submit Record Drawings showing all changes (i.e. additions, deletions, revisions to the plans previously approved by the Department including site grades and elevations). The Record Drawings shall include, but not be limited to, details such as the as-built elevations of the excavated areas, top and bottom of the liner system, piping, pumps and controls.

c. The owner or operator shall submit a narrative indicating all changes in plans and the cause of the deviations and certification by the design engineer to the Department.

d. The engineer of record shall provide a report to verify conformance with the project specifications and applicable requirements of F.A.C. Rule 62-701.400(7) and (8). The report including all testing results for the entire project shall be submitted to the Department along with the completion of construction documents.

PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

PERMIT NO.: 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

**SPECIFIC CONDITIONS:**

8. **Control of Nuisance Conditions.** The operating authority shall be responsible for the control of odors and fugitive particulates arising from the construction. Such control shall minimize the creation of nuisance conditions on adjoining property. If a complaint is received from the general public concerning activities regulated by this permit, and the Department or EPCHC personnel confirms that the complaint is based on a violation of the standards and criteria applicable to the permittee pursuant to this permit, then the permittee must take immediate corrective action to abate the violation.

9. **Facility Maintenance and Repair.** If there is any damage to any portion of the site facilities regulated by this permit or failure of any portion of the associated systems including monitor wells and piezometers, and such damage or failure may adversely affect the continued compliance with this permit, then the permittee shall **immediately (within 24 hours)** notify the Department and EPCHC explaining such occurrence and remedial measures to be taken and time needed for repairs. Written detailed notification shall be submitted to the Department and EPCHC **within seven (7) days** following the occurrence.

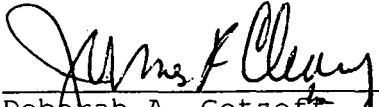
10. **Professional Certification.** Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.), Florida Statutes, applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared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

11. **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.

12. **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 date of permit expiration and renewal deadlines. It is a violation of this permit for failure to comply with all conditions and deadlines.

Executed in Tampa, Florida

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
\_\_\_\_\_  
Deborah A. Getzoff  
Director of District Management  
Southwest District

PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

PERMIT NO.: 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

ATTACHMENT 1

SPECIFIC CONDITION	SUBMITTAL DUE DATE	REQUIRED ITEM
4.	2 weeks after pre-construction conference	Submit construction schedule
4.	Monthly	Submit updated construction schedule and progress report.
7.	Within 60 days after construction is complete	Submit Certification of Construction Completion, Arrange for inspection, submit Record Drawings, submit narrative describing all deviations.



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

DEP Form # 62-701.900(2)
Form Title <u>Certification of Construction Completion</u>
Effective Date <u>May 19, 1994</u>
DEP Application No. _____ (Filled by DEP)

## Certification of Construction Completion of a Solid Waste Management Facility

DEP Construction Permit No: \_\_\_\_\_ County: \_\_\_\_\_

Name of Project: \_\_\_\_\_

Name of Owner: \_\_\_\_\_

Name of Engineer: \_\_\_\_\_

Type of Project: \_\_\_\_\_

Cost: Estimate \$ \_\_\_\_\_ Actual \$ \_\_\_\_\_

Site Design: Quantity: \_\_\_\_\_ ton/day Site Acreage: \_\_\_\_\_ Acres

Deviations from Plans and Application Approved by DEP: \_\_\_\_\_

Address and Telephone No. of Site: \_\_\_\_\_

Name(s) of Site Supervisor: \_\_\_\_\_

Date Site inspection is requested: \_\_\_\_\_

This is to certify that, with the exception of any deviation noted above, the construction of the project has been completed in substantial accordance with the plans authorized by Construction

Permit No.: \_\_\_\_\_ Dated: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of Professional Engineer

Memorandum

Florida Department of  
Environmental Protection

PERMIT COVER MEMO

TO: ☒ DEBORAH GETZOFF, Director of District Management

FROM/THROUGH:

William Kutash 6/11/01 ENVIRONMENTAL ADMINISTRATOR  
Bob Butera 6/11/01 SUPERVISOR  
Kim Ford 6/11/01 ENGINEER

DATE: 6/11/01

FILE NAME: Southeast Landfill -  
Impoundment - Pond B

PERMIT #: 35435-005-SC

PROGRAM: Solid Waste

COUNTY: Hillsborough

TYPE OF PERMIT ACTION: ☒ ISSUE ☐ DENY ☐ MODIFY  
☐ TRANSFER OWNER ☐ NOD  
☐ PUBLIC NOTICE ☐ INTENT TO ISSUE

PUBLIC NOTICE PERIOD CLOSED? YES PETITION FILED? NO

PERMIT SUMMARY: This permit is to allow the construction of a surface impoundment (for storing landfill leachate and effluent) and related improvements. Construction certification is required by this permit.

PROFESSIONAL RECOMMENDATION: ☒ APPROVE ☐ DENY

EVALUATION SUMMARY: The application was received on January 4, 2001. One deficiency letter was sent with responses received on March 7, 2001. Revised construction plans were received on April 16, 2001, and a replacement sheet was received on April 24, 2001. The revised leachate management plan was received on April 24, 2001.

This application was deemed complete on **April 16, 2001**.  
Notice of Intent to Issue was published on **May 21, 2001**.  
There were no petitions.

Department Processing Time = 57 days (as of June 11, 2001)  
Total Processing Time (TIH) = 158 days (as of June 11, 2001)

Day 90/30 for this Action is July 15, 2001.

Memorandum

Florida Department of  
Environmental Protection

PERMIT COVER MEMO

TO: X DEBORAH GETZOFF, Director of District Management

FROM/THROUGH:

William Kutash *WKG 5/8/01* ENVIRONMENTAL ADMINISTRATOR  
Bob Butera *BB 5/8/01* SUPERVISOR  
Kim Ford *KF 4/25/01* ENGINEER

DATE: *4/25/01*

FILE NAME: Southeast Landfill -  
Impoundment - Pond B

PERMIT #: 35435-005-SC

PROGRAM: Solid Waste

COUNTY: Hillsborough

TYPE OF PERMIT ACTION: ISSUE DENY MODIFY  
TRANSFER OWNER NOD  
PUBLIC NOTICE X INTENT TO ISSUE

PUBLIC NOTICE PERIOD CLOSED?        PETITION FILED?       

PERMIT SUMMARY: This permit is to allow the construction of a surface impoundment (for storing landfill leachate and effluent) and related improvements. Construction certification is required by this permit.

PROFESSIONAL RECOMMENDATION: X APPROVE DENY

EVALUATION SUMMARY: The application was received on January 4, 2001. One deficiency letter was sent with responses received on March 7, 2001. Revised construction plans were received on April 16, 2001, and a replacement sheet was received on April 24, 2001. The revised leachate management plan was received on April 24, 2001.

This application was deemed complete on **April 16, 2001.**


Department Processing Time = 37 days (as of April 24, 2001)  
Total Processing Time (TIH) = 110 days (as of April 24, 2001)

Day 90/30 for this Action is July 15, 2001.

CERTIFICATION

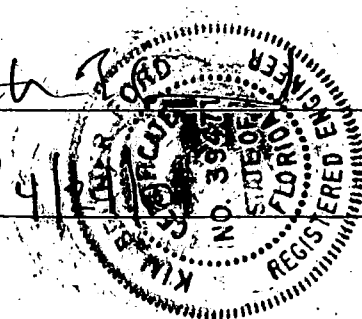
Surface Impoundment - Pond B, SE Landfill  
Application No. 35435-005-SC

I HEREBY CERTIFY that the engineering features described in the above referenced application (provide / ~~do not provide~~) reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Title <sup>62</sup>17. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical and structural features).

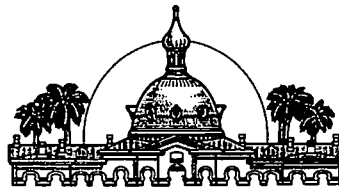
  
\_\_\_\_\_  
(Signed)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Seal)







Hillsborough County  
Florida

Office of the County Administrator  
Daniel A. Kleman

**RECEIVED**  
MAY 22 2001

SOUTHWEST DISTRICT  
Deputy County Administrator  
Patricia Bean

Assistant County Administrators  
Edwin Hunzeker  
Jimmie Keel  
Anthony Shoemaker

BOARD OF COUNTY COMMISSIONERS

Stacey L. Easterling  
Pat Frank  
Chris Hart  
Jim Norman  
Jan K. Platt  
Thomas Scott  
Ronda Storms

May 21, 2001

Mr. Kim Ford, P.E.  
Solid Waste Permitting  
Florida Department of Environmental Protection  
3804 Coconut Palm Drive  
Tampa, Florida 33619

RE: Southeast County Landfill Effluent Pond - Legal Advertisement Proof of Publication

Dear Mr. Ford:

In accordance with Section 403.815, Florida Statutes and Rule 62-103.150, F.A.C., the Hillsborough County Solid Waste Management Department (SWMD) is providing proof of publication of the legal advertisement for the Florida Department of Environmental Protection's (DEP) Notice of Intent to Issue a Construction Permit for the Effluent/Leachate Surface Impoundment at the Southeast County Landfill.

The proof of publication was provided to the SWMD by the Tampa Tribune on May 21, 2001 and the legal ad ran on May 21, 2001.

Please advise should you have any questions concerning the information provided.

Sincerely,

Patricia V. Berry  
Landfill Services Section Manager  
Solid Waste Management Department

Attachment

xc: Larry Ruiz, SCS  
Paul Schipfer, EPC

**THE TAMPA TRIBUNE**  
**Published Daily**  
**Tampa, Hillsborough County, Florida**

State of Florida                     }  
County of Hillsborough } ss.

Before the undersigned authority personally appeared J. Rosenthal, who on oath says that she is Classified Billing Manager of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of advertisement being a

LEGAL NOTICE

in the matter of \_\_\_\_\_

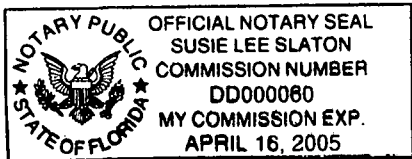
STATE OF FLORIDA

was published in said newspaper in the issues of MAY 21, 2001

Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, this advertisement for publication in the said newspaper.

Sworn to and subscribed by me, this 21 day  
of MAY, A.D. 20 01

Personally Known ☒ or Produced Identification \_\_\_\_\_  
Type of Identification Produced \_\_\_\_\_



*Susie Lee Slaton*

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
MAY 23 2001  
SOUTHWEST DISTRICT  
TAMPA

State of Florida  
Department of Environmental  
Protection  
Notice of Proposed Agency  
Action on Permit Application  
The Department gives notice  
of its intent to issue a permit  
(File No. 35435-005-SC) to Hills-  
borough County, c/o Mr. Daryl  
Smith, P.O. Box 1110, Tampa,  
Florida 33601, who applied on  
January 4, 2001 to the Depart-  
ment of Environmental Protec-  
tion for a permit to construct  
an effluent/leachate surface  
impoundment of approximat-  
ely 1/2 acre at the Southeast  
County Landfill, located 8.8  
miles east of U.S. 301 on C.R.  
672, southeast of Tampa, Hills-  
borough County, Florida.  
Persons whose substantial in-  
terests are affected by the De-  
partment's proposed permit-  
ting decision may petition for  
an administrative proceeding  
(hearing) in accordance with  
Section 120.57, Florida Stat-  
utes. The petition must contain  
the information set forth be-  
low, and must be filed (re-  
ceived) in the office of General  
Counsel of the Department at  
3900 Commonwealth Boule-  
vard, Mail Station 35, Tallahas-  
see, Florida 32399-3000, within  
fourteen (14) days of publica-  
tion of this notice. A copy of the  
petition must also be mailed at  
the time of filing to the appli-  
cant at the address indicated.  
Failure to file a request for  
hearing within this time period  
shall constitute a waiver any  
right such person may have to  
request an administrative de-  
termination (hearing) under  
Section 120.57, Florida Stat-  
utes.  
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 state-  
ment of how each petitioner's  
substantial interests are af-  
fected by the Department's ac-  
tion 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 pro-  
posed action; and (f) A state-  
ment of which rules or statutes  
petitioner contends require re-  
versal or modification of the  
Department's action or pro-  
posed action; and (g) A state-  
ment of the relief sought by pe-  
titioner, stating precisely the  
action petitioner wants the De-  
partment to take with respect  
to the Department's action or  
proposed action.  
If a petition is filed, the admin-  
istrative hearing process is de-  
signed to formulate agency ac-  
tion. Accordingly, the Depart-  
ment's final action may be dif-  
ferent from the position taken  
by it in this notice. Persons  
whose substantial interests  
will be affected by any deci-  
sion of the Department with re-  
gard 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 consti-  
tutes a waiver of any right such  
person has to request a hear-  
ing under Section 120.57, Flori-  
da Statutes, and to participate  
as a party to this proceeding.  
Any subsequent intervention  
will only be at the approval of  
the presiding officer upon mo-  
tion filed pursuant to Rule 28-  
5.207, Florida Administrative  
Code.  
The application is available for  
public inspection during nor-  
mal business hours, 8:00 a.m.  
to 5:00 p.m., Monday through  
Friday, except legal holidays,  
at 3804 Coconut Palm Drive,  
Tampa, Florida 33619-8318.  
2615 5/21/01

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 5/16/01 Subject SEPARATE CONSTRUCTION PERMITS  
Time 1:55 Permit No. \_\_\_\_\_  
M LARRY RUIZ County HALL CO  
Representing SL Telephone No. 6210080

☐ Phoned Me ☒ Was Called ☐ Scheduled Meeting ☐ Unscheduled Meeting

Other Individuals Involved in Conversation/Meeting \_\_\_\_\_

Summary of Conversation/Meeting \_\_\_\_\_

I RETURNED THE CALL.  
I EXPLAINED CONSTRUCTION PERMIT #1 REQUIRES A  
PERMIT NOW TO ENCLOSE REFERENCE  
TO NEW LAMP IN OLD CONCRETE PERMIT,  
AND #3-RENEWAL IS REQUIRED  
ONLY IF CONSTRUCTION NOT COMPLETED  
WITH PERMIT TIME FRAME.  
LR SAID UNDERSTANDS AND NO PROBLEM.

(continue on another  
sheet, if necessary)

Signature EL

Title \_\_\_\_\_

# U.S. Postal Service CERTIFIED MAIL RECEIPT

(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:

Hills City SW Mgmt Dept

Postage \$

Certified Fee

Return Receipt Fee  
(Endorsement Required)

Restricted Delivery Fee  
(Endorsement Required)

Total Postage & Fees \$

5-8-01

Postmark  
Here

Name (Please Print Clearly) (to be completed by mailer)

Mr. Daryl Smith

Street, Apt. No., or PO Box No.

PO Box 1110

City, State, ZIP+4

Tampa, FL 33601

PS Form 3800, July 1999

See Reverse for Instructions

7099 3400 0001 9760 2476

Intent To Serve #35435-005-SC

## SENDER:

- 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):

- ☐ Addressee's Address
- ☐ Restricted Delivery

Consult postmaster for fee.

## 3. Article Addressed to:

HILLSBOROUGH COUNTY  
SOLID WASTE MGMT DEPT  
MR. DARYL SMITH, DIRECTOR  
PO BOX 1110  
TAMPA, FL 33601

## 4a. Article Number

7099 3400 0001 9760 2476

## 4b. Service Type

- ☐ Registered
- ☒ Certified
- ☐ Express Mail
- ☐ Insured
- ☒ Return Receipt for Merchandise
- ☐ COD

## 7. Date of Delivery

MAY 10 2001

## 5. Received By: (Print Name)

CLERK OF CIRCUIT COURT

## 6. Signature (Addressee or Agent)

*[Signature]*

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

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE



First-Class Mail  
Postage & Fees Paid  
USPS  
Permit No. G-10

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

State of Florida  
Department of Environmental Protection  
3804 Coconut Palm Drive  
Tampa, Florida 33619-8316

**D.E.P.**

**MAY 11 2001**

**Southwest District Tampa**

*Kim Ford - Solid Waste*



THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

May 8, 2001

In the matter of an  
Application for Permit by:

DEP File No. 35435-005-SC  
Hillsborough County

Hillsborough County  
Solid Waste Management Dept.  
c/o Mr. Daryl Smith, Director  
P.O. Box 1110  
Tampa, FL 33601

---

INTENT TO ISSUE

The Department of Environmental Protection gives notice of its Intent to Issue a permit for the proposed project as detailed in the application specified above, for the reasons stated below.

The applicant, Hillsborough County, applied on January 4, 2001 to the Department of Environmental Protection for a permit to construct a surface impoundment of approximately 1/2 acre at the Southeast County Landfill, for storing landfill leachate or effluent, subject to the specific and general conditions attached, 8.8 miles east of U.S. 301 on C.R. 672, southeast of Tampa, Hillsborough County, Florida.

The Department has permitting jurisdiction under Sections 403.707 and 403.861, Florida Statutes (F.S.), and Chapters 62-4 and 62-701, Florida Administrative Code (F.A.C.). The project is not exempt from permitting procedures. The Department has determined that a solid waste construction permit is required for the proposed work.

The Department intends to issue this permit based on its belief that reasonable assurances have been provided to indicate that the

proposed project will not adversely impact water quality and the proposed project will comply with appropriate provisions of Chapters 62-4 and 62-701, F.A.C., subject to the specific conditions attached in the permit. Pursuant to Section 403.815, Florida Statutes, you (the applicant) are required to publish at your own expense the enclosed Notice of Proposed Agency Action on Permit Application. The notice must be published one time only within thirty (30) days of receipt of this intent in the legal ad section of a newspaper of general circulation in the area affected. Proof of publication must be provided to the Department within seven (7) days of publication of the notice. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit. The Department will issue the permit with the attached conditions unless petition for administrative proceeding (hearing) is filed pursuant to the provisions of Sections 120.569 and 120.57, Florida Statutes.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any other person must be filed within fourteen days of publication of the public notice or within fourteen days of receipt

of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 of the Florida Statutes, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the discretion of the presiding officer upon the filing of a motion in compliance with rule 28-5.207 of the Florida Administrative Code.

A petition must 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 the 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 the petitioner, if any;
- (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the action or proposed action addressed in this notice of intent.



Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Any person may elect to pursue mediation by reaching a mediation agreement with all parties to the proceeding (which include the applicant, the Department, and any person who has filed a timely and sufficient petition for a hearing) and by showing how the substantial interests of each mediating party are affected by the Department's action or proposed action. The agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

The agreement to mediate must include the following:

- (a) The names, addresses, and telephone numbers of any persons who may attend the mediation;
- (b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;
- (c) The agreed allocation of the costs and fees associated with the mediation;
- (d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;

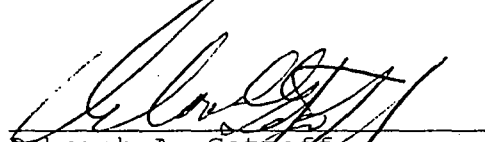
- (e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;
- (f) The name of each party's representative who shall have authority to settle or recommend settlement; and
- (g) Either an explanation of how the substantial interests of each mediating party will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that each party has already filed, and incorporating it by reference.
- (h) The signatures of all parties or their authorized representatives.

As provided in Section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by Sections 120.569 and 120.57 for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above, and must therefore file their petitions within fourteen days of receipt of this notice of intent. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under Sections

120.569 and 120.57 remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

Executed in Tampa, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



Deborah A. Getzoff  
Director of District Management  
Southwest District

DG/kbfb

Attachment

Copies furnished to:

Elected Officials Notification List  
Robert Gardner, P.E., SCS Engineers  
Robert Butera, P.E., FDEP Tampa  
Ron Cope, EPCHC

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this **NOTICE OF INTENT TO ISSUE** and all copies were mailed before the close of business on May 8, 2001 to the listed persons.  
Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED,**  
on this date, pursuant to  
Section 120.52(11), Florida Statutes,  
with the designated Department Clerk,  
receipt of which is hereby  
acknowledged.

Anna Blach  
(Clerk)

5-8-01  
(Date)

**State of Florida**  
**Department of Environmental Protection**  
**Notice of Proposed Agency Action on Permit Application**

The Department gives notice of its intent to issue a permit (File No. 35435-005-SC) to Hillsborough County, c/o Mr. Daryl Smith, P.O. Box 1110, Tampa, Florida 33601, who applied on January 4, 2001 to the Department of Environmental Protection for a permit to construct an effluent/leachate surface impoundment of approximately 1/2 acre at the Southeast County Landfill, located 8.8 miles east of U.S. 301 on C.R. 672, southeast of Tampa, Hillsborough County, Florida.

Persons whose substantial interests are affected by the Department's proposed permitting decision 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 Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within fourteen (14) days of publication of this notice. A copy of the petition must also be mailed at the time of filing to the applicant at the address indicated. Failure to file a request for hearing within this time period shall constitute a waiver any right such person may have to request an administrative determination (hearing) under 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; and (f) A statement of which rules or statutes petitioner contends require 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, Florida Statutes, 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, Florida Administrative Code.

The application 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 3804 Coconut Palm Drive, Tampa, Florida 33619-8318.

RULES OF THE ADMINISTRATION COMMISSION, MODEL RULES OF PROCEDURE  
CHAPTER 28-5, DECISIONS DETERMINING SUBSTANTIAL INTERESTS  
PART II, FORMAL HEARINGS  
A) PREHEARING PROCEDURES

28-5.201 Initial of Formal Proceedings.

(1) Initiation of formal proceedings shall be made by petition to the Agency responsible for rendering final Agency action. The term petition as used herein includes any application or other document which expresses a request for formal proceedings. Each petition should be printed, typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double-spaced and indented.

(2) All petitions filed under these rules should contain:

(a) The name and address of each Agency affected and each Agency's file or identification number, if known;

(b) The name and address of the petitioner or petitioners, and an explanation of how his/her substantial interests will be affected by the Agency determination;

(c) A statement of when and how petitioner received notice of the Agency decision of intent to render a decision;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;

(f) A demand for relief to which the petitioner deems himself entitled; and

(g) Other information which the petitioner contends is material.

(3) Upon receipt of a petition for formal proceedings, the Agency shall either accept or deny the petition, and if accepted shall elect either to conduct the hearing itself through the Agency head, or member thereof, assign a person authorized by Subsection 120.57(1)(a) or other authority, or request that a Hearing Officer from the Division of Administrative Hearings be assigned to conduct the hearing.

(a) A petition may be denied if the petitioner does not state adequately a material factual allegation, such as a substantial interest in the Agency determination, or if the petition is untimely.

(b) The Agency shall promptly give written notice to all parties of the action taken on the petition, and shall state with particularity its reasons therefore.

(4) If the Agency elects to request that a Hearing Officer of the Division of Administrative Hearings be assigned to conduct the hearing, the Agency shall forward the petition, and all materials filed with the Agency, to the Division of Administrative hearings, and shall notify all parties of its action.

Specific Authority: 120.53(1), 120.54(10), F.S.  
Law Implemented: 120.57, F.S.  
History: New 3-23-80



# Department of Environmental Protection

Jeb Bush  
Governor

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

David B. Struhs  
Secretary

PERMITTEE  
Hillsborough County  
Solid Waste Management Dept.  
Mr. Daryl Smith, Director  
P.O. Box 1110  
Tampa, FL 33601

PERMIT/CERTIFICATION  
WACS Facility ID No: SWD-29-41193  
Permit No: 35435-005-SC  
Date of Issue:  
Expiration Date:  
County: Hillsborough  
Lat/Long: 27°46'25"N  
82°11'15"W

**DRAFT**

Sec/Town/Rge: 13, 14, 15,  
18, 19, 22,  
23, 24, 31,  
& 32S/21E

Project: Southeast County  
Landfill - Pond B  
Surface Impoundment

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-4 and 62-701. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

To construct a surface impoundment of approximately 1/2 acre at the Southeast County Landfill, subject to the specific and general conditions attached, located 8.8 miles east of U.S. 301 on C.R. 672, southeast of Tampa, Hillsborough County, Florida. The specific conditions attached are for the construction of a:

1. Surface Impoundment - Pond B

General Information: The construction will include 1/2 acre surface impoundment with a double geomembrane liner system. The impoundment will be used for storage of effluent, or for storage of leachate as a contingency in case of an emergency.

Replaces Permit No.: N/A, new

This permit contains compliance items summarized in Attachment 1 that shall be complied with and 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 dates noted, enforcement action may be initiated to assure compliance with the conditions of this permit.

PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

PERMIT NO. : 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

## DRAFT

### 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 403.861, 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), F.S., 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 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.



PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

PERMIT NO.: 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

**DRAFT**

GENERAL CONDITIONS:

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.

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.

PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

PERMIT NO.: 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

**DRAFT**

GENERAL CONDITIONS:

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

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.

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PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

PERMIT NO.: 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

**DRAFT**

**GENERAL CONDITIONS:**

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.

**DRAFT**

**SPECIFIC CONDITIONS:**

1. **Permit Application Documentation.** This permit is valid for construction of the 1/2 acre surface impoundment - Pond B in accordance with the reports, plans and other information as follows:

- Application and supporting information received on January 4, 2001
- Additional supporting information and responses by SCS Engineers received on March 7 and April 25, 2001;
- Construction plans by SCS Engineers and replacement sheet 4 received April 16 and 24, 2001;
- Revised leachate management plan received on April 24, 2001;
- and in accordance with all applicable requirements of Department rules.

Upon receipt and approval of a request for a minor permit modification pursuant to FAC 62-4.050(4)(s) to operate the new components of the facility regulated by this permit, including Certification of Construction Completion for the impoundment and related improvements, and related supporting documents identified in this permit, the current landfill operation permit shall be modified to allow the operation of the new impoundment and related improvements.

2. **Permit Modifications.** Any construction subject to Department Solid Waste regulations not previously approved as part of this permit shall require a separate Department permit unless the Department determines a permit modification to be more appropriate, or unless otherwise approved in writing by the Department. Permits shall be modified in accordance with the requirements of 62-4.080, F.A.C. A modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review by the Department is considered a substantial modification.

3. **Permit Renewal.** No later than one hundred eighty (180) days before the expiration of the Department Permit, the permittee shall apply for a renewal of a permit, if necessary for continuing related activities, on forms and in a manner prescribed by the Department, in order to assure conformance with all applicable Department rules. Permits shall be renewed at least every five years as required by F.A.C. 62-4.070(4).

4. **Construction Schedule and Progress Report.** No later than two (2) weeks after the pre-construction conference, the owner or operator shall submit a construction schedule which includes estimated dates for related solid waste construction activities to the Department. The Engineer of Record or another qualified professional engineer shall make periodic inspections during construction to ensure that design integrity is maintained. An updated construction schedule and progress report shall be submitted to the Department monthly. Progress reports shall include a description of deviations from approved plans and specifications. Field changes shall be noted on construction plans kept at the project site. The Department shall be notified at least one week in advance of beginning liner installation.

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SPECIFIC CONDITIONS:

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5. **Quality Assurance.** The construction quality assurance plan shall provide personnel with adequate information to achieve continuous compliance with the construction requirements. The plan shall include or refer to specifications and construction methods which use established engineering practices for construction and provide for quality control testing procedures and sampling frequencies, pursuant to F.A.C. 62-701.400(7) and (8). Sampling and testing shall be conducted by trained personnel during construction and after construction completion. Such personnel will be under the direction of the construction quality assurance professional engineer, to assure the project will comply with the standards. The engineer or his designee shall be on-site at all times during construction to monitor construction activities.

6. **Laboratory and Field Testing Requirements.** Field testing during the construction activities shall be conducted under the direct supervision of the Certifying Engineer or his designee representing the owner. A laboratory experienced in the testing of geosynthetics, independent of the liner manufacturer and installer, shall perform the required conformance testing and testing of seam shear and peel strength.

7. **Certification of Construction Completeness.** Within sixty (60) days after the specified construction has been completed for each part completed during a construction period, the following activities shall be completed:

a. The owner or operator shall submit a Certification of Construction Completion, Form 62-701.900(2), signed and sealed by the responsible professional engineer for the construction to the Department for approval, and shall arrange for Department representatives to inspect the construction in the company of the permittee, the engineer, and the facility operator.

b. The owner or operator shall submit Record Drawings showing all changes (i.e. additions, deletions, revisions to the plans previously approved by the Department including site grades and elevations). The Record Drawings shall include, but not be limited to, details such as the as-built elevations of the excavated areas, top and bottom of the liner system, piping, pumps and controls.

c. The owner or operator shall submit a narrative indicating all changes in plans and the cause of the deviations and certification by the design engineer to the Department.

d. The engineer of record shall provide a report to verify conformance with the project specifications and applicable requirements of F.A.C. Rule 62-701.400(7) and (8). The report including all testing results for the entire project shall be submitted to the Department along with the completion of construction documents.

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PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

PERMIT NO.: 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

**DRAFT**

**SPECIFIC CONDITIONS:**

8. **Control of Nuisance Conditions.** The operating authority shall be responsible for the control of odors and fugitive particulates arising from the construction. Such control shall minimize the creation of nuisance conditions on adjoining property. If a complaint is received from the general public concerning activities regulated by this permit, and the Department or EPCHC personnel confirms that the complaint is based on a violation of the standards and criteria applicable to the permittee pursuant to this permit, then the permittee must take immediate corrective action to abate the violation.

9. **Facility Maintenance and Repair.** If there is any damage to any portion of the site facilities regulated by this permit or failure of any portion of the associated systems including monitor wells and piezometers, and such damage or failure may adversely affect the continued compliance with this permit, then the permittee shall **immediately (within 24 hours)** notify the Department and EPCHC explaining such occurrence and remedial measures to be taken and time needed for repairs. Written detailed notification shall be submitted to the Department and EPCHC **within seven (7) days** following the occurrence.

10. **Professional Certification.** Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.), Florida Statutes, applicable portions of permit applications 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.

11. **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.

12. **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 date of permit expiration and renewal deadlines. It is a violation of this permit for failure to comply with all conditions and deadlines.

Executed in Tampa, Florida

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

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Deborah A. Getzoff  
Director of District Management  
Southwest District

PERMITTEE: Hillsborough County  
c/o Mr. Daryl Smith

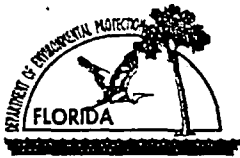
PERMIT NO.: 35435-005-SC  
Southeast County Landfill  
Surface Impoundment - Pond B

DRAFT

ATTACHMENT 1

SPECIFIC CONDITION	SUBMITTAL DUE DATE	REQUIRED ITEM
4.	2 weeks after pre-construction conference	Submit construction schedule
4.	Monthly	Submit updated construction schedule and progress report.
7.	Within 60 days after construction is complete	Submit Certification of Construction Completion, Arrange for inspection, submit Record Drawings, submit narrative describing all deviations.

DRAFT



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

DEP Form # 62-701.900(2)
Form Title Certification of Construction Completion
Effective Date May 19, 1994
DEP Application No. _____
(Filled by DEP)

## Certification of Construction Completion of a Solid Waste Management Facility

DEP Construction Permit No: \_\_\_\_\_ County: \_\_\_\_\_

Name of Project: \_\_\_\_\_

Name of Owner: \_\_\_\_\_

Name of Engineer: \_\_\_\_\_

Type of Project: \_\_\_\_\_

Cost: Estimate \$ \_\_\_\_\_ Actual \$ \_\_\_\_\_

Site Design: Quantity: \_\_\_\_\_ ton/day Site Acreage: \_\_\_\_\_ Acres

Deviations from Plans and Application Approved by DEP: \_\_\_\_\_

Address and Telephone No. of Site: \_\_\_\_\_

Name(s) of Site Supervisor: \_\_\_\_\_

Date Site inspection is requested: \_\_\_\_\_

This is to certify that, with the exception of any deviation noted above, the construction of the project has been completed in substantial accordance with the plans authorized by Construction

Permit No.: \_\_\_\_\_ Dated: \_\_\_\_\_

Date: \_\_\_\_\_  
Signature of Professional Engineer



## SCS ENGINEERS

3012 U. S. Highway 301 N.,

Suite 700

Tampa, FL 33619

(813) 621-0030

Fax (813) 623-6757

SCS ENGINEERS

facsimile transmittal

To: Kim Ford

Fax:

744-6125 (061)

From: Sheila Carpenter-van Dijk

Date:

April 25, 2001

Re: Spray Nozzles and Wind

Pages:

4, including this cover

CC:

Project  
No.

09200020.11

☐ Urgent☐ For Review☐ Please Comment☒ Please Reply☐ Please Recycle

## Notes:

Kim, Please call me when you get this.

Sheila



150°, 170° Metal

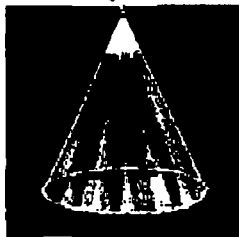


180° Metal

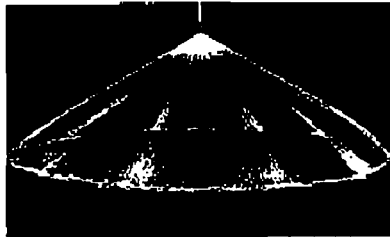


50° Metal

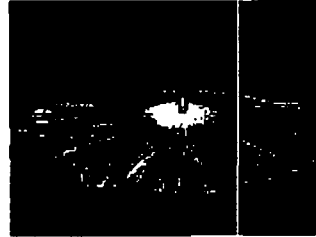
TF 24 N



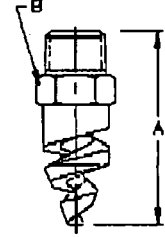
Hollow Cone 50° (N)



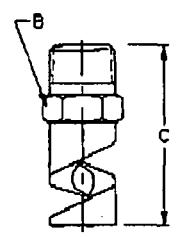
Hollow Cone 120° (W)



Hollow Cone 180° (XW)



50°, 120°



180°

**TF Hollow Cone Flow Rates and Dimensions**

Hollow Cone, 50° (N), 60° (V), 90° (M), 120° (W), and 180° (XW) Spray Angles, 1/4" to 4" Pipe Sizes

Male Pipe Size	Nozzle Number	Available Spray Angles					K Factor	GALLONS PER MINUTE @ PSI												Operation above 60 PSI or recom. K1 PTFE		High PSI or variation recom. for Metal Only		Approx. (in.)		Dim. (in.) for			Wt. (oz.) 180° Metal Plus.
		50°	60°	90°	120°	180°		5 PSI	10 PSI	20 PSI	30 PSI	40 PSI	50 PSI	60 PSI	80 PSI	100 PSI	200 PSI	400 PSI	Free Orif. Dia.	Pass. Dia.	Metal Only* A B C								
1/4	TF8	50°	60°	90°	120°	180°	0.221	0.496	0.70	0.99	1.21	1.40	1.57	1.71	1.88	2.21	4.13	2.48	0.08	0.08	1.68	0.58		1.25	0.95				
	TF8	50°	60°	90°	120°	180°	0.471	0.919	1.30	1.84	2.25	2.60	2.91	3.18	3.60	4.11	5.87	12.2	0.13	0.13	1.88	0.58	1.88						
	TF10	50°	60°	90°	120°	180°	0.632	1.41	2.00	2.83	3.48	4.00	4.47	4.90	5.66	6.82	8.94	12.8	0.16	0.13	1.88	0.58	1.88						
3/8	TF12	50°	60°	90°	120°	180°	0.449	2.12	3.00	4.24	5.20	6.08	6.71	7.35	8.40	9.49	18.4	19.0	0.19	0.13				1.75	0.25				
	TF14	50°	60°	90°	120°	180°	1.39	2.88	4.05	5.73	7.01	8.10	9.05	9.92	11.5	12.8	18.1	26.6	0.22	0.13	1.68	0.89	1.68						
	TF16	50°	60°	90°	120°	180°	1.88	3.75	5.30	7.50	9.18	10.8	11.9	13.0	15.0	18.8	23.7	33.5	0.25	0.13									
1/2	TF20	50°	60°	90°	120°	180°	2.61	5.58	8.25	11.7	14.5	16.5	18.4	20.2	23.5	28.1	36.9	52.2	0.21	0.13				3.00	0.50				
	TF24	50°	60°	90°	120°	180°	3.61	8.52	12.1	17.0	20.9	24.1	26.9	29.5	34.1	39.1	53.9	76.2	0.35	0.18	2.50	0.88	2.38						
	TF28	50°	60°	90°	120°	180°	5.22	11.7	16.5	23.5	28.6	33.0	36.9	40.4	46.7	52.2	73.8	104	0.44	0.19									
3/4	TF32	50°	60°	90°	120°	180°	6.84	14.8	21.0	28.7	38.4	42.0	47.0	51.4	59.4	68.4	93.9	133	0.50	0.19	2.75	1.13	3.00	3.00	1.00				
	TF40	50°	60°	90°	120°	180°	10.6	23.7	33.5	47.4	58.0	67.0	74.8	82.1	94.8	108	150	212	0.83	0.25									
	TF48	50°	60°	90°	120°	180°	15.0	33.6	47.5	67.2	82.3	95.9	106	116	134	150	212	300	0.76	0.25	1.58	0.58	1.58						
1	TF56	50°	60°	90°	120°	180°	20.4	45.6	64.5	91.2	112	129	144	158	182	204	288	408	0.88	0.31				30.0	6.00				
	TF64	50°	60°	90°	120°	180°	28.7	59.7	84.5	120	146	169	188	207	239	287	378	534	1.00	0.31	2.00	0.58	4.28						
	TF72	50°	60°	90°	120°	180°	30.4	67.9	98.0	136	165	192	215	236	272	304	428	607	1.13	0.31									
2	TF88	50°	60°	90°	120°	180°	44.3	98.0	140	198	242	280	313	343	396	445	628	885	1.28	0.44	5.83	2.50	6.88	45.0	8.00				
	TF96	50°	60°	90°	120°	180°	55.9	125	177	250	306	354	395	433	500	566	791	1120	1.50	0.44	8.08	2.50	7.00						
3	TF112	50°	60°	90°	120°		81.0	181	258	362	443	512	572	627	724	810	1150	1620	1.75	0.56				114	20.0				
	TF128	50°	60°	90°	120°		107	229	339	480	588	679	759	831	960	1070	1510	2150	2.00	0.56									
4	TF160	50°	60°	90°	120°		166	371	525	742	900	1050	1170	1290	1488	1660	2350	3320	2.50	0.63	10.1	4.50		168	27.0				

Flow Rate (GPM) =  $K\sqrt{PSI}$ 

\*Dimensions are for bar stock, cast sizes may vary.

1.00 for 180°

1.83 for 180°

Standard Materials: Brass, 316 Stainless Steel, PVC, Polypropylene and PTFE (Poly. not available for TF6 &amp; TF8). See chart on page 17 for complete list.

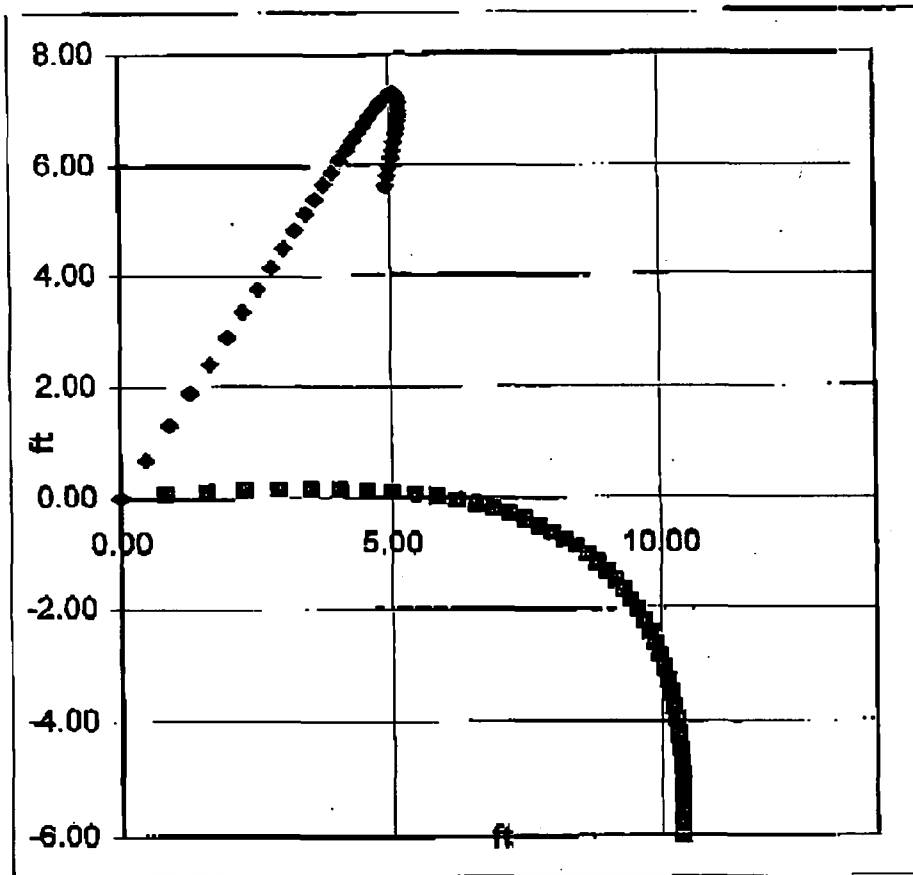
TF 24 150° available in Factory Mutual approved brass

**BETE**

Technical Services Department

SCS Engineers  
Application #001028  
TF24N at 20 psi

Spraying 30 degrees above horizontal into 7 mph wind



nozzle orientation 30°  
gas orientation 180°  
gas speed 10.3 ft/s  
gas temperature 59 °F  
gas pressure 14.696 Psia

wind

Reference #:	001028	Date:	11/27/2000
<b>BETE</b>		To:	SHEILA C. J. J. J.
Technical Services		Company:	SCS ENGINEERS
FAX #:	(413) 772-5729		
Phone #:	1-800-890-0860 ext. 183		
Attn:	Eric Rantanen	FAX #:	813 623 6757
Page	1 of 3		

**BETE**

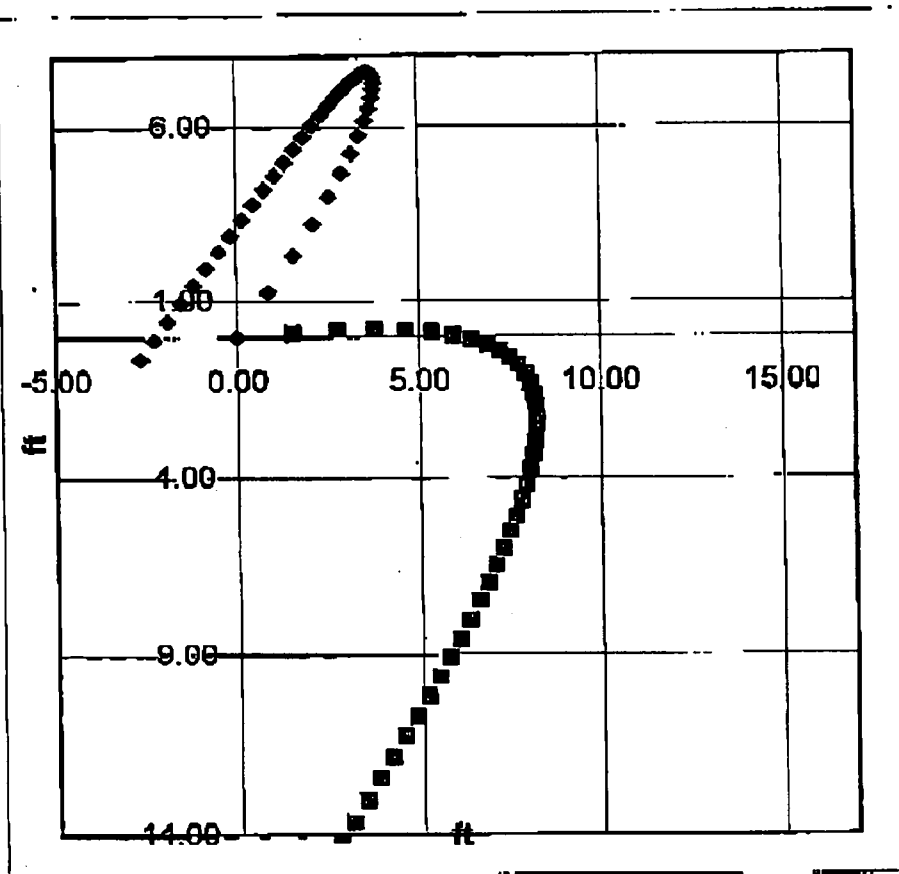
Technical Service Department

SCS Engineers

Application #001028

TF24N at 20 psi

Spraying 30 degrees above horizontal into 10 mph wind



nozzle orientation 30°  
 gas orientation 180°  
 gas speed 14.7 ft/s  
 gas temperature 59 °F  
 gas pressure 14.696 Psia

Reference #:	001038	Date:	12/04/2000
<b>BETE</b> Technical Services		By: <u>Shirley Casanova, D. C.</u>	
FAX #:	(413) 772-8725	Company:	<u>SCS Engineers</u>
Phone #:	1-800-830-0860 ext. 185	FAX #:	<u>813 623 6757</u>
Attn:	Eric Rantanen		
Page	1 of 2		
Page	OF		



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129-671 <22> QRL

JAN/26/00 00:00

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KBF

129-671 <20> QRL

JAN/26/00 00:00







SE LANDFILL  
HILLSBOROUGH COUNTY

4/25/01  
KBF

129-671 <19> ORL

JAN 26/00 00:00

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Hills Co  
4/25/01

129-671 <23> ORL

JAN 26/00 00:00

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HILLSBOROUGH COUNTY

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KBF

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Hills Co  
4/25/01

129-671 <25> ORL

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SE LANDFILL  
HILLSBOROUGH COUNTY

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KBF

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Hills Co  
4/25/01

129-671 <24> ORL

JAN 26/00 00:00

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HILLSBOROUGH COUNTY

4/25/01  
KBF

Not

Set 1

K. Kond

4/25/01

Permitting  
[✓]

proposed New Lines part

OBSERVED only empty field in  
AREA of proposed ponds. DROVE on TOP  
AND OBSERVED SPRAY IRRIGATION SYSTEM.  
LTP OUT OF SERVICE FOR REPAIRS AS PER  
WATER MASTER - ~~NOT~~ SPRAY PATTERN.  
FOR IRRIGATION IS 22 80' RADIUS

Fill out the above documenting all inspections of facilities for permitting and/or construction QA/QC purposes. Please place in my basket within 3 days of inspections.

## SCS ENGINEERS

April 24, 2001  
File No. 09200020.21

Mr. Kim B. Ford, P.E.  
Florida Department of Environmental Protection  
Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

APR 24 2001

SOUTHWEST DISTRICT  
TAMPA

Subject: Southeast County Landfill (SCLF) – Effluent/Leachate Storage Pond  
Pending Permit No.: #35435-005-SC, Hillsborough County

Dear Mr. Ford:


As discussed during our telephone conversation of April 23, 2001, on behalf of the Hillsborough County Solid Waste Management Department (HCSWMD), SCS Engineers (SCS) submits the attached Leachate Management Plan (LMP) for the Southeast County Landfill. For clarity, SCS recompiled the LMP in its entirety and revised the submittal date to April 24, 2001. Please discard the LMP dated March 2001 with revision dated April 16, 2001. The attached LMP is included as replacement for those submitted with the permit application and subsequent responses.

In addition, attached find sheet 4 of 5 of the construction drawings for the subject permit. This sheet was revised to change the designation of Valves No. 6 and 7. The attached drawing is included as replacement for sheet 4 of 5 as submitted with the responses dated March 7, 2001.

Please do not hesitate to call if you have any questions.

Very truly yours,

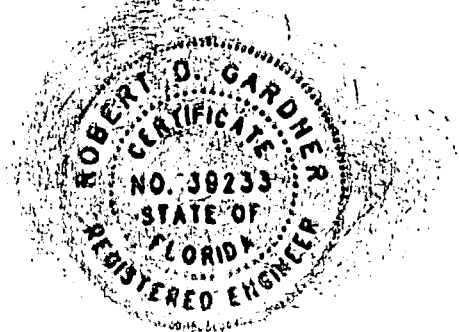
  
Larry E. Ruiz, Assoc. AIA  
Project Manager  
SCS ENGINEERS

  
Robert B. Gardner, P.E., D.E.E.  
Vice President  
SCS ENGINEERS

LER/RBG:scv

attachments

cc: Patricia Berry, HCSWMD  
Bob Butera, FDEP-Tampa  
Paul Shipfer, EPC



**Superior Client Service****SCS ENGINEERS**3012 U. S. Highway 301 N., Suite 700  
Tampa, FL 33619  
(813) 621-0080  
Fax (813) 623-6757**SCS ENGINEERS****facsimile transmittal**

To:	<u>Kim Ford</u>	Phone:	<u>744-6100</u>
Company:	<u>FDEP</u>	Fax:	<u>744-6125</u>
From:	<u>Larry</u>	Date:	<u>4/24/01</u>
Re:	<u>LMP</u>	Pages:	<u>3</u>
cc:		Project No.	<u>09200020.11</u>

☐ Urgent☒ For Review☐ Please Comment☒ Please Reply☐ Please Recycle

Notes:

Larry

**CONTENTS (Continued)****Attachments**

- A Lift 7 – Phases V and VI Sequence Drawings
- B Settlement Data Form
- C Facility Inspection and Evaluation Forms
- D Leachate Balance Report Forms

**FIGURES**

<u>Figure</u>		<u>Page</u>
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3-1	Location of Irrigation Sprinkler Reels .....	3-3
4-1	Leachate Management System Schematic.....	4-2
4-2	Location of Valves.....	4-8
5-1	Pore Pressure Versus Depth Relationship at 1.3 Years .....	5-3
5-2	Pore Pressure Versus Depth Relationship at 6.7 Years. ....	5-4
6-1	Leachate Depth Hydrograph (1997) .....	6-3
6-2	Leachate Depth Hydrograph (1998), SELF .....	6-4
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5-1	Leachate Collection and Removal System Analysis, Southeast County Landfill .....	5-2
6-1	Leachate Depths and Quantity Removed.....	6-1

The Water Balance Report Form will continue to be completed and submitted to the FDEP and EPC by the 15<sup>th</sup> of the month following the monthly reporting period. The following data is recorded daily:

- Effluent sprayed in gal/day.
- Rainfall onsite in inches/day and time of day.
- Observed runoff influent to retention areas as (yes/no) time of day of inspection.

### **3.3.2 Supplemental Leachate and Effluent Evaporation via Truck-Mounted Spraying**

Evaporation will be employed as a supplemental method to dispose of leachate. The supplemental evaporation of leachate involves spraying small quantities of leachate from a spray bar mounted on the rear of a tank truck onto active-fill areas of the landfill. This approach has been used successfully at the SCLF since 1984. The advantages of this method are the reduction of leachate by evaporation, the promotion of the decomposition of organic matter in the landfilled refuse, and dust control.

The HCSWMD will monitor the rate of application, soil moisture conditions, and the specific landfill areas used so that this leachate disposal method does not generate runoff. Leachate spray evaporation may be applied under the following conditions:

- Leachate may only be sprayed on active-fill areas, including the working face, and areas with the required 6 inches of initial cover.
- Leachate may not be sprayed on areas with intermediate or final cover, seeded or unseeded.
- The maximum grade leachate may be sprayed on is 10H:1V slope. Areas within 150 feet of a 4H:1V or steeper sideslope may not be sprayed on. At all times, areas receiving leachate must be controlled to prevent leachate runoff from entering the stormwater system.
- Leachate may not be sprayed during a rainfall event.
- The tank truck spray bar method maximizes evaporation. The application rate of leachate will be such that leachate does not accumulate on the landfill surface, nor infiltrate quickly into the covered refuse. It is evaporation that is the main goal of this leachate disposal method, rather than the actual recirculation of leachate.
- Leachate should not be sprayed at the end of the day on the initial cover of the working face or other areas. Spraying should be done early in the morning after any dew evaporates and continue until early afternoon or until all available areas have been utilized.

Revised April 24, 2001

The HCSWMD will continue evaporating leachate and effluent in full conformance with Chapter 62-701, FAC. The HCSWMD will continue to notify the FDEP of all evaporated quantities in the monthly water balance reports.

### **3.3.3 Supplemental Effluent Evaporation at Pond B**

The HCSWMD plans include a new 0.6 acre, 266,000 gallon effluent/leachate storage pond, which is referred to as Pond B, adjacent to the existing effluent storage pond (Pond A).

Pond B is designed with an upper and a lower 60-mil HDPE geomembrane between which an HDPE geonet is installed. The subbase for the lower geomembrane consists of six inches of soil with a saturated hydraulic conductivity of  $1 \times 10^{-2}$  centimeters per second, or less, installed over the on site soil cleared of vegetation and graded. A spray evaporation system is designed around the perimeter of the pond. The spray evaporation system consists of 30 nozzles, with an estimated flow capacity of 17 gallons per minute per nozzle and a 510 gallon per minute pump.

The operational constraints associated with the spray evaporation system are discussed in Section 4.9. In general, the HCSWMD operates the system manually, and only during the hours the landfill is open. The spray evaporation system will not be operated during windy conditions (i.e., over 10 miles per hour) to prevent overspray outside to limits of the pond liner system.

### **3.4 SCHEDULE FOR MAINTENANCE OF THE LCRS**

The SCLF facilities are inspected daily. Maintenance of the LCRS is conducted on an as-needed basis. If necessary, this LMP maintenance schedule will be modified to reflect permit conditions. On October 28, 1998, the HCSWMD performed the jet cleaning of the LCRS in Phases V and VI. At the same time, the HCSWMD conducted a video inspection of the LCRS in Phases V and VI and found the system to be performing adequately.

## SECTION 6

### MONITORING

Leachate depth and phosphatic clay settlement records continue to be maintained on site and are reported on a monthly basis to FDEP and the EPC. Copies of the Settlement Data form, and Facility Inspection and Evaluation forms are included in Attachments B and C. Leachate Balance Report Forms modified for Pond B are included in Attachment D.

Leachate monitoring will continue as outlined in the LMP. The piezometer will continue to be used to monitor the leachate depth over the liner in Phase IV and the level indicator of PPS-B will monitor the leachate depth in the SCLF. The HCSWMD will monitor both locations until it can be demonstrated that the LMP goals, as outlined in Sections 6.1 and 6.2, can be achieved by maintaining the proposed levels at PPS-B.

To facilitate monitoring operations and gather accurate data, the HCSWMD installed flow meters to quantify leachate removal volumes at the following locations:

- PPS-A
- Dewatering system in Phase IV
- Spray irrigation system
- Truck bypass at the LTRF
- Truck bypass at the Effluent Pond (Pond B)

Table 6-1 shows leachate depth in the sump area of Phase IV and total leachate removed from the landfill in data collected from January 1995 through December 2000.

**TABLE 6-1. LEACHATE DEPTHS AND QUANTITY REMOVED**

Monitoring Locations	1995	1996	1997	1998	1999	2000
Phase IV Piezometer (average inches)	58.6	35.9	23.4	25.2	30.8	19.5
Total Leachate Removed (million gallons)	29.3	28.1	26.3	31.2	33.7	23.2

#### 6.1 PHASE IV MONITORING

The piezometer in Phase IV will continue to be used to monitor the leachate depth over the liner in Phase IV until it can be demonstrated that the LMP goals can be maintained by maintaining the proposed levels at PPS-B as noted in the next section. After the demonstration is completed,

Revised April 24, 2001



the HCSWMD may elect to remove the piezometer in Phase IV. At that time, the leachate head over the liner will continue to be monitored at PPS-B in Phase VI. The performance of the LCRS will be evaluated on a daily basis. The evaluation and record keeping forms will be revised as operating conditions change. The action criteria are included on the daily evaluation form per the following conditions:

- Normal operation will be obtained with leachate depth over the liner between 12 inches and 24 inches. The HCSWMD will achieve this condition in April or May of each year and will strive to maintain this condition. If this condition is not achieved during the month of April or May of each year, the HCSWMD will evaluate the LCRS performance and will provide a report with recommendations to the FDEP and EPC.
- High level operation will be obtained with leachate depth over the liner between 24 inches and 30 inches. This condition may be maintained for several months each year but will not exceed 30 inches during routine landfill operations. For this condition, accelerated leachate removal may be necessary.

These conditions were developed from hydrographs produced by the Hydraulic Evaluation of Landfill Performance (HELP) model as described in Section 5 of the LMP. Figures 6-1 through 6-5 present yearly leachate depth hydrographs for 1997 through 2001 respectively. These conditions will ensure that the system is managed so that the actual head of leachate over the liner is maintained at 12 inches or less (i.e., taking into account the pore pressures in the phosphatic clays during consolidation).

## 6.2 PHASE VI MONITORING

As Phases V and VI are loaded with refuse, settlement will continue in these areas to create an ultimate low point in Phase VI. The settlement calculations by Ardaman for the landfill liner system, presented in the original permit application, are still valid. PPS-B was placed in the projected low point and is the primary leachate collection point in the SCLF. PPS-B was designed to maximize the performance of leachate collection and removal system by allowing unimpeded flow of leachate into the sump.

PPS-B is equipped with a level indicator located at the control panel near FPS-A. The HCSWMD monitors the level on a daily basis; Attachment C presents the daily evaluation report form that is used. Maintaining the operation of the PPS-B such that the leachate level in the vault does not exceed 24 inches from bottom will provide reasonable assurance that the SCLF will maintain a leachate head (i.e., effective head taking into account consolidation pore pressures in the phosphatic clays after consolidation) over the liner of 12 inches or less during routine landfill operation.

Revised April 24, 2001

**ATTACHMENT B**  
**SETTLEMENT DATA FORM**

**ATTACHMENT D**  
**LEACHATE BALANCE REPORT FORMS**

**SCS ENGINEERS**TO FDEPDATE April 16, 2001Solid Waste SectionJOB NO. 09200020.213804 Coconut Palm DriveATTENTION Mr. Kim FordTampa, FL 33619Re: Southeast County Landfill

WE ARE SENDING YOU

Effluent/Leachate Pond Permit Responses

✓ Attached Under separate cover via

Shop drawings

Prints

Copy of letter

Change Order

The following items:

Plans

Samples

Specifications

**D.E.P.****APR 16 2001****Southwest District Tampa**

COPIES	DATE	DESCRIPTION
4	April 13, 2001	Leachate Management Plan Revised pages: Cover page, Table of Contents, Pages 2-1, 3-1, 3-4, 3-5, 3-6, 4-3, 4-4, 4-5, 4-6, 4-7, 5-2, 7-1; Daily Field Data Entry Form, Table 1 and Table 2 (Appendix D); Figures 1-1, 4-1, and 4-2. Signed and sealed by Robert B. Gardner, April 16, 2001
4	February 2001	Revised drawings 1/5 through 5/5, signed and sealed by Robert B. Gardner, April 16, 2001

THESE ARE TRANSMITTED as check below:

For approval	Approved as submitted	Resubmit	Copies for approval
✓ For your use	Approved as noted	Submit	Copies distribution
As requested	Returned for corrections	Return	Corrected prints

For review and comment

FOR BIDS DUE

19

PRINTS RETURNED AFTER LOAN TO US

REMARKS

Kim,

One original is included for Mr. Bob Butera.

Please replace the pages, forms, and figures in the Leachate Management Plan dated March 2001 with the attached pages, forms, and figures. Please discard previous Southeast County Landfill Effluent/Leachate Storage Pond Drawings.

COPY TO FileSIGNED: Sheila Carpenter-van Dijk*If enclosures are not as noted, kindly notify us at once.*

## SCS ENGINEERS

April 6, 2001  
File No. 09200020.21

Mr. Kim B. Ford, P.E.  
Florida Department of Environmental Protection  
Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

**RECEIVED**  
**APR 09 2001**  
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SOUTHWEST DISTRICT

Subject: Southeast County Landfill - Effluent/Leachate Storage Pond  
Pending Permit No.: #35435-005-SC

Dear Mr. Ford:

This letter confirms that SCS Engineers (SCS) is in the process of obtaining additional information and clarifications to the subject permit as requested by the Florida Department of Environmental Protection (FDEP). Specifically, the FDEP requested revisions to the Leachate Management Plan and to the drawings of the permit application as faxed to SCS on April 4 and 5, 2001. We expect to provide the additional information and clarifications to you by April 15, 2001.

Please call if you have any questions.

Very truly yours,

  
Larry E. Ruiz, Assoc. AIA  
Project Manager



Robert B. Gardner, P.E., D.E.E.  
Vice President  
SCS ENGINEERS

RBG/LER:scv

cc: Patricia V. Berry, HCSWMD



Environmental Consultants

3012 U.S. Highway 301 North  
Suite 700  
Tampa, FL 33619-2242813 621-0080  
FAX 813 623-6757**SCS ENGINEERS**

April 6, 2001

File No. 09200020.21

Mr. Kim B. Ford, P.E.  
Florida Department of Environmental Protection  
Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Subject: Southeast County Landfill - Effluent/Leachate Storage Pond  
Pending Permit No.: #35435-005-SC


Dear Mr. Ford:

This letter confirms that SCS Engineers (SCS) is in the process of obtaining additional information and clarifications to the subject permit as requested by the Florida Department of Environmental Protection (FDEP). Specifically, the FDEP requested revisions to the Leachate Management Plan and to the drawings of the permit application as faxed to SCS on April 4 and 5, 2001. We expect to provide the additional information and clarifications to you by April 15, 2001.

Please call if you have any questions.

Very truly yours,

  
Larry E. Ruiz, Assoc. AIA  
Project Manager

  
Robert B. Gardner, P.E., D.E.E.  
Vice President  
SCS ENGINEERS

RBG/LER:scv

cc: Patricia V. Berry, HCSWMD

# Florida Department of Environmental Protection

## Memorandum

**TO:** Kim Ford, P.E.  
**FROM:** John Morris, P.G. *JRM*  
**DATE:** April 5, 2001  
**SUBJECT:** Southeast County Landfill, Class I Landfill  
Effluent/Leachate Storage Pond  
Pending Permit No. 35435-005-SC, Hillsborough County  
**cc:** Robert Butera, P.E.

---

I have reviewed portions of the responses provided to the request for additional information that were received March 7, 2001, that deal with leachate and treated leachate effluent handling. The submittals reviewed include:

- *Response to Request for Additional Information, Southeast County Landfill, Effluent/Leachate Storage Pond*, prepared by SCS Engineers, dated March 7, 2001.
- *Leachate Management Plan, Southeast County Landfill, Hillsborough County, Florida*, prepared by SCS Engineers, revised March 2001.

The comment numbers used herein are consistent with my previous memorandum dated February 1, 2001. I anticipate no additional requests for additional information provided comment No. 4 is addressed.

### **CONSTRUCTION PERMIT APPLICATION EFFLUENT/LEACHATE STORAGE POND, SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

#### **Section K – Landfill Operations Requirements**

1. It is my understanding that the Operations Plan is not related to the issuance of the construction permit for Pond B, but that its modification to include Pond B will be addressed in the pending renewal of the operating permit for the facility. No additional information is requested.

### **LEACHATE MANAGEMENT PLAN, SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

2. The revision dates used throughout the Leachate Management Plan are noted. No additional information is requested.

#### **Section 4.3 – Temporary Wellpoint Dewatering System in Phase IV, Capacity 0 to 12,000 GPD**

3. The response that this issue will be addressed in the pending renewal of the operating permit for the facility is noted. No additional information is requested.

#### **Section 4.9.1 – Procedures for Effluent Storage and Evaporation in Pond B**

4. Please modify Table 1 (Leachate Water Balance Report Form) that is presented in Appendix D of the Leachate Management Plan by adding a note that describes how the depths of liquids stored in Pond A and Pond B are measured (see attached form).

#### **Section 4.9.2 – Procedures for Leachate Storage and Evaporation in Pond B**

5. The revisions to this section are noted. No additional information is requested.

*"Protect, Conserve and Manage Florida's Environment and Natural Resources"*

**MEMORANDUM – Southeast County Landfill, Effluent/Leachate Storage Pond**

**Pending Permit No. 35435-005-SC**

**Page 2 of 2**

**April 5, 2001**

Section 4.9.3 – Procedures to Resume Effluent Storage and Evaporation in Pond B

6. The revisions to this section are noted. No additional information is requested.

7. See comment No. 4 above.

Section 6.1 – Phase IV Monitoring

8. The response that this issue will be addressed in the pending renewal of the operating permit for the facility is noted. No additional information is requested.

Attachment

jrm



**TABLE I. LEACHATE BALANCE REPORT FORM**  
**OCTOBER 20** (Not to Include Pond B)  
**SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

I	II			III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX
Day	Area (acres)			Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Est. Depth Over Liner (in.)	Est. Depth Pump Sta. B (in.)	Flow Meter Dewater System (gal.)	Leachate Pumped to LTRF (gal.)	Leachate in 575K Tank (gal.)	Leachate Treated at LTRF (gal.)	Total Leachate Hauled (gal.)	Leachate Dust Cont./Evaporation (gal.)	Pond A Storage (gal.)	Pond B Storage (gal.)	Effluent Irrigation Evaporation (gal.)	Effluent Dust Cont./Evaporation (gal.)	Total Effluent Hauled (gal.)	Landfill Evaporation (gal.)
	final	active	int.																	
1	25.2	7	130.2	0.00	NR		NR	NR	10,030	44,070	NR	15,400	0	0	NR		0	0	0	0
2	25.2	7	130.2	0.00	2.8		19.5	46.1	10,030	44,070	254,000	15,400	48,000	0	98,000		0	0	0	0
3	25.2	7	130.2	0.01	3.1		19.0	45.1	9,760	62,060	245,000	16,100	72,000	6,000	113,000		38,556	0	0	35,600
4	25.2	7	130.2	0.00	2.8		18.5	42.2	9,670	80,900	230,000	17,100	54,000	0	98,000		21,321	0	0	17,100
5	25.2	7	130.2	0.00	2.6		18.0	41.4	9,420	82,650	238,000	16,800	60,100	6,200	88,000		45,356	0	0	41,200
6	25.2	7	130.2	0.01	2.0		18.0	42.7	9,580	73,200	238,000	18,500	60,200	3,100	162,000		0	0	0	2,500
7	25.2	7	130.2	0.00	2.2		18.0	30.7	10,020	82,450	247,000	7,800	42,400	0	70,000		0	0	0	0
8	25.2	7	130.2	0.00	NR		NR	NR	9,623	80,553	NR	0	0	0	NR		0	0	0	0
9	25.2	7	130.2	0.00	2.2		17.5	15.0	9,623	80,553	374,000	2,600	30,000	3,100	70,000		50,660	0	0	43,000
10	25.2	7	130.2	0.00	1.0		17.0	15.2	9,525	70,905	403,000	1,700	30,000	9,200	113,000		0	0	0	7,400
11	25.2	7	130.2	0.00	1.9		16.5	17.1	10,035	59,490	379,000	38,300	54,800	6,000	157,000		0	0	0	4,800
12	25.2	7	130.2	0.00	2.2		16.5	15.2	9,345	73,705	379,000	16,700	90,000	9,100	70,000		61,001	0	0	56,100
13	25.2	7	130.2	0.00	1.7		16.5	15.2	9,890	72,255	309,000	38,600	66,000	9,000	145,000		0	0	0	7
14	25.2	7	130.2	0.00	2.5		16.5	16.7	10,115	71,970	288,000	38,700	0	2,700	83,000		39,819	0	0	34
15	25.2	7	130.2	0.00	NR		NR	NR	10,173	73,450	NR	37,300	0	0	NR		0	0	0	0
16	25.2	7	130.2	0.00	3.1		16.5	18.2	10,173	73,450	348,000	37,300	24,200	8,800	113,000		54,466	0	0	50,600
17	25.2	7	130.2	0.00	2.8		16.5	18.4	9,440	80,670	333,000	42,100	55,100	3,000	98,000		39,002	0	0	33,600
18	25.2	7	130.2	0.00	2.0		16.5	18.4	9,370	77,415	367,000	2,600	36,000	9,200	162,000		0	0	0	7,400
19	25.2	7	130.2	0.00	2.0		16.5	18.8	9,540	69,735	365,000	0	54,000	15,000	162,000		0	0	0	12,000
20	25.2	7	130.2	0.00	2.0		16.5	21.8	9,280	70,110	369,000	0	30,000	8,800	162,000		0	0	0	7,000
21	25.2	7	130.2	0.00	2.0		16.5	17.8	9,340	71,520	408,000	0	12,000	0	162,000		0	0	0	0
22	25.2	7	130.2	0.00	NR		NR	NR	9,060	70,510	NR	0	6,000	0	NR		0	0	0	0
23	25.2	7	130.2	0.00	2.0		16.5	18.9	9,060	70,510	511,000	0	30,000	18,300	162,000		0	0	0	14,600
24	25.2	7	130.2	0.00	2.0		16.5	17.8	8,800	77,570	497,000	0	108,000	18,000	162,000		0	0	0	14,400
25	25.2	7	130.2	0.00	2.3		16.5	15.8	9,130	85,000	439,000	18,600	60,500	18,000	74,000		29,741	0	0	38,200
26	25.2	7	130.2	0.00	1.9		16.5	16.1	9,750	83,130	422,000	19,100	48,000	21,000	157,000		0	0	0	16,800
27	25.2	7	130.2	0.00	2.4		16.5	16.7	10,420	82,780	391,000	21,800	72,000	0	79,000		0	0	0	0
28	25.2	7	130.2	0.00	2.4		16.5	18.8	10,455	83,120	391,000	3,600	78,000	0	79,000		0	0	0	0
29	25.2	7	130.2	0.00	NR		NR	NR	10,763	74,160	NR	0	0	0	NR		0	0	0	0
30	25.2	7	130.2	0.00	2.4		16.0	18.5	10,763	74,160	453,000	0	18,000	0	79,000		0	0	0	0
31	25.2	7	130.2	0.00	2.5		16.0	18.4	11,030	73,750	489,000	4,900	54,000	12,000	83,000		0	0	0	9,600
<b>Total</b>				0.02					292,220	2,270,270		431,000	1,293,300	186,500			379,922	0	0	453,100
<b>Daily Average (See note 12)</b>					2.3		17.0	23.0	9,426	73,235	360,269	19,591	49,742	9,800	115,400					22,660
<b>Monthly Average (See note 13)</b>									9,426	73,235		13,903	41,719	6,000			12,300	0	0	14,620

**Notes:**

- NR = No Records, NA = Not Available.
- Column II, total active landfill area (Phases I-VI) is 162.4.
- Columns III and IV, field measured. Column III, Trace is less than 0.01 inches and is not included in total.
- Column VI, measured from depth in Phase IV Piezometer.
- Column VIII, PPS-B sensor reading plus 9 inches.
- Column VIII, XI, and XVI quantities from flow meters.
- Column IX, flow meter at PPS-A.
- Column X, calculated from depth in 575,000 gal. leachate tank.
- Columns XII, XIII, XVI, and XVII, quantities calculated from truck weight and flow meter.
- Column XIX, 80% of the daily values from Columns XII, XVI, and XVII.
- Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values.
- Daily average is calculated by dividing the total by the actual days measured in the month.
- Monthly average calculated by dividing the total by the number of days of the month.

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Apr 5 2001 9:00

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*Jobs  
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4/5/01*

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ENVIRONMENTAL PROTECTION

3804 Coconut Palm Drive  
Tampa, FL 33619-8318

**FAX**

Date:

*4/5/01*

Number of pages including cover sheet:

*6*

To:

*Larry Ruiz  
SES*

Phone:

*6210080*

Fax phone:

*6236757*

CC:

From:

*for Ford*

Phone:

*(813) 744-6100*

*x382*

Fax phone:

*(813) 744-6125*

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Tampa, FL 33618  
(813) 621-0080  
Fax (813) 623-6757

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## facsimile transmittal

To:	<u>KIM Ford</u>	Phone:	
Company:	<u>FDEP</u>	Fax:	<u>744-6125</u>
From:	<u>Larry Ruiz</u>	Date:	<u>4/4/01</u>
Re:	<u>Pond B</u>	Pages:	<u>20</u>
cc:		Project No.	<u>09200020-11</u>

☐ Urgent ☒ For Review ☒ Please Comment ☐ Please Reply ☐ Please Recycle

**Notes:**

Hello, here are the revisions. I will be at the landfill in the morning. If you have any comments, fax them to me and I will correct them when I return. Thanks  
Larry.

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## SECTION 2

### LEACHATE GENERATION PHASES I THROUGH VI

Precipitation falling on a landfill surface will run off, evaporate, evapotranspire, or infiltrate. The percentage of precipitation falling on a landfill surface that will travel each of these paths can be estimated by use of water balance methods. For the SCLF, water balance computations were calculated using the United States Environmental Protection Agency's (U.S. EPA) Hydrological Evaluation of Landfill Performance (HELP) computer model (Schroeder, Payton, McEnroe, and Sjostrom, 1988).

SCS conducted a water balance analysis on the phases of the SCLF to estimate the potential rate of leachate generation. The analysis incorporated climatological variables, landfill geometric variables (e.g., sideslopes), and operational variables (e.g., intermediate and final cover sequencing). The results from the HELP model were provided in Exhibit A of the responses to FDEP by SCS dated May 26, 1995 regarding the 1994 Operation Permit Renewal Application.

Operations at the SCLF typically include an active 5-acre cell where waste is placed, compacted, and covered daily with initial cover (includes the working face plus other areas with initial cover). Table 2-1 presents the summary of calculated leachate generation for Phases I through VI. SCS estimates that the SCLF has the potential to generate an average of 89,600 gallons per day (gpd) of leachate for the 162.2 acre operational area of Phases I - VI, or about 550 gallons per day per acre (gda). Table 2-1 also includes an estimated 50 gda of water generated from the consolidation of the phosphatic clay bottom liner system (Camp, Dresser, & McKee, 1983, p. 3-5), leachate generation resulting from treated effluent spray irrigation of 60,000 gpd, and truck mounted spray evaporation of 12,200 gpd (highest average reported in 1993).

The HELP model was used to analyze the following configurations for the entire landfill (i.e., Phases I-VI).

- Open phase.
- Working face.
- Intermediate soil cover with and without spray irrigation.
- Temporary clay capped slope.
- Geomembrane capping system on a 5 percent slope.

The final configuration of the SCLF, shown on Drawing 14 of the SCLF Operating Sequence Drawings dated August, 1994 by SCS, was modeled to estimate the leachate generation rate for the top slopes and sideslopes capped with a geomembrane system. Results indicate that an estimated rate of 12,000 gpd can be expected after final closure.

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### SECTION 3

## LEACHATE MANAGEMENT SYSTEM COMPONENTS

### 3.1 LEACHATE COLLECTION AND REMOVAL SYSTEM (LCRS)

The layout of the leachate collection system is presented in Figure 1-1. The LCRS has been constructed in accordance with the construction permits for Phases I through VI. Recent improvements to the system included the installation of additional leachate collection trenches in Phases V and VI filled with chipped tires (September 1998) for the purpose of improving the performance of the LCRS and provide additional redundancy in the system.

The as-built report and certification for Phases V and VI were submitted to the FDEP and EPC in March 1993. The certification of construction for the chipped tire trenches and PPS-B were submitted to the FDEP and EPC in December 1998. When Phases V and VI were activated in April 1999, the LCRS in Phases V and VI was connected to the Phases III and IV LCRS. Based on the current operational practices and leachate removal volumes at the SCLF, the active LCRS is operating efficiently consistent with the design.

### 3.2 PHASES V AND VI SEQUENCE

The configuration of Lift 7 meets the loading requirements established by Ardaman and Associates, Inc. for the SCLF. To clarify and facilitate the management of the different filling stages, Lift 7 has been divided into six intermediate lifts (i.e., 7A through 7F). The sequence drawings for Lift 7 is presented in Attachment A. Filling in Lift 7 began in April 1999 and solid waste has been placed in intermediate lifts 7A through 7D. As of the date of this report filling is occurring in Phase VI-Lift 7D.

The placement of Lifts 7E and 7F consists of filling the valley area between Phases V/VI and Phases III/IV. These lifts will overlap over Phases I, III, and IV. Filling will continue with Lift 7E – Cell A on the southeast corner of Phase VI. Filling will progress in a northerly direction across Phases III, V, and IV. At completion, Lift E will receive intermediate cover around the landfill perimeter slopes (6H:1V) and top slopes (30H:1V). Placement of refuse will continue in Lift 7F – Cell A in the middle of Phase III adjacent to the existing service haul road. Filling will progress in a westerly direction across Phases I, III, IV, and VI. At completion, Lift 7F will receive intermediate cover around the landfill perimeter slopes (6H:1V) and top slopes (30H:1V).

Landfilling will continue on Phase I Lift 8 as shown on Drawing No. 8 of the SCLF Operating Sequence Drawings dated August, 1994 by SCS.

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- The amount of irrigation in a given area can be easily adjusted utilizing reel speed to maximize the capacity of the system.

The operational sequence of the mobile reel irrigators is as follows:

- Before each irrigation event, the medium density polyethylene (PE) hose is stretched out with a vehicle (approximately 1,200 linear feet). This activity takes approximately 30 minutes per day.
- Once both PE hoses have been stretched out across the top of the SCLF, personnel turn on the irrigation pump(s) timer; one pump if the reels are operated sequentially, two pumps if the reels are being operated concurrently. The reels automatically reel back the PE hose at a preset rate (i.e., 300 feet per hour).
- At the end of the irrigation event, the timer turns off the irrigation pump(s) and the irrigation reels automatically return to their original position.

Specific Conditions of the current Operations Permit indicates that spray irrigation can occur under the following conditions:

- The permit conditions allow spray irrigation at a rate of 0.10 inch per application followed by two hours (waiting period) between each application for a maximum of 0.30 inch per day of effluent. Under no circumstances can effluent be allowed to discharge as runoff to adjacent stormwater systems or conveyance ditches. Effluent is not sprayed during weather conditions or in quantities that may cause runoff, surface seeps, wind-blown spray, or exceedance of limits of leachate head over the liner as described in Section 6.0 of the LMP. Ponding is prohibited.

Spraying can take place only when rainfall runoff into the onsite retention areas downgradient from the spray areas has terminated for 2 hours based on daily inspections of the influent point to each related retention area, or as follows, whichever is more restrictive:

- At least 4 hours after a rainfall of 3/4 inches or less, or
- At least 24 hours after a day of rainfall of 3/4 inches to 2-1/2 inches, or
- At least 48 hours after a day of rainfall of 2-1/2 inches or greater
- Spray irrigation of effluent may not be conducted within 100 feet of the landfill liner trench, on slopes steeper than 10 percent, nor on areas with permanent final cover.
- Spray irrigation of treated effluent can be conducted between the hours of 10:00 a.m. to 4:00 p.m.

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The Water Balance Report Form presented in Attachment B, will continue to be completed and submitted to the FDEP and EPC by the 15<sup>th</sup> of the month following the monthly reporting period. The following data is recorded daily:

- Effluent sprayed in gal/day.
- Rainfall onsite in inches/day and time of day.
- Observed runoff influent to retention areas as (yes/no) time of day of inspection.

### **3.3.2 Supplemental Leachate and Effluent Evaporation via Truck-Mounted Spraying**

Evaporation will be employed as a supplemental method to dispose of leachate. The supplemental evaporation of leachate involves spraying small quantities of leachate from a spray bar mounted on the rear of a tank truck onto active-fill areas of the landfill. This approach has been used successfully at the SCLF since 1984. The advantages of this method are the reduction of leachate by evaporation, the promotion of the decomposition of organic matter in the landfilled refuse, and dust control.

The HCSWMD will monitor the rate of application, soil moisture conditions, and the specific landfill areas used so that this leachate disposal method does not generate runoff. Leachate spray evaporation may be applied under the following conditions:

- Leachate may only be sprayed on active-fill areas, including the working face, and areas with the required 6 inches of initial cover.
- Leachate may not be sprayed on areas with intermediate or final cover, seeded or unseeded.
- The maximum grade leachate may be sprayed on is 10H:1V slope. Areas within 150 feet of a 4H:1V or steeper sideslope may not be sprayed on. At all times, areas receiving leachate must be controlled to prevent leachate runoff from entering the stormwater system.
- Leachate may not be sprayed during a rainfall event.
- The tank truck spray bar method maximizes evaporation. The application rate of leachate will be such that leachate does not accumulate on the landfill surface, nor infiltrate quickly into the covered refuse. It is evaporation that is the main goal of this leachate disposal method, rather than the actual recirculation of leachate.
- Leachate should not be sprayed at the end of the day on the initial cover of the working face or other areas. Spraying should be done early in the morning after any dew evaporates and continue until early afternoon or until all available areas have been utilized.

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The HCSWMD will continue evaporating leachate and effluent in full conformance with Chapter 62-701, FAC. The HCSWMD will continue to notify the FDEP of all evaporated quantities in the monthly water balance reports.

### **3.3.3 Supplemental Leachate and Effluent Evaporation and Storage at Pond B**

The HCSWMD plans to construct a new 0.6 acre, 266,000 gallon effluent/leachate storage pond, which will be referred to as Pond B, adjacent to the existing effluent storage pond (Pond A). Pond B will be constructed with a double, 60 mil, HDPE liner system. A spray evaporation system will be constructed around the perimeter of the pond. The spray evaporation system will consist of 30 nozzles, with an estimated flow capacity of 17 gallons per minute per nozzle and a 510 gallon per minute pump. The pond was designed to store either raw leachate or effluent from the LTRF. However, the pond will be used for effluent storage and evaporation. If the need for leachate storage arises, the HCSWMD will provide notification to the Florida Department of Environmental Protection (FDEP) prior to use of the pond for leachate. The prior notification will include reason(s) for leachate storage in the pond and the projected duration.

The operational constraints associated with this spray evaporation system are discussed in Section 4.9. In general, the HCSWMD will operate the system manually, and only during the hours the landfill is open. The spray evaporation system will not be operated during windy conditions (i.e., over 10 miles per hour) to prevent overspray outside to limits of the pond liner system.

### **3.4 SCHEDULE FOR MAINTENANCE OF THE LCRS**

The SCLF facilities are inspected daily. Attachment C presents the inspection and evaluation forms used at the SCLF. Maintenance of the LCRS is conducted on an as-needed basis. If necessary, this LMP maintenance schedule will be modified to reflect permit conditions. On October 28, 1998, the HCSWMD performed the jet cleaning of the LCRS in Phases V and VI. At the same, the HCSWMD conducted a video inspection of the LCRS in Phases V and VI and found the system to be in good condition.

#### **4.3 TEMPORARY WELLPOINT DEWATERING SYSTEM IN PHASE IV, CAPACITY 0 TO 12,000 GPD**

In July 1996, the HCSWMD completed construction of the temporary wellpoint dewatering system in Phase IV. The wellpoint dewatering system was designed to provide a supplemental leachate removal method so that the HCSWMD could bring the leachate depth in Phase IV to the depth outlined in the LMP. The wellpoint dewatering system consists of forty wellpoints installed in two parallel rows, spaced on 40-foot centers within the estimated sump area in Phase IV. The wellpoint dewatering is connected by discharge manifolds to a vacuum assisted dewatering pump. The leachate from the temporary dewatering system is pumped to PPS-B via a 3-inch diameter header pipe into the PPS-B alternate access pipe.

The temporary dewatering system was designed to remove the accumulated leachate in Phase IV. The wellpoint dewatering system will remain in place as long as needed to provide assurance that the leachate depth does not exceed the LMP goals. The HCSWMD plans to remove the wellpoint dewatering system prior to the beginning of waste filling in Phase VI Lift 7F. The HCSWMD may elect in the future to remove the wellpoint dewatering system prior to filling in Lift 7F if it can be demonstrated that the LMP goals can be maintained without the temporary dewatering system.

#### **4.4 MAIN LEACHATE PUMP STATION (MLPS), CAPACITY 240 GPM**

The MLPS consists of a 7-foot square, (inside dimension) below-grade concrete sump with dual submersible pumps (i.e., one operating and one stand by). From the MLPS, leachate is conveyed to the 575,000-gallon storage tank at the on-site LTRF. The pump in operation is set for a 24-hour operation cycle with the "on" float at 4 feet from the sump bottom and the "off" float at 2 feet from the sump bottom.

#### **4.5 STORAGE TANK, CAPACITY 575,000 GALLONS**

The leachate level in the storage tank is maintained to provide for the maximum storage capacity possible. The tank is maintained with an average low level of 6 feet or 180,000 gallons (3 days storage) to ensure enough leachate is available for the LTRF to operate without interruptions. When levels below 6 feet are reached in the tank, leachate hauling and recirculation are temporarily reduced or stopped. Similarly, an action level is established for high level of 11 feet (320,000 gallons) in the storage tank. A level of 11 feet provides for a remaining storage capacity in the tank of 180,000 gallons (3 days storage) to allow continuous operation of the SCLF pump stations. When levels are above 11 feet, treatment, hauling, and/or recirculation is increased.

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#### **4.6 LEACHATE TREATMENT AND RECLAMATION FACILITY AVERAGE CAPACITY 60,000 GALLONS PER DAY**

In December 1994, the HCSWMD constructed an on-site leachate treatment and reclamation facility (LTRF). The LTRF consists of a PACT carbon activated treatment system. The LTRF system is described in detail in the following documents:

- Section 4 of the Design Report Leachate Management System Hillsborough County Southeast Landfill by SCS dated July 10, 1991.
- Initial Operational Period Evaluation Report for the Leachate Treatment and Reclamation Facility, Southeast County Landfill Hillsborough County, Florida by SCS dated July 2, 1996.
- Evaluation of the Leachate Treatment and Reclamation Facility January through September, 1996, Southeast County Landfill Hillsborough County, Florida by SCS dated August 25, 1997.

Once the leachate has been treated, it is pumped through a 4-inch diameter single-walled HDPE pipe to the treated effluent holding basin (described below). From the holding basin, the treated effluent is pumped through the spray irrigation system and used to water the areas of the SCLF with fair grass cover that have not received final cover. Excess treated effluent is transported to two off-site County wastewater treatment plants.

#### **4.7 EFFLUENT STORAGE POND (POND A), CAPACITY 120,000 GALLONS**

The effluent storage pond (Pond A) receives treated leachate (effluent) from the LTRF. The pond is lined with 80-mil HDPE and provides for temporary effluent storage of 120,000 gallons plus 2 feet of freeboard. Using the existing staff gage in the pond, Pond A is maintained at a maximum depth of 4.5 feet (elevation 137.0) and a minimum depth of 6 inches. Effluent evaporation on the landfill, or off-site hauling is increased if levels in Pond A reach the maximum level of 4.5 feet during times when irrigation is not allowed. Similarly, if levels are below 6 inches then the irrigation, recirculation, and off-site hauling are temporarily reduced.

#### **4.8 IRRIGATION PUMP STATION, CAPACITY 250 GPM**

The irrigation pump station consists of a 5-foot square, (inside dimension) below-grade concrete sump with dual vertical turbine pumps (one operating and one stand by). From the irrigation pump station, effluent is conveyed to the spray irrigation system on the landfill. The pump in operation is set manually depending on weather conditions.

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#### **4.9 EFFLUENT/LEACHATE STORAGE POND (POND B), CAPACITY 266,000 GALLONS**

The effluent/leachate storage pond (Pond B) will provide an additional storage volume of 266,000 gallons. The pond is designed with one foot of storage for the 25-year, 24-hour storm and two feet of freeboard. Pond B will be primarily used for additional storage of effluent from the LTRF. If required, the pond may also be used for leachate storage. If the need for leachate storage arises, the HCSWMD will provide notification to the FDEP prior to use of the pond for leachate. The prior notification will include reason(s) for leachate storage in the pond and the projected duration.

Pond B will be lined with an upper and a lower 60-mil HDPE geomembrane between which an HDPE geonet will be installed. The subbase for the lower geomembrane will consist of six inches of soil with a saturated hydraulic conductivity of  $1 \times 10^{-5}$  centimeters per second, or less, installed over the on site soil which will be cleared of vegetation and graded.

##### **4.9.1 Procedures for Effluent Storage and Evaporation in Pond B**

Under normal operations, Pond B will be used for effluent storage and evaporation, the following valve settings and activities are needed (See Figure 4-2.):

1. To fill the empty Pond B with effluent, Valve P-1 remains open.
2. Open Valve P-3 to allow gravity flow from Pond A into Pond B.
3. Open Valve P-4 to allow spray evaporation in Pond B.

When the effluent in Pond B reaches three feet in depth, as noted on the staff gauge in the pond, the pump for the spray evaporation system may be activated. The spray evaporation system will only be operated manually and will be monitored for changing weather conditions. Overspray outside the limits of geomembrane will not be allowed.

The spray evaporation system will only be operated during the hours the landfill is open. Using the staff gauge in the pond, Pond B is maintained at a maximum depth of seven feet and a minimum depth of 12 inches.

If Pond B reaches the maximum level of seven feet, valve P-3 will be closed, and spray irrigation, pond evaporation and hauling will be increased.

#### **4.9.2 Procedures for Leachate Storage In Pond B**

If leachate storage is required, the following activities and valve settings are needed (See Figure 4-2):

1. Notify FDEP and EPC 24 hours prior. The notification must include reason(s) and projected duration.
2. Drain Pond B of effluent following steps 3 through 7 below. All Steps 3 through 7 must be completed prior to filling Pond B with leachate.
3. Close Valve P-1.
4. Close Valve P-3.
5. Close Valve P-4.
6. To pump the effluent back to Pond A,
  - (1) Open Valve P-5
  - (2) Open Valve P-6
  - (3) Start the evaporation pump at Pond B.
7. When Pond B is empty (6 inches depth on the bottom of the pond),
  - (1) Shut off the evaporation pump
  - (2) Close Valve P-5
  - (3) Close Valve P-6
- 8a. To fill Pond B with leachate coming from the LTRF, open Valve P-2.
- 8b. To fill Pond B with leachate coming from the landfill, close Valve P-11 and open Valve P-12.
9. When Pond B filling is completed (staff gauge depth of seven feet or less)
  - (1) Close Valve P-2
  - (2) Open Valve P-11
  - (3) Close Valve P-12

Maximum leachate depth in the pond is seven feet. If Pond B reaches the maximum level of seven feet, off-site hauling will be increased. **Spray evaporation of leachate is not allowed.**

#### **4.9.3 Procedures to Resume Effluent Storage and Evaporation in Pond B.**

Before Pond B is used again for effluent storage and evaporation, the following valve settings and activities are needed (See Figure 4-2):

1. Drain Pond B of leachate following steps 2 through 5 below.
2. Close Valve P-10
3. Close Valve P-13.
4. Open Valve P-5.
5. Open Valve P-7.
- 6a. To pump leachate to the truck loading station,
  - (1) Open Valve P-9
  - (2) Close Valve P-8
  - (3) Start the evaporation pump at Pond B.
- 6b. To pump leachate back to the 575,000 gallon tank,
  - (1) Open Valve P-8
  - (2) Close Valve P-9
  - (3) Start the evaporation pump at Pond B.
7. Pond B must be clean prior to resuming effluent storage. Pressure wash the geomembrane and pump out the wash water to the truck loading station to be hauled off site as leachate. If necessary, vac-clean the geomembrane.
8. When Pond B is empty and clean (all leachate evacuated),
  - (1) Shut off the evaporation pump
  - (2) Close Valve P-5
  - (3) Close Valve P-7.
9. Open Valve P-3.
10. Open Valve P-1.
11. Open Valve P-4.

Resume normal operation per Section 4.9.1.

Revised April 5, 2001

**TABLE 5-1. LEACHATE COLLECTION AND REMOVAL SYSTEM ANALYSIS,  
SOUTHEAST COUNTY LANDFILL**

Scenario	Description	Depth over Liner		Clay Slope <sup>2</sup> (percent)	Pipe Distance <sup>3</sup> (feet)	Head over Liner including Clay Pore Pressure <sup>4</sup>	
		FDEP <sup>1</sup> Equation (inches)	HELP Model (inches)			Year 1 (110 inches) <sup>5</sup>	Year 7 (43 inches) <sup>5</sup>
1	Intermediate filling using intermediate cover over non-active areas. (Lifts 7C through 7D, 15 feet of waste).	12	5	1.0	200	-98	-38
2	After placement of 30 ft. waste.	19	3	1.6	400	-91	-40
3	Final Closure	9	<1	1.6	400	-101	-42

**Notes:**

1. Moore's Equation as modified by J.P. Giroud and presented in the FDEP memorandum entitled "Municipal Solid Waste Landfill Alternative Design Closure Guidance" dated February 10, 1995.
2. Top of the clay as it slopes towards the collection pipe.
3. Distance leachate travels to reach collection pipe.
4. (-) represents an upward gradient.
5. Upward pore pressure based on loading and consolidation curves prepared by Ardaman and Associates, Inc. dated March 7, 1994.

Revised April 5, 2001

## SECTION 7

### NOTIFICATIONS

The FDEP and the EPC will be notified of any equipment failure or event that disrupts the routine operation of the LCRS. The person responsible for operation of the SCLF is the Landfill Site Manager, HCSWMD, currently Mr. Meredith Matthews. He reports to the Landfill Services Executive Manager, HCSWMD, currently Ms. Patricia V. Berry. The HCSWMD will continue to evaluate the performance of the LMP and will propose modifications as necessary to accomplish the LMP objective and continue the proper management of leachate at the SCLF.

Revised April 5, 2001



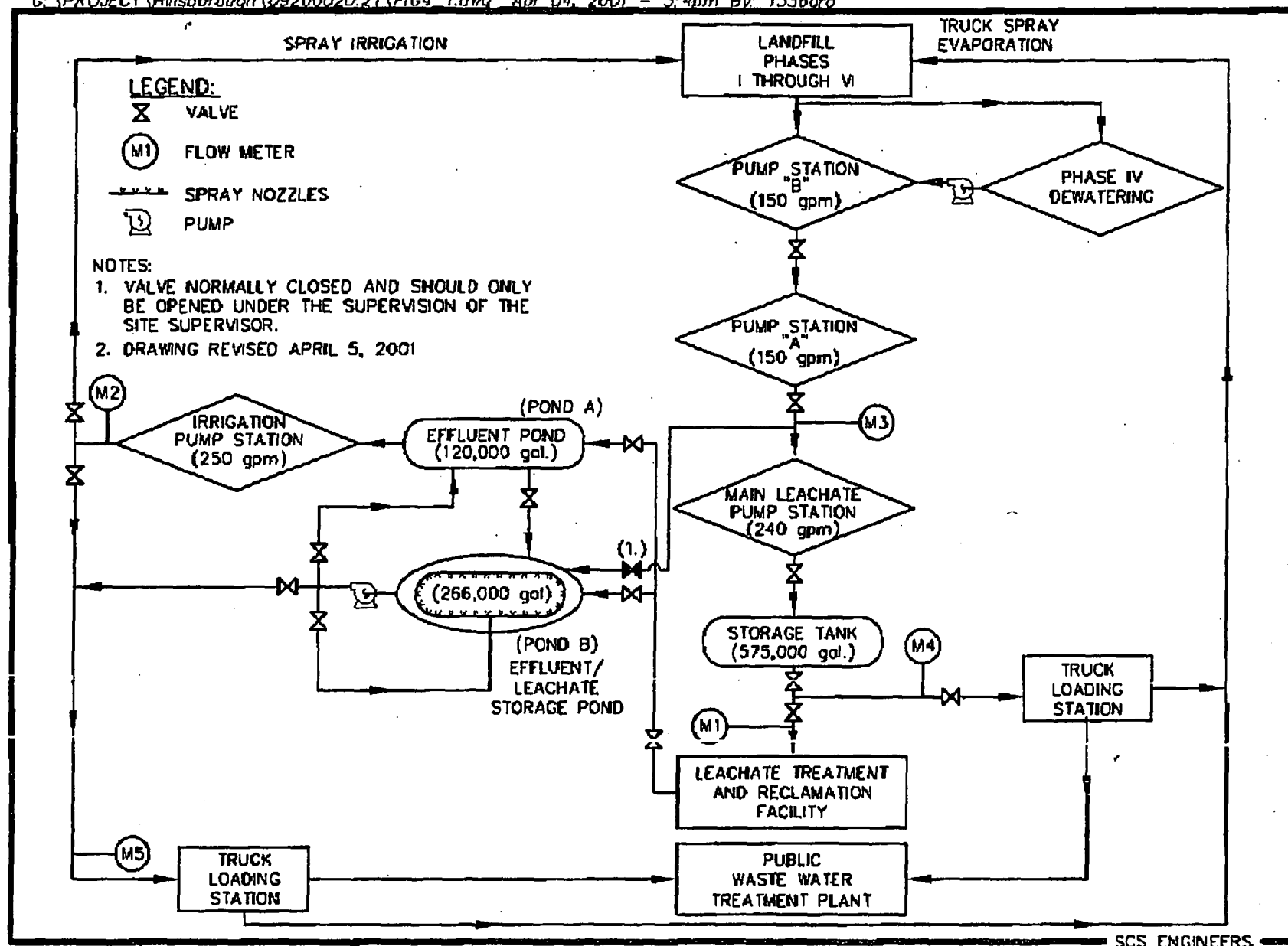
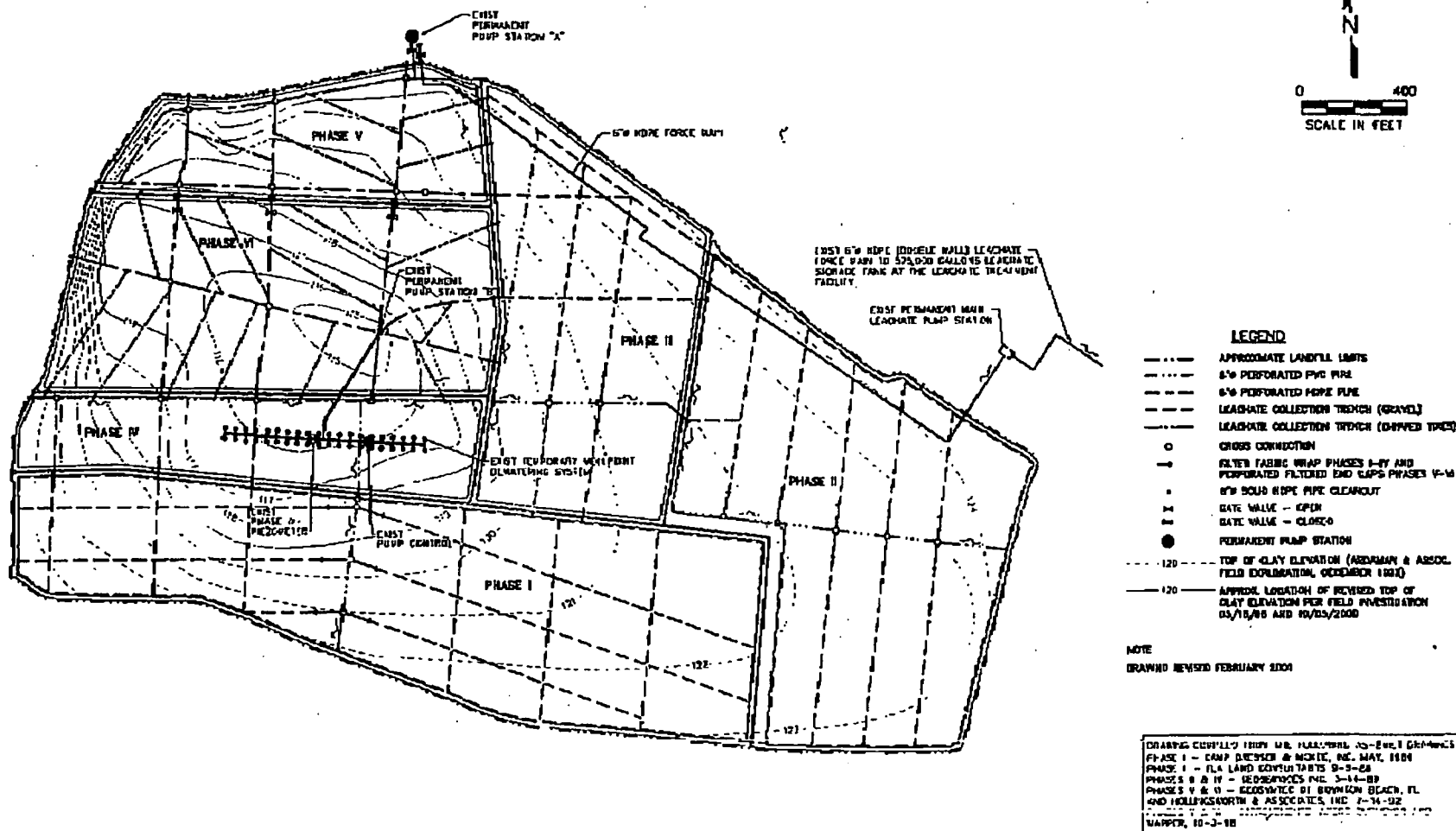


Figure 4-1. Leachate Management System Schematic.



REVISED APRIL 5, 2001

SCS ENGINEERS

Figure 1-1. Leachate Collection System and Estimated Top of Phosphatic Clay.

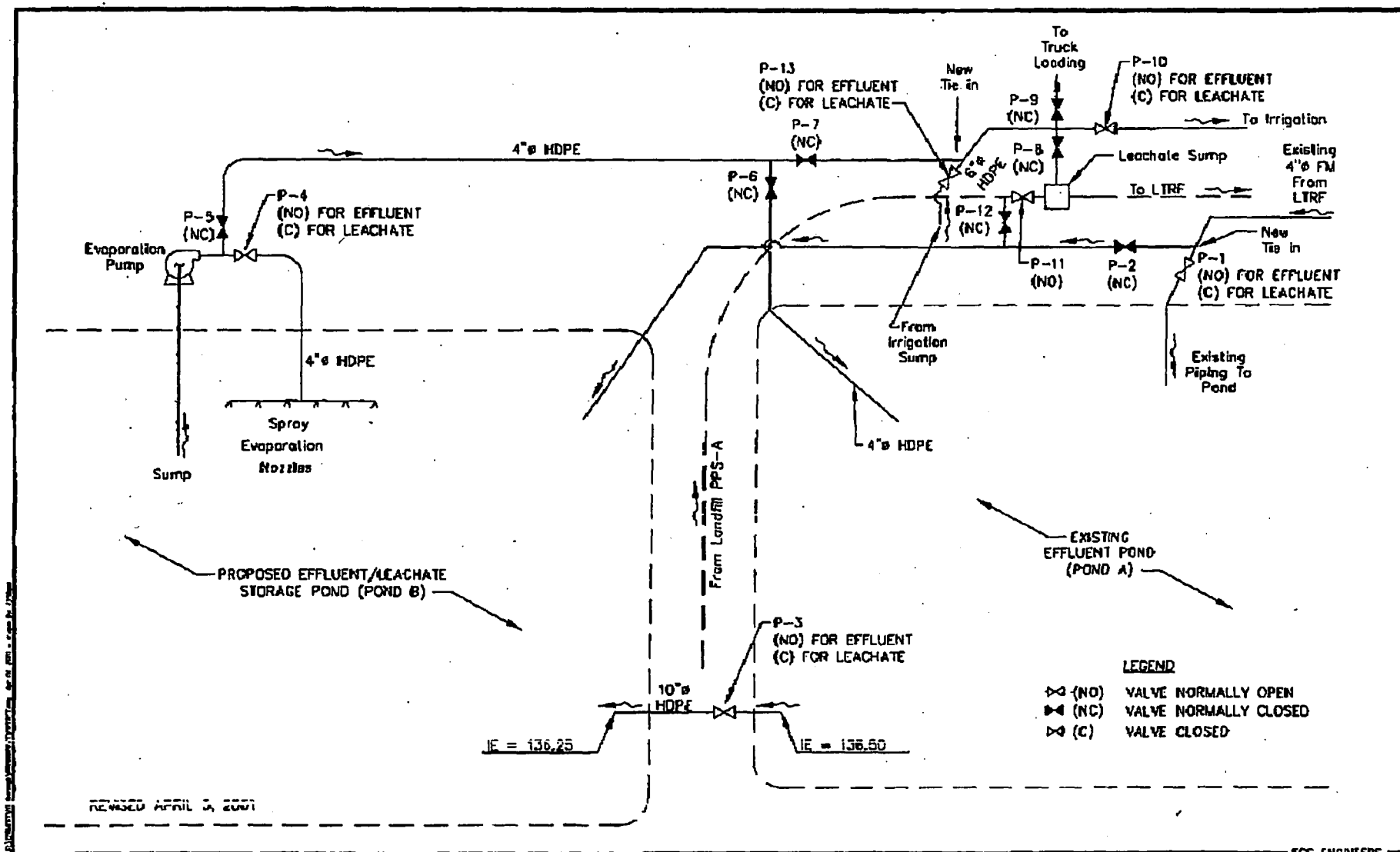
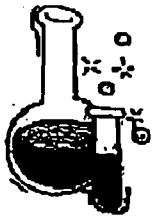


Figure 4-2. Location of Valves

SCS ENGINEERS



HILLSBOROUGH COUNTY SOUTHEAST COUNTY LANDFILL  
LEACHATE MANAGEMENT FACILITY

DAILY FIELD DATA ENTRY FORM

Technician	Date
------------	------

Time
------

Parameter	Date	Date	Total
Piezometer Phase IV			
Dewatering Flow Meter			
Piezometer Phase IV			
Pump Station A			
Pump Station B	9" +	9" +	
Depth in Pond A			
Depth in Pond B			
Effluent pH Reading			
Effluent Flow Meter Reading			
Main Leachate Pump Station			
Effluent Bypass (Flow Meter)			
Main L.T.P. Leachate Bypass			
Depth in 500k Tank			
Leachate Dust Control/Evap			
Effluent Dust Control/Evap			
Effluent Spray Irrigation			

Comments

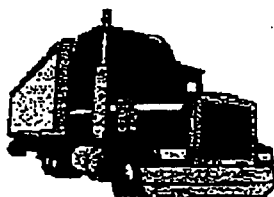


TABLE 1. LEACHATE WATER BALANCE REPORT FORM  
OCTOBER 1995 (Revised to Include Pond B)  
SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX	
Day	Area (acres)		Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Est. Depth Over Liner (in.)	Est. Depth Pump Sta. B (in.)	Flow Meter Debris System (gal.)	Leachate Pumped to LTRF (gal.)	Leachate in 575K Tank (gal.)	Leachate Treated in LTRF (gal.)	Total Leachate Hauled (gal.)	Leachate Dist. Cont./Evaporation (gal.)	Pond A Storage (gal.)	Pond B Storage (gal.)	Pond B Evaporation (gal.)	Effluent Irrigation Evaporation (gal.)	Effluent Duct Cont./Evaporation (gal.)	Total Effluent Hauled (gal.)	Landfill Evaporation (gal.)
	Time	Acres																		
1	25.2	7	130.2	0.00	NR	NR	NR	10,050	44,070	NR	15,460	0	0	NR			0	0	0	0
2	25.2	7	130.2	0.00	2.8	19.5	46.1	10,050	44,070	231,000	15,460	48,000	0	92,000	0	0	0	0	0	0
3	25.2	7	130.2	0.01	3.1	19.0	45.1	9,760	62,060	215,000	16,100	72,000	6,000	113,000	0	0	39,556	0	0	35,600
4	25.2	7	130.2	0.00	2.8	18.5	42.2	9,670	80,900	230,000	17,100	54,000	0	93,000	0	0	21,321	0	0	17,100
5	25.2	7	130.2	0.00	2.6	18.0	41.4	9,420	82,650	238,000	16,800	60,100	6,200	88,000	0	0	45,356	0	0	41,200
6	25.2	7	130.2	0.01	2.0	18.0	42.7	9,580	73,200	238,000	18,500	60,200	3,100	162,000	0	0	0	0	0	2,500
7	25.2	7	130.2	0.00	2.2	18.0	30.7	10,020	82,430	247,600	7,800	42,400	0	70,000	0	0	0	0	0	0
8	25.2	7	130.2	0.00	NR	NR	NR	9,420	84,530	NR	0	0	0	NR	NR	NR	NR	NR	NR	NR
9	25.2	7	130.2	0.00	2.2	17.5	15.0	9,420	84,530	374,000	7,600	30,000	3,100	70,000	0	0	50,660	0	0	43,000
10	25.2	7	130.2	0.00	1.0	17.0	15.2	9,125	70,905	403,000	7,700	30,000	9,200	113,000	0	0	0	0	0	7,400
11	25.2	7	130.2	0.00	1.9	16.3	17.1	10,035	59,490	379,000	38,300	54,800	6,000	157,000	0	0	0	0	0	6,800
12	25.2	7	130.2	0.00	2.2	16.3	15.2	9,345	73,705	379,000	86,200	90,000	9,100	70,000	0	0	61,001	0	0	56,100
13	25.2	7	130.2	0.00	1.7	16.3	15.2	9,890	71,255	309,000	38,600	66,000	9,000	145,000	0	0	0	0	0	7,200
14	25.2	7	130.2	0.00	2.5	16.3	16.7	10,115	71,970	288,000	38,700	0	2,700	83,000	0	0	39,819	0	0	34,000
15	25.2	7	130.2	0.00	NR	NR	NR	10,122	72,430	NR	37,300	0	0	NR	NR	NR	NR	NR	NR	NR
16	25.2	7	130.2	0.00	3.1	16.3	18.2	10,122	72,430	348,000	37,100	24,200	8,800	113,000	0	0	54,466	0	0	50,600
17	25.2	7	130.2	0.00	2.8	16.3	18.4	9,440	80,670	313,000	42,100	55,100	3,000	98,000	0	0	39,001	0	0	33,600
18	25.2	7	130.2	0.00	2.0	16.3	18.4	9,370	77,415	367,000	2,600	36,000	9,200	162,000	0	0	0	0	0	7,400
19	25.2	7	130.2	0.00	2.0	16.3	18.8	9,540	69,735	365,000	0	54,000	15,000	162,000	0	0	0	0	0	12,000
20	25.2	7	130.2	0.00	2.0	16.3	21.8	9,280	70,110	369,000	0	30,000	8,800	162,000	0	0	0	0	0	7,000
21	25.2	7	130.2	0.00	2.0	16.3	17.8	9,340	71,520	408,000	0	12,000	0	162,000	0	0	0	0	0	0
22	25.2	7	130.2	0.00	NR	NR	NR	9,060	74,510	NR	0	6,000	0	NR	NR	NR	NR	NR	NR	NR
23	25.2	7	130.2	0.00	2.0	16.3	18.0	8,660	70,510	511,000	0	10,000	18,300	162,000	0	0	0	0	0	14,600
24	25.2	7	130.2	0.00	2.0	16.3	17.8	8,800	77,570	497,000	0	108,000	18,000	162,000	0	0	0	0	0	14,400
25	25.2	7	130.2	0.00	2.3	16.3	15.8	9,120	85,000	439,000	18,600	60,500	18,000	74,000	0	0	19,741	0	0	35,200
26	25.2	7	130.2	0.00	1.9	16.3	16.1	9,750	81,330	422,000	19,100	48,000	23,000	157,000	0	0	0	0	0	16,800
27	25.2	7	130.2	0.00	2.4	16.3	16.7	10,420	82,780	391,000	21,800	73,000	0	79,000	0	0	0	0	0	0
28	25.2	7	130.2	0.00	2.4	16.3	18.8	10,455	83,120	391,000	3,600	78,000	0	79,000	0	0	0	0	0	0
29	25.2	7	130.2	0.00	NR	NR	NR	10,763	74,860	NR	0	0	0	NR	NR	NR	NR	NR	NR	NR
30	25.2	7	130.2	0.00	2.4	16.0	18.5	10,763	74,860	453,000	0	18,000	0	79,000	0	0	0	0	0	0
31	25.2	7	130.2	0.00	2.5	16.0	18.4	11,030	73,750	489,000	4,900	54,000	12,000	83,000	0	0	0	0	0	9,600
Total			0.02					292,220	2,170,220		431,800	1,291,100	886,500				379,922	0	0	453,100
Daily Average (See note 12)				2.3		37.0	23.0	9,426	73,735	360,269	19,591	49,742	9,800	115,400						22,660
Monthly Average (See note 13)								9,426	73,735	360,269	19,591	49,742	9,800	115,400			12,700	0	0	14,620

Notes:

- NR = No Records, NA = Not Available.
- Column II, total active landfill area (Phases I-VI) is 162.4.
- Columns III and IV, field measured. Column III, 111.0 is less than 0.01 inches and is not included in total.
- Column VI, are used from depth in Phase IV Piezometer.
- Column VIII, PPS-B sensor reading plus 9 inches.
- Columns VII, XI, and XVII quantities from flow meters.
- Column IX, calculated from depth in 575,000 gal. leachate tank.
- Columns XII, XIII, XIV, and XVI, quantities calculated from truck weight and flow meter.
- Column XX, 60% of the daily values from Columns XII, XIII, and XVI.
- Column XVI, Pond B evaporation = 5% of amount sprayed.
- Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values.
- Daily average is calculated by dividing the total by the actual days measured in the month.
- Monthly average is calculated by dividing the total by the number of days of the month.

F:\projects\Hillsboro\09200020\_21\Leachate Revised Data Forms.xls (Revised by acv 04/03/01)

TABLE 2. FIELD DATA ENTRY FORM  
OCTOBER 2000 (Revised to include Pond B)  
SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX
Day	Active Area (ac.)	Piezometer Phase IV (in.)	Reading Pump Sta. D (in.)	Flow Meter Pump Sta. A (gal.)	Flow Meter Dewatering System (gal.)	Depth in 575K Tank (ft.)	Leachate Hauled Contractor (gal.)	Leachate Hauled County (gal.)	Leachate Dust Cont./Evaporation (gal.)	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Effluent Spray Evap (gal.)	Leachate Treated at LTRF (gal.)	Effluent (irrigation) Evaporation (gal.)	Effluent Hauled Contractor (gal.)	Effluent Hauled County (gal.)	Effluent Dust Cont./Evaporation (gal.)
1	7	NR	NR	42,014,920	13,272,630	NR	0	0	0	0.00	NR			15,413	0	0	0	0
2	7	19.5	37.1	42,058,990	13,282,680	8.83	42,000	6,000	0	0.00	2.8			25,415	0	0	0	0
3	7	19.0	36.1	42,121,050	13,292,418	8.50	72,000	0	6,000	0.01	3.1			16,095	38,556	0	0	0
4	7	18.5	33.2	42,201,950	13,302,110	8.09	42,000	12,000	0	0.00	2.8			17,095	21,321	0	0	0
5	7	18.0	32.4	42,284,600	13,311,530	8.25	54,100	6,000	6,200	0.00	2.6			16,790	45,356	0	0	0
6	7	18.0	33.7	42,357,800	13,321,110	8.25	60,200	0	3,100	0.01	2.0			18,470	0	0	0	0
7	7	18.0	21.7	42,440,250	13,331,130	8.58	42,100	0	0	0.00	2.2			7,790	0	0	0	0
8	7	NR	NR	42,520,803	13,340,733	NR	0	0	0	0.00	NR			0	0	0	0	0
9	7	17.5	6.0	42,601,355	13,350,375	13.00	30,800	0	3,100	0.00	2.2			2,555	50,660	0	0	0
10	7	17.0	6.2	42,672,260	13,359,980	14.00	18,600	12,000	9,200	0.00	1.0			1,705	0	0	0	0
11	7	16.5	8.1	42,731,750	13,369,935	13.17	36,100	18,700	6,800	0.00	1.9			38,270	0	0	0	0
12	7	16.5	6.2	42,805,455	13,379,280	13.17	72,000	18,000	9,100	0.00	2.2			16,680	61,001	0	0	0
13	7	16.5	6.2	42,877,710	13,389,170	10.75	60,000	6,000	9,000	0.00	1.7			38,610	0	0	0	0
14	7	16.5	7.7	42,949,680	13,399,285	10.00	0	0	2,700	0.00	2.5			38,680	39,819	0	0	0
15	7	NR	NR	43,021,130	13,409,050	NR	0	0	0	0.00	NR			37,293	0	0	0	0
16	7	16.5	9.2	43,096,980	13,419,630	12.08	18,200	6,000	8,800	0.00	3.1			37,293	54,466	0	0	0
17	7	16.5	9.4	43,177,650	13,429,870	11.58	36,300	18,800	3,000	0.00	2.8			42,125	39,002	0	0	0
18	7	16.5	9.4	43,255,065	13,438,440	12.75	36,000	0	9,200	0.00	2.0			2,575	0	0	0	0
19	7	16.5	8.8	43,324,800	13,447,980	12.67	36,000	18,000	13,000	0.00	2.0			0	0	0	0	0
20	7	16.5	12.8	43,394,910	13,457,200	12.83	24,000	6,000	8,800	0.00	2.0			0	0	0	0	0
21	7	16.5	8.8	43,466,430	13,466,600	14.87	12,000	0	0	0.00	2.0			0	0	0	0	0
22	7	NR	NR	43,536,920	13,475,660	NR	6,000	0	0	0.00	NR			0	0	0	0	0
23	7	16.5	9.9	43,607,450	13,484,720	17.75	0	30,000	18,300	0.00	2.0			0	0	0	0	0
24	7	16.5	8.8	43,685,020	13,493,520	17.25	60,800	48,000	18,000	0.00	2.0			0	0	0	0	0
25	7	16.5	6.8	43,770,020	13,502,650	15.25	42,000	18,500	18,000	0.00	2.3			18,575	29,741	0	0	0
26	7	16.5	7.1	43,853,150	13,512,400	14.67	30,000	18,000	21,000	0.00	1.9			19,130	0	0	0	0
27	7	16.5	7.7	43,935,930	13,522,830	13.58	36,000	36,000	0	0.00	2.4			21,760	0	0	0	0
28	7	16.5	9.8	44,019,050	13,533,275	13.58	42,000	36,000	0	0.00	2.4			2,590	0	0	0	0
29	7	NR	NR	44,094,210	13,544,038	NR	0	0	0	0.00	NR			0	0	0	0	0
30	7	16.0	9.5	44,167,370	13,554,800	15.75	0	18,000	0	0.00	2.4			0	0	0	0	0
31	7	16.0	9.4	44,241,120	13,565,830	17.00	36,000	18,000	12,000	0.00	2.5			4,890	0	0	0	0

(Project Hillsbor09200020.21) Leachate Revised Data Form.xls (Revised by acv 04/05/01)

Notes:

- NR = No Records, NA = Not Available.
- Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values.
- Column XI, Trace is less than 0.01 inches.
- Column IX, if level exceeds 24 inches, less than minimum of three food fill must increase.
- Column III, Phase IV piezometer began monitoring on 7/10/95.
- Columns V, VI, VIII, IX, X, XIV, XV, XVI, and XVII are gauges from flow meters.

COMMISSION  
 PAT FRANK  
 CHRIS HART  
 JIM NORMAN  
 JAN PLATT  
 THOMAS SCOTT  
 RONDA STORMS  
 STACEY EASTERLING

EXECUTIVE DIRECTOR  
 RICHARD D. GARRITY, Ph.D.



ADMINISTRATIVE OFFICES, LEGAL &  
 WATER MANAGEMENT DIVISION  
 1900 - 9th AVENUE  
 TAMPA, FLORIDA 33605  
 TELEPHONE (813) 272 - 5960  
 FAX (813) 272 - 5157

AIR MANAGEMENT DIVISION  
 TELEPHONE (813) 272 - 5530

WASTE MANAGEMENT DIVISION  
 TELEPHONE (813) 272 - 5788

WETLANDS MANAGEMENT DIVISION  
 TELEPHONE (813) 272 - 7104

MEMORANDUM

Date: March 22, 2001  
 To: Kim B. Ford, P.E., FDEP Solid Waste Section  
 From: Ronald A. Cope, Environmental Supervisor, Solid & Hazardous Waste Section  
 RE: RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION. CONSTRUCTION PERMIT APPLICATION, HILLSBOROUGH COUNTY SOUTH EAST LANDFILL EFFLUENT/LEACHATE STORAGE POND.

In accordance with the provisions of Chapter 84-446, Laws of Florida, the requirements of Chapter 1-7, Rules of the Environmental Protection Commission (EPC), and the EPC/FDEP Inter-Agency Operating Agreement, EPC staff have received and evaluated the referenced response, which was received March 8, 2001.

Based upon the information provided in the referenced response, it appears that the comments and concerns outlined in the EPC's January 26, 2001, memorandum have been adequately addressed. The EPC has no objection to the Department's approval of the Construction Permit.

If you have questions, comments or concerns or would like to discuss this matter further, please feel free to contact me directly at (813) 272-5955, extension 1292.

Post-It® Fax Note	7671	Date	3/21/01	# of pages	1
To	Kim Ford, P.E.	From	Ronald Cope		
Copy	FDEP Solid Waste	Co.	ERHC		
Phone	144-6100 x 382	Phone	272-5955 x 1292		
Fax	144-6125	Fax			



WASTE MANAGEMENT TECHNICAL SUPPORT  
ROUTING FORM

PERMITTED FACILITIES

To: JOHN MORRIS  
Solid Waste Program  
From: Jim Ford  
Date: 3/8/01  
Subject: SE LEACHATE POND

Document Name: \_\_\_\_\_  
Revision Number 1 County: Hill  
Facility Name: \_\_\_\_\_  
Type of Facility: Improvement  
Permit Number: PENDING Issue Date: \_\_\_\_\_  
Copy of Permit attached: \_\_\_\_\_

Document submitted in compliance with permit condition \_\_\_\_\_

Document subject to permit timeclock. Yes

Day 1: 3/7/01

Day 30: 4/5/01

PATS sheet attached: \_\_\_\_\_

Enforcement Case/CO/NOV/ associated with this site: \_\_\_\_\_

Files and related documents can be found attached in file

Please review and comment on the technical aspects of the attached document as you deem appropriate. In order to make progress with the permit review, please provide comments within 30 days or by 4/1/01.

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Module \_\_\_\_\_

Attachments



**SCS ENGINEERS**

TO FDEP  
Solid Waste Section  
3804 Coconut Palm Drive  
Tampa, FL 33619

WE ARE SENDING YOU

✓ Attached Under separate cover via \_\_\_\_\_  
 Shop drawings Prints  
 Copy of letter Change Order  
 The following items: Plans Samples  
 Specifications \_\_\_\_\_

DATE March 7, 2001

JOB NO. 09200020.21

ATTENTION Mr. Kim Ford

Re: Southeast County Landfill

Effluent/Leachate Pond Permit Responses

**D.E.P.**  
**MAR 07 2001**  
**Southwest District Tampa**

COPIES	DATE	DESCRIPTION
4	March 2001	Leachate Management Plan, March 2001
4	March 7, 2001	Responses to FDEP regarding Effluent/Leachate Pond Permit

THESE ARE TRANSMITTED as check below:

For approval \_\_\_\_\_ Approved as submitted \_\_\_\_\_ Resubmit \_\_\_\_\_ Copies for approval \_\_\_\_\_  
 ✓ For your use \_\_\_\_\_ Approved as noted \_\_\_\_\_ Submit \_\_\_\_\_ Copies distribution \_\_\_\_\_  
 As requested \_\_\_\_\_ Returned for corrections \_\_\_\_\_ Return \_\_\_\_\_ Corrected prints \_\_\_\_\_  
 For review and comment \_\_\_\_\_  
 FOR BIDS DUE \_\_\_\_\_ 19 \_\_\_\_\_ PRINTS RETURNED AFTER LOAN TO US

REMARKS \_\_\_\_\_

Kim, \_\_\_\_\_

One original is included for Mr. Bob Butera. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

COPY TO File SIGNED: Sheila Carpenter-van Dijk

*If enclosures are not as noted, kindly notify us at once.*



Bob RD 2/15/01  
Junker JRM 1/4/01

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 2/14/01 Subject SE pond  
Time 9:30 Permit No. \_\_\_\_\_  
County Hills  
M Bob Landrum Telephone No. 6210080  
Representing SCS  
☐ Phoned Me ☒ Was Called ☐ Scheduled Meeting ☐ Unscheduled Meeting  
Other Individuals Involved in Conversation/Meeting \_\_\_\_\_

Summary of Conversation/Meeting B.G. requested 1 on 1 discussion  
B.G. said County wants more flexibility when a  
pump goes down. I suggested storage in LF  
for LUL is better than collecting rainfall in  
another pond. B.G. said he is convinced that  
net evaporation is greater than rainfall with  
proposed evaporation system.  
I suggested he should be convinced and spraying  
must be controlled over the pond. I told him  
Sarasota proposed spray evaporation over 10 ac and  
later decided against (J. Baker).  
I asked what difference between current SE treatment  
B.G. said would not recommend a per pond or  
spray field because of TDS, chlorides and agrees  
that spraying leachate may leave a residual

(continue on another  
sheet, if necessary)

Signature [Signature]

Title \_\_\_\_\_

## Ford, Kim

---

**From:** Robert B. Gardner [rgardner@scseng.com]  
**Sent:** Tuesday, February 13, 2001 11:32 AM  
**To:** Ford, Kim  
**Subject:** Southeast Landfill

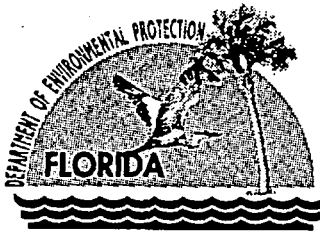
Dear Kim,

If you have time today, I would like to come over and meet with you one on one to discuss the most recent set of comments that were sent to Hillsborough County regarding the proposed new storage basin at the Southeast Landfill.

My concern is this: This project is a relatively straightforward project. The County wants to install additional effluent storage capacity, use more aggressive evaporative techniques to reduce the quantity of liquid that must be hauled offsite, and provide contingency storage for leachate. The pond design meets the requirements set forth in Rule 62-701 for a leachate impoundment; however, from the comments generated by the Department, one would think just the opposite. I believe the County and SCS have provided adequate information on the basis of design and operation. The County has operated the current impoundment successfully since the mid-1990's, though el Nino and la Nina weather periods. SCS permitted a larger impoundment in Escambia County (5 million gallon, double lined impoundment) with much less difficulty.

Please give me a call today if possible.

Robert B. Gardner, P.E., D.E.E.  
Vice President  
SCS ENGINEERS  
rgardner@scsengineers.com  
800.569.9702



# Department of Environmental Protection

Jeb Bush  
Governor

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

David B. Struhs  
Secretary

February 2, 2001

Mr. Daryl Smith  
Hillsborough County  
Solid Waste Management Department  
P. O. Box 1110  
Tampa, FL 33601

**Re: Southeast County Landfill - Leachate Pond**  
**Pending Permit No.: #35435-005-SC, Hillsborough County**

Dear Mr. Smith:

This is to acknowledge receipt of your permit application received January 4, 2001 for construction of a leachate surface impoundment for the Southeast County Landfill.

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

Your permit application is incomplete. This is the Department's 1st request for information. Please provide the information listed below promptly. Evaluation of your proposed project will be delayed until all requested information has been received.

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

1. **62-701.320(7)(e)2.** (a) Is the proposed leachate storage pond required as part of the landfill contingency plans? An explanation of the circumstances surrounding the need for the effluent/leachate storage pond is requested. (b) Are the operation of the facility's: leachate treatment facility, the leachate spray irrigation activities within active portions of the facility, and the continued off-site disposal of leachate adequate for the management of the leachate volumes being generated? (c) Provide contingency plans for management of additional leachate generated from rainfall into the proposed leachate pond. (d) A water balance (for 1 year) for the leachate pond is requested for leachate generation from expected rainfall. Compare the evaporation due to spraying over the pond and for worst case with no spray evaporation over the pond. (e) Figure 4-1 should be revised to distinguish between use of the pond for leachate and effluent. Separate figures are suggested.
2. **62-701.320(7)(e)2. and .400(6)(b)3.** (a) No contingency plan related to the draining and repair of the pond and liner was provided. If leakage found in the leak detection system exceeds the theoretical leakage rate predicted, how will the pond be drained and repaired? (b) What is the actual leakage rate that will require repair to prevent flooding the secondary liner system? (c) What is the capacity of the secondary sump? (d) What specific equipment and procedures will be used for removal? (e) Where will the leachate be drained to or how it will be otherwise managed. The contingency plan should be based on a worst case scenario with both the effluent pond and the leachate pond filled to capacity.

*"More Protection, Less Process"*

*Printed on recycled paper.*

3. **62-701.400(5)(f)**. Provisions for cleaning of the leachate pond in preparation for effluent storage change-over are requested.
4. **62-701.400(6)(b)1**. Assurance that the cited seasonal high groundwater elevation(s) have not been skewed based on the regional drought conditions experienced over the past 2 years, in support that groundwater will remain below the bottom liner subbase.
5. **62-701.400(6)(b)1**. Assurance that contaminants will be contained within the lined leachate pond during operation of the spray evaporation system is required. Calculations are requested to support containment based on spray droplet size and wind velocity. As leachate is sprayed into the air and pure water evaporated, will dissolved solids become particulate matter and drift outside the liner? Conclusions regarding containment of leachate spray dissolved solids should be in part based on results from an other similar type project or field demonstration.
6. **62-701.400(6)(b)2**. The pond has not been designed in segments. The reasoning behind the non-segmented design is requested. Pond design revisions may be required.
7. **62-701.400(6)(b)5**. Design calculations to demonstrate two feet of freeboard will be maintained is requested.
8. **62-701.400(6)(b)6**. Procedures for controlling vectors and odors for the proposed leachate pond is requested.
9. **62-701.320(7)(f) and .400(6)**. Full size plan sheets and clarification regarding the following items are requested:
  - a. Attachment D-1, sheet 3 of 7 illustrates and Section G, Construction Requirements, General Design Requirements explains that two (2) 4'x4'x1' concrete pads will be installed within the limits of the storage pond and will be used in the future as heater pads. Please provide an explanation of the use of heaters associated with the pond and protection of the liners.
  - b. Attachment D-1, sheet 5 of 7, section 'B' detail, does not illustrate the 4" spray evaporation header pipe that is to be installed within the pond berm.
  - c. Attachment D-1, sheet 5 of 7, provides pipe penetration details relative to the 10" pond interconnection pipe. However, the overall illustration and details are unclear. Based on the illustration(s) provided in the Typical Pipe Penetration Through Liner Detail 2, and the associated Polylock Detail, does the required double liner system extend past the pipe penetration? It appears that the up-slope from the pipe boot weld, a single layer of 60 mil geomembrane is proposed, with the 60 mil geonet and 60 mil and upper 60 mil geomembrane being eliminated. Assurance that the double liner system is provided for the entire pond and the liners are adequately protected from punctures is required. The use of HDPE rub sheets is requested.
7. Supporting information in response to Mr. John Morris's February 1, 2001 memorandum (attached). Please call Mr. Morris at extension 336 to discuss this item.
8. Construction Schedule with anticipated begin date.

Mr. Daryl Smith  
Hillsborough County  
Solid Waste Management Department

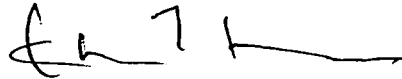
February 2, 2001  
Page 3

**Please provide all responses that relate to engineering required for construction, signed and sealed by a professional engineer.**

"NOTICE! Pursuant to the provisions of Section 120.60, F.S., if the Department does not receive a 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 receive this letter, responding to as many of the information requests as possible 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 will be grounds for the Department to issue a Final Order of Denial for lack of timely response. A denial for lack of information or response will be unbiased as to the merits of the application. The applicant can reapply as soon as the requested information is available."

**You are requested to arrange a meeting with DEP staff to discuss the items in this letter prior to responding.** Please submit your response to this letter as one complete package. On all future correspondence, please include Robert Butera on distribution. If you have any questions you may call me at (813) 744-6100, extension 382.

Sincerely,



Kim B. Ford, P.E.  
Solid Waste Section  
Division of Waste Management

KBF/ab  
Attachment

cc: Patricia Berry, HCSWMD  
Robert Gardner, P.E., SCS  
Ron Cope, EPCHC  
AB Robert Butera, P.E., FDEP Tampa  
John Morris, P.G., FDEP Tampa

## Memorandum

# Florida Department of Environmental Protection

TO: Kim Ford, P.E.  
FROM: John Morris, P.G. JEM  
DATE: February 1, 2001  
SUBJECT: Southeast County Landfill, Class I Landfill  
Effluent/Leachate Storage Pond  
Pending Permit No. 35435-005-SC, Hillsborough County  
cc: Robert Butera, P.E. RB

I have reviewed portions of the referenced permit application and the supporting document that were received January 4, 2001, that deal with leachate and treated leachate effluent handling. The materials reviewed include:

- *Construction Permit Application Effluent/Leachate Storage Pond, Southeast County Landfill, Hillsborough County, Florida*, prepared by SCS Engineers, dated December 8, 2000.
- *Leachate Management Plan, Southeast County Landfill, Hillsborough County, Florida*, prepared by SCS Engineers, dated December 8, 2000.

Please have the applicant address the following comments.

### CONSTRUCTION PERMIT APPLICATION EFFLUENT/LEACHATE STORAGE POND, SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

#### Section K - Landfill Operations Requirements

1. It is indicated that the pond (effluent/leachate storage Pond B) was added to the existing Operations Plan. Please indicate the revision date of the Operations Plan that is referenced and when the revised plan was provided to the Department.

### LEACHATE MANAGEMENT PLAN, SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

2. It would be helpful if the text, tables, figures, and appendices of the Leachate Management Plan included the date of preparation.

#### Section 4.3 - Temporary Wellpoint Dewatering System in Phase IV, Capacity 0 to 12,000 GPD

3. Please describe how it will be demonstrated that the Leachate Management Plan goals can be maintained in Phase IV without the temporary dewatering system. Please indicate if this demonstration will be provided as part of the evaluation of the clay bottom liner required by Specific Condition No. 42 of permit No. SO29-256427. Please indicate if this demonstration will address the approximate location of revised top of clay elevation based on field investigations on May 18, 1998 and October 5, 2000 as shown on Figure 1-1. Please provide the anticipated schedule for submittal of this demonstration to the Department.

Section 4.9.1 – Procedures for Effluent Storage and Evaporation in Pond B

4. Please modify this section to indicate that to avoid overfilling Pond B, Valve P-3 shall remain open only during operational hours.

Section 4.9.2 – Procedures for Leachate Storage and Evaporation in Pond B

5. Please modify this section by deleting the last sentence, as it is indicated in Step No. 3 of this section that Valve P-3 is closed when Pond B is used for leachate storage.

Section 4.9.3 – Procedures to Resume Effluent Storage and Evaporation in Pond B

6. Please indicate what activities will be performed at the end of Step No. 5 of this section to remove leachate from the Pond B liner prior to the release of effluent into Pond B.

7. Please modify this section to indicate that to avoid overfilling Pond B, Valve P-3 shall remain open only during operational hours.

Section 6.1 – Phase IV Monitoring

8. Review of the leachate water balance report form prepared for December 2000 indicated that the temporary dewatering system was operated at an average removal rate of 6,453 gallons per day. Please indicate if the demonstration that operating PPS-B as proposed (leachate level in the vault not exceeding 24 inches from the bottom) will maintain leachate heads over the liner of 12 inches or less during routine landfill operation will include the measurement of leachate depths in the Phase IV piezometer while the temporary dewatering system is not operating.



Florida Department of  
**Environmental Protection**

**Memorandum**

**TO:** Kim Ford, P.E.  
**FROM:** John Morris, P.G. JEM  
**DATE:** February 1, 2001  
**SUBJECT:** Southeast County Landfill, Class I Landfill  
Effluent/Leachate Storage Pond  
Pending Permit No. 35435-005-SC, Hillsborough County  
**cc:** Robert Butera, P.E. RB

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Please have the applicant address the following comments.

**CONSTRUCTION PERMIT APPLICATION EFFLUENT/LEACHATE STORAGE POND,  
SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

**Section K - Landfill Operations Requirements**

1. It is indicated that the pond (effluent/leachate storage Pond B) was added to the existing Operations Plan. Please indicate the revision date of the Operations Plan that is referenced and when the revised plan was provided to the Department.

**LEACHATE MANAGEMENT PLAN, SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH  
COUNTY, FLORIDA**

2. It would be helpful if the text, tables, figures, and appendices of the Leachate Management Plan included the date of preparation.

**Section 4.3 - Temporary Wellpoint Dewatering System in Phase IV, Capacity 0 to 12,000 GPD**

3. Please describe how it will be demonstrated that the Leachate Management Plan goals can be maintained in Phase IV without the temporary dewatering system. Please indicate if this demonstration will be provided as part of the evaluation of the clay bottom liner required by Specific Condition No. 42 of permit No. SO29-256427. Please indicate if this demonstration will address the approximate location of revised top of clay elevation based on field investigations on May 18, 1998 and October 5, 2000 as shown on Figure 1-1. Please provide the anticipated schedule for submittal of this demonstration to the Department.

**MEMORANDUM – Southeast County Landfill, Effluent/Leachate Storage Pond**

**Pending Permit No. 35435-005-SC**

**Page 2 of 2**

**February 1, 2001**

Section 4.9.1 – Procedures for Effluent Storage and Evaporation in Pond B

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6. Please indicate what activities will be performed at the end of Step No. 5 of this section to remove leachate from the Pond B liner prior to the release of effluent into Pond B.

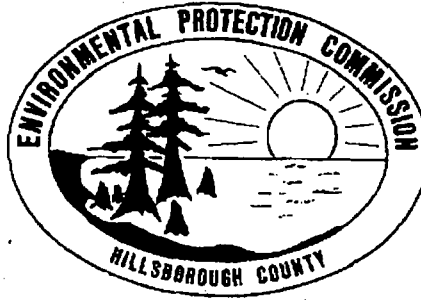
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Section 6.1 – Phase IV Monitoring

8. Review of the leachate water balance report form prepared for December 2000 indicated that the temporary dewatering system was operated at an average removal rate of 6,453 gallons per day. Please indicate if the demonstration that operating PPS-B as proposed (leachate level in the vault not exceeding 24 inches from the bottom) will maintain leachate heads over the liner of 12 inches or less during routine landfill operation will include the measurement of leachate depths in the Phase IV piezometer while the temporary dewatering system is not operating.

COMMISSION

PAT FRANK  
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JAN PLATT  
THOMAS SCOTT  
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BEN WACKSMAN



ADMINISTRATIVE OFFICES, LEGAL &  
WATER MANAGEMENT DIVISION  
1900 - 9th AVENUE  
TAMPA, FLORIDA 33605  
TELEPHONE (813) 272 - 5980  
FAX (813) 272 - 5157

AIR MANAGEMENT DIVISION  
TELEPHONE (813) 272 - 5530

WASTE MANAGEMENT DIVISION  
TELEPHONE (813) 272 - 5788

WETLANDS MANAGEMENT DIVISION  
TELEPHONE (813) 272 - 7104

EXECUTIVE DIRECTOR  
RICHARD D. GARRITY, Ph.d.

**FACSIMILE TRANSMITTAL**  
Waste Management Division  
Solid & Hazardous Waste Section

To: Kim B. Ford, P.E.

Fax: (813) 744-6125

From: Ronald Cope

Date: 1/26/01

Re: SELF Impoundment

Pages: 2 + cover

CC:

☐ Urgent    ☐ For Review    ☐ Please Comment    ☐ Please Reply    ☐ Please Recycle

Notes:

My meager comments...

Call with questions or comments.

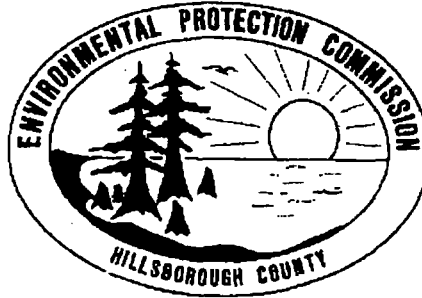


COMMISSION

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STACEY EASTERLING

EXECUTIVE DIRECTOR

RICHARD D. GARRITY, Ph.D.



ADMINISTRATIVE OFFICES, LEGAL &  
WATER MANAGEMENT DIVISION  
1900 - 9th AVENUE  
TAMPA, FLORIDA 33605  
TELEPHONE (813) 272 - 5960  
FAX (813) 272 - 6157

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TELEPHONE (813) 272 - 5530

WASTE MANAGEMENT DIVISION  
TELEPHONE (813) 272 - 5788

WETLANDS MANAGEMENT DIVISION  
TELEPHONE (813) 272 - 7104

MEMORANDUM

Date: January 26, 2001

To: Kim B. Ford, P.E., FDEP Solid Waste Section

From: Ronald A. Coppe, Environmental Supervisor, Solid & Hazardous Waste Section

RE: CONSTRUCTION PERMIT APPLICATION, HILLSBOROUGH COUNTY SOUTH EAST LANDFILL EFFLUENT/LEACHATE STORAGE POND.

In accordance with the provisions of Chapter 84-446, Laws of Florida, the requirements of Chapter 1-7, Rules of the Environmental Protection Commission (EPC), and the EPC/FDEP Inter-Agency Operating Agreement, EPC staff have received and evaluated the referenced Construction Permit Application, which was received January 4, 2001.

Based upon the information provided in the referenced application, the EPC would like to submit the following comments for the Department's consideration and inclusion in any request for additional information that may be forwarded to the applicant. Complete responses to the items listed are necessary prior to the EPC's approval of the Director's Authorization required pursuant to Chapter 1-7, Rules of the Environmental Protection Commission, §1-7-01.30(2), and §1-7-01.32(6).

1. An explanation of the circumstances surrounding the need for the effluent/leachate storage pond is requested. It is the EPC's understanding that the operation of the facility's leachate treatment facility, the leachate spray evaporation activities within active portions of the facility, and the continued off-site disposal of leachate are adequate for the management of the leachate volumes being generated.
2. Attachment D-1, sheet 3 of 7 illustrates and Section G, Construction Requirements, General Design Requirements explains that two (2) 4'x4'x1' concrete pads will be installed within the limits of the storage pond and will be used in the future as heater pads. Please provide an explanation of the use of heaters associated with the pond. [§62-701.320(5)(b)]
3. Attachment D-1, sheet 5 of 7, section 'B' detail, does not illustrate the 4" spray evaporation header pipe that is to be installed within the pond berm. [§62-701.320(5)(b)]
4. Attachment D-1, sheet 5 of 7, provides pipe penetration details relative to the 10" pond interconnection pipe. However, the overall illustration and details are unclear. Based on the illustration(s) provided in the Typical Pipe Penetration Through Liner Detail 2, and the associated Polylock Detail, it appears that the required double liner system does not extend past the point of pipe penetration. It appears that up-slope from the pipe boot weld, a single layer of 60 mil geomembrane is proposed, with the 60

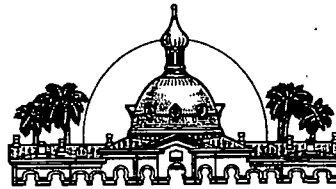


Memo to K. Ford, P.E.  
S.E.L.F. Effluent/Leachate Storage Impoundment  
Page 2

mil geonet and 60 mil and upper 60 mil geomembrane being eliminated. [S62-701.400(6)(b)3]

5. Section G, Construction Requirements, Bottom Liner Location Relative To Seasonal High Groundwater, provides information related to the elevation of seasonal high groundwater relative to the pond bottom. It appears, based on the information submitted that the pond bottom elevation of 128' NGVD is above the seasonal high groundwater elevation. Nonetheless, it is requested that the applicant provide assurance that the cited seasonal high groundwater elevation(s) have not been skewed based on the drought conditions the region has experienced over the past 1 to 2 years. [S62-701.400(6)(b)1]
6. The design of the pond does not appear to comply with the requirements of S62-701.400(6)(b)2, in that it has not been designed in segments. The reasoning behind the non-segmented design and verification that this design is approved by the Department is requested.
7. No contingency plan related to the draining and repair of the pond and liner is provided. Section G, Construction Requirements, Collection and Detection System indicates that if leakage found in the leak detection system exceeds the theoretical leakage rate predicted, the pond can be drained and repaired. However, it is not indicated where the effluent or leachate will be drained to or how it will be otherwise managed. The contingency plan should be based on a worst case scenario with both effluent/leachate ponds being filled to capacity. [S62-701.320(7)(e)2]
8. It appears that the revised Leachate Management Plan should include provisions for the reasonable cleaning of the pond(s) in preparation for leachate and effluent storage change-over. Based on existing permit conditions, which limit the volumes and locations of leachate spray evaporation and based on the use of the ponds for both leachate and effluent storage, the mixing of leachate with effluent appears likely. What procedures are in place that will inhibit the mixing of effluent and leachate and that will eliminate or reasonably decrease the likelihood of the unpermitted spray irrigation of leachate on areas not approved for that activity? [S62-701.400(5)(f)]

If, upon your review of the comments listed above, you have questions, additional comments or concerns, please feel free to contact me directly at (813) 272-5955, extension 1292.



Hillsborough County  
Florida

BOARD OF COUNTY COMMISSIONERS

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**RECEIVED**

JAN 19 2001

January 18, 2001

Department of Environmental Protection  
SOUTHWEST DISTRICT  
BY \_\_\_\_\_

Mr. Kim Ford, P.E.  
Solid Waste Permitting  
Florida Department of Environmental Protection  
3804 Coconut Palm Drive  
Tampa, Florida 33619

RE: Surface Impoundment for Leachate and Effluent Construction at the Southeast County  
Landfill - Legal Advertisement Proof of Publication

Dear Mr. Ford:

In accordance with Section 403.815, Florida Statutes and Rule 62-103.150, F.A.C., the Hillsborough County Solid Waste Management Department (SWMD) is providing proof of publication of the legal advertisement for the Florida Department of Environmental Protection's (DEP) Notice of Application for a Permit to Construct a Surface Impoundment for Leachate and Effluent at the Southeast County Landfill.

The proof of publication was provided to the SWMD by the Tampa Tribune on January 17, 2001, and the legal ad ran on January 15, 2001.

Please advise should you have any questions concerning the information provided.

Sincerely,

Patricia V. Berry  
Landfill Services Section Manager  
Solid Waste Management Department

Attachment

xc: Larry Ruiz, SCS  
Paul Schipfer, EPC

**THE TAMPA TRIBUNE**  
**Published Daily**  
**Tampa, Hillsborough County, Florida**

State of Florida        }  
County of Hillsborough } ss.

Before the undersigned authority personally appeared J. Rosenthal, who on oath says that she is Classified Billing Manager of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of advertisement being a

LEGAL NOTICE

in the matter of \_\_\_\_\_

STATE OF FLORIDA

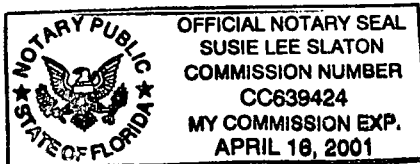
was published in said newspaper in the issues of \_\_\_\_\_

JANUARY 15, 2001

Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, this advertisement for publication in the said newspaper.

Sworn to and subscribed by me, this 17 day  
of JANUARY, A.D. 20 '01

Personally Known ☒ or Produced Identification \_\_\_\_\_  
Type of Identification Produced \_\_\_\_\_



*Susie Lee Slaton*

State of Florida  
Department of Environmental  
Protection  
Notice of Application  
The Department announces  
receipt of an application for  
permit from Hillsborough  
County Solid Waste Manage-  
ment Department, for a permit  
to construct a surface im-  
poundment for leachate and  
effluent, subject to Depart-  
ment rules, located at the ex-  
isting Southeast County Land-  
fill, 8.8 miles east of U.S. High-  
way 301 on C.R. 672, in Hillsbor-  
ough County, Florida.  
This application is being pro-  
cessed and is available for  
public inspection during nor-  
mal business hours, 8:00 a.m.  
to 5:00 p.m., Monday through  
Friday, except legal holidays,  
at the Department of Environ-  
mental Protection, Southwest  
District Office, 3804 Coconut  
Palm Drive, Tampa, Florida  
33619-1352.  
1107 1/15/01

## \*\* Transmit Conf. Report \*\*

P.1

Jan 9 2001 11:44

Telephone Number	Mode	Start	Time	Pages	Result	Note
96236757	NORMAL	9.11:43	0'27"	2	# O K	

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

3804 Coconut Palm Drive  
Tampa, FL 33619-8318

# FAX

Date:

1/9/00

Number of pages including cover sheet:

2

To:

Larry Ruiz

SES

Phone:

621 0080

Fax phone:

6236757

CC:

From:

Jim Folan

Phone:

(813) 744-6100 x 382

Fax phone:

(813) 744-6125

REMARKS:



Urgent



For your review



Reply ASAP



Please comment

For Emerson's  
Please publish  
notice of Application

Tax

for



FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

3804 Coconut Palm Drive  
Tampa, FL 33619-8318

**FAX**

Date:

1/9/00

Number of pages including cover sheet:

2

To:

LARRY RUIZ

SES

Phone:

621 0080

Fax phone:

623 6757

CC:

From:

Jim Ford

Phone:

(813) 744-6100 x 382

Fax phone:

(813) 744-6125

REMARKS:

☐ Urgent

☒ For your review

☒ Reply ASAP

☐ Please comment

FOR INFORMATION  
PLEASE PUBLISH  
NOTICE OF APPLICATION

tax  
for

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


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

62-110.106(6). If required, the notice shall be published by the applicant one time only within fourteen days after a complete application is filed and shall contain the name of the applicant, a brief description of the project and its location, the location of the application file, and the times when it is available for public inspection. The notice shall be prepared by the Department and shall comply with the following format:

**State of Florida  
Department of Environmental Protection  
Notice of Application**

The Department announces receipt of an application for permit from Hillsborough County Solid Waste Management Department for a permit to construct a surface impoundment for leachate and effluent, subject to Department rules, located at the existing Southeast County Landfill, 8.8 miles east of US Highway 301 on C.R. 672, in Hillsborough 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.



WASTE MANAGEMENT TECHNICAL SUPPORT  
ROUTING FORM

PERMITTED FACILITIES

To: John  
From: tm  
Date: 1/5/01  
Subject: SE Leachate pond

Document Name: \_\_\_\_\_  
Revision Number 0 County: Hills  
Facility Name: \_\_\_\_\_  
Type of Facility: Improvement  
Permit Number: \_\_\_\_\_ Issue Date: \_\_\_\_\_

Copy of Permit attached: \_\_\_\_\_

Document submitted in compliance with permit condition. \_\_\_\_\_

Document subject to permit timeclock. 45

Day 1: 1/4/01

Day 30: 2/2/01

PATS sheet attached: \_\_\_\_\_

Enforcement Case/CO/NOV/ associated with this site: \_\_\_\_\_

Files and related documents can be found ATTACHED

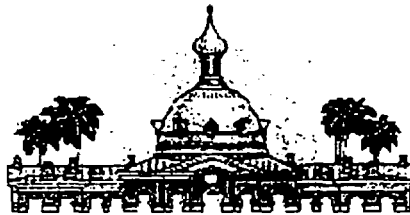
Please review and comment on the technical aspects of the attached document as you deem appropriate. In order to maintain progress with the permit review, please provide comments within 30 days or by Feb 1, 2001.

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Module \_\_\_\_\_

Attachments

# **Construction Permit Application Effluent/Leachate Storage Pond Southeast County Landfill Hillsborough County, Florida**



**Submitted to:**

Florida Department of Environmental Protection  
Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33719

**Prepared by:**

SCS Engineers  
3012 U.S. Highway 301 N., Suite 700  
Tampa, Florida 33619  
(813) 621-0080

**Submitted for:**

Hillsborough County  
Solid Waste Management Department  
P.O. Box 1110  
Tampa, Florida 33601  
(813) 276-5680

File No. 09195029.25  
December 2000

SOUTHWEST DISTRICT  
FDEP

Solid Waste Program  
Permitting Application

New Site

Site Name:	
Site Address:	
County:	
Type/Subcode:	

Existing Site

Site ID:	35435 - 005		
Project Name:	SE LANDFILL LEACHATE POND		
Type/Subcode:	SC 08		
Fee Submitted:	1000	<input checked="" type="checkbox"/> correct	<input type="checkbox"/> incorrect
Fee Refund \$	/	Fee Request \$	/

Related Party

Role:	Applicant
Name:	Daryl Smith
Company:	Hillsborough County
Street:	PO Box 1110
City:	Tampa
Zip Code:	33601
Phone:	(813) 272 5680

Distribution Date:

Fee Checked By:

K FORD

Date:

1/5/01

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

APPLICATION FOR PERMIT TO CONSTRUCT, OPERATE, MODIFY OR CLOSE  
A SOLID WASTE MANAGEMENT FACILITY

Please Type or Print

**A. GENERAL INFORMATION**

1. Type of facility:

Disposal ☒

Class I Landfill	<input checked="" type="checkbox"/>	Ash Monofill	<input type="checkbox"/>
Class II Landfill	<input type="checkbox"/>	Asbestos Monofill	<input type="checkbox"/>
Class III Landfill	<input type="checkbox"/>	Industrial Solid Waste	<input type="checkbox"/>
Other	<input type="checkbox"/>		

Volume Reduction ☐

Incinerator	<input type="checkbox"/>	Pulverizer/Shredder	<input type="checkbox"/>
Composting	<input type="checkbox"/>	Compactor/Baling Plant	<input type="checkbox"/>
Materials Recovery	<input type="checkbox"/>	Energy Recovery	<input type="checkbox"/>
Other	<input type="checkbox"/>		

2. Type of application:

Construction (Other)	<input checked="" type="checkbox"/>	Construction/Operation	<input type="checkbox"/>
Operation	<input type="checkbox"/>	Closure	<input type="checkbox"/>

3. Classification of application:

New	<input type="checkbox"/>	Substantial Modification	<input type="checkbox"/>
Renewal	<input type="checkbox"/>	Minor Modification	<input checked="" type="checkbox"/>

4. Facility name: Southeast County Landfill

5. DEP ID number: SO29-256427 County: Hillsborough

6. Facility location (main entrance): 8.8 miles east of U.S. Highway 301 on County Road 672

7. Location coordinates:

Section: 13, 14, 15, 18, 19, 22, 23, 24 Township: 31S Range: 21E, 22E

UTMs: Zone N/A km E km N

Latitude: 27 ° 46 ' 25 " Longitude: 82 ° 11 ' 15 "

Applicant name (operating authority): Hillsborough County Solid Waste Management Department

Mailing address: P.O. Box 1110 Tampa FL 33601  
Street or P.O. Box City State Zip

Contact person: Daryl H. Smith Telephone: (813) 272-5680

Title: Director, Solid Waste Management Department

9. Authorized agent/Consultant: SCS Engineers

Mailing address: 3012 U.S. Highway 301 North, Suite 700, Tampa, FL 33619  
Street or P.O. Box City State Zip

Contact person: Robert B. Gardner, P.E., DEE Telephone: (813) 621-0080

Title: Vice President

10. Landowner (if different than applicant): \_\_\_\_\_

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

Contact person: \_\_\_\_\_ Telephone: ( ) \_\_\_\_\_

11. Cities, towns and areas to be served: Tampa, Temple Terrace, Plant City, Hillsborough County

12. Population to be served:

Current: 939,670 Five-Year Projection: 995,000

13. Volume of solid waste to be received: 2,200 yds<sup>3</sup>/day tons/day gallons/day

14. Date site will be ready to be inspected for completion: FDEP to be notified

15. Estimated life of facility: 27 years

16. Estimated costs:

Total Construction: \$ 220,000 Closing Costs: \$ N/A

17. Anticipated construction starting and completion dates:

From: FDEP to be notified To: FDEP to be notified

**T. CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER**

**A. Applicant**

The undersigned applicant or authorized representative of Hillsborough County is aware that statements made in this form and attached information are an application for a Construction (other) Permit from the Florida Department of Environmental Protection and certifies that the information in this application is true, correct and complete to the best of his knowledge and belief. Further, the undersigned agrees to comply with the provisions of Chapter 403, Florida Statutes, and all rules and regulations of the Department. It is understood that the Permit is not transferable, and the Department will be notified prior to the sale or legal transfer of the permitted facility.

  
\_\_\_\_\_  
Signature of Applicant or Agent

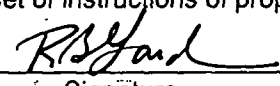
Daryl H. Smith, Director  
\_\_\_\_\_  
Name and Title

Date: 1/4/01

Attach a letter of authorization if agent is not a governmental official, owner, or corporate officer.

**B. Professional Engineer Registered in Florida or Public Officer as required in Section 403.707 and 403.707(5), Florida Statutes.**

This is to certify that the engineering features of this solid waste management facility have been designed/examined by me and found to conform to engineering principals applicable to such facilities. In my professional judgement, this facility, when properly maintained and operated, will comply with all applicable statutes of the State of Florida and rules of the Department. It is agreed that the undersigned will provide the applicant with a set of instructions of proper maintenance and operation of the facility.

  
\_\_\_\_\_  
Signature  
Robert B. Gardner, P.E., DEE,  
Vice President  
\_\_\_\_\_  
Name and Title (please type)

39233  
\_\_\_\_\_  
Florida Registration Number  
(please affix seal)

SCS Engineers, 3012 U.S. Highway 301 North, Suite 700  
\_\_\_\_\_  
Mailing Address

Tampa, Florida 33619  
\_\_\_\_\_  
City, State, Zip Code

(813) 621-0080  
\_\_\_\_\_  
Telephone Number

Date: December 8, 2000