



qwfile

MANATEE COUNTY GOVERNMENT

Public Works Department

October 14, 1993

Allison Amram
Environmental Specialist
Florida Department of Environmental Regulation
Southwest District Office-Solid Waste Section
3804 Coconut Palm
Tampa, Florida 33619

D.E.P.

OCT 18 1993

SOUTHWEST DISTRICT
TAMPA

RE: Lena Road Landfill: Permit No. S041-211176
Third Quarter Monitoring Report - 1993

Dear Ms Amram:

Enclosed for your review is the third quarter Groundwater Monitoring Report for 1993 pursuant to the above referenced permit number. Daily rainfall, pH, and landfill tonnage records are also enclosed, however the field parameters of dissolved oxygen, turbidity, temperature, colors and sheens will be performed as soon as the equipment is procured. One surficial aquifer well GC-1 showed slightly elevated benzene compounds. The well was resampled and the benzene compound levels decreased. However, we have contacted Professional Services Industries, Inc., (PSI) to serve as our Geotechnical engineer during this investigation.

Please contact me if I can provide any clarification to this data as submitted.

Sincerely,

Gregory F. Yekaitis 748-5543
Solid Waste Technical Coordinator

GFY/tyk

Enclosures

cc: Chongman Lee, FDER, Tallahassee
Richard A. Wilford, Director, MCPWD
Charles Hunsicker, Assistant Director, MCPWD
Karen Collins, Director, Environmental Action Commission
John Harllee, Esquire
Roger Hill, Schroeder-Manatee Ranch
Leonard Eder, Eder and Associates
Lisa Perros, USEPA, Regional IV, Water Management District
Daniel Gray, Deputy Director of Operations, MCPWD
Gus DiFonzo, Solid Waste Division Manager, MCPWD

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-3241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

QUARTERLY REPORT ON GROUND WATER MONITORING
Rule 17-4.245(6)(k)2.

CHS # _____

DATE October 14, 1993DER PERMIT # S041-211176

Lena Road Landfill - Manatee County Public Works
Installation Name

Caller Service 25010 Bradenton Florida 34206 Manatee
Address City State Zip County

Richard A. Wilford Director of Public Works
Owner or Authorized Representative's Name Title

Method of Discharge N/AType of Industry Municipal Government

Report for Period 7/1/93 to 9/30/93
date date

Attach monitoring data as approved in monitoring plan using parameter monitoring report forms. When applicable, attach additional sheets describing any changes in the background water quality and the discharge plume since the last reported description. Include any changes in size, direction of movement, rate of movement, and concentration changes of plume constituents in violation of the applicable standards.

NOTE: Pursuant to Rule 17-4.245(6)(k)3., at any time there is a change in the permitted volume, location or chemical, physical or microbiological composition of the discharge plume, the permittee shall notify the department and, if required by the department, submit a new report stating the volume and chemical, physical and microbiological compositions of the discharge at the point of release or contact with the ground water at the site boundary.

CERTIFICATION

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

[Signature]
Owner or Authorized Representative's Signature

10/11/93
Date

MANATEE COUNTY PUBLIC WORKS

CENTRAL LABORATORY (HRS No. E54139)

PROJECT: LENA ROAD LANDFILL

DATES COLLECTED: July 7, 8, 12, 13, 14, 1993

COLLECTED BY: D. Elliott

FIELD PARAMETERS

LOCATION	DATE	ID No.	pH	COND.	TEMP.	TOTAL DEPTH	SAMPLE DEPTH	ELEVATION	NUGD **
			(S.U.)	(umho/cm)	(deg C)	(ft)	(ft)	(ft)	(ft)
GC 1	07-Jul-93	20543	N/A	875	22.0	23.76	4.75	31.36	26.61
GC 3	07-Jul-93	20543	N/A	460	24.0	22.58	5.29	35.08	29.79
GC 4	07-Jul-93	20543	N/A	445	25.0	22.18	3.50	33.98	30.48
SA 3	07-Jul-93	20543	N/A	625	25.0	163.02	20.00	35.12	15.12
SA 4	07-Jul-93	20543	N/A	625	24.0	143.78	16.80	31.28	14.48
SA 2	08-Jul-93	20544	7.4	500	23.5	154.93	18.2	37.97	19.77
SA 5	08-Jul-93	20544	7.3	600	24.0	153.02	20.20	37.92	17.72
SA 6	08-Jul-93	20544	7.5	775	24.0	153.04	19.90	36.04	16.14
GC 2	08-Jul-93	20544	6.2	500	23.0	18.03	6.04	38.23	32.19
LRII 1	08-Jul-93	20544	6.3	460	23.0	21.12	5.92	38.02	32.10
LRII 2	08-Jul-93	20544	6.2	135	24.0	22.83	6.16	36.53	30.37
SMR I	12-Jul-93	20545	5.8	235	22.0	22.88	4.92	36.48	31.56
SMR II	12-Jul-93	20545	7.4	625	23.0	150.00	18.70	36.10	17.40
SA 7	12-Jul-93	20545	7.7	460	24.0	152.97	19.10	33.27	14.17
SA 8	12-Jul-93	20545	8.2	480	25.0	153.38	19.50	34.48	14.98
LRII 3	12-Jul-93	20545	4.9	110	25.0	22.61	6.42	33.51	27.09
LRII 4	12-Jul-93	20545	6.4	430	25.0	22.50	6.58	33.90	27.32
MW 1	13-Jul-93	20528	4.8	238	28.0	74.53	9.50	38.93	29.43
MW 6	13-Jul-93	20528	5.4	300	24.0	20.72	5.38	39.32	33.94
CW 4	13-Jul-93	20528	7.1	1175	24.0	47.91	4.75	37.54	32.79
CW 5	13-Jul-93	20528	5.6	335	25.0	11.92	18.40	42.00	23.60
LRII 5	13-Jul-93	20528	6.3	278	23.0	22.78	4.48	36.78	32.30
MW 2	14-Jul-93	20529	N/A	315	25.0	13.97	4.42	39.77	35.35
MW 3	14-Jul-93	20529	N/A	1050	24.0	13.37	9.33	40.07	30.74
MW 5	14-Jul-93	20529	N/A	390	25.0	21.42	7.75	N/A	N/A
GC 5	14-Jul-93	20529	N/A	215	28.0	22.02	6.92	36.52	29.60
GC 6	14-Jul-93	20529	N/A	245	28.0	22.40	9.71	39.10	29.39

NOTES : ** Validated against field calculated value

MANATEE COUNTY PUBLIC WORKS

CENTRAL LABORATORY (HRS No. E54139)

PROJECT: LENA ROAD LANDFILL

DATES COLLECTED: April 27, 28, 29 May 4, 5, 1993
COLLECTED BY: D. Elliott

LABORATORY PARAMETERS **

LOCATION	DATE	ID No.	pH	COND.	NITRITE as N	NITRATE as N	TKN	CHLORIDE	TDS	SULFATE	TOC	BICARBONATE ALKALINITY
			(S.U.)	(umho/cm)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mgCaCO3/l)
GC 1	07-Jul-93	20543	6.3	959	0.04	<0.01	2.2	110	566	0.95	2.2	326
GC 3	07-Jul-93	20543	6.4	501	0.01	<0.01	1.7	27.7	298	22.6	1.2	182
GC 4	07-Jul-93	20543	6.5	492	0.03	<0.01	1.1	27.2	286	23.3	0.8	151
SA 3	07-Jul-93	20543	7.2	652	<0.01	<0.01	1.8	28.3	422	34.6	1.1	246
SA 4	07-Jul-93	20543	7.4	651	<0.01	<0.01	1.8	54.9	439	37.1	0.9	192
SA 2	08-Jul-93	20544	7.4	189	<0.01	<0.01	1.6	28.3	334	7.90	4.0	239
SA 5	08-Jul-93	20544	7.4	205	<0.01	<0.01	2.8	68.7	408	11.0	0.8	207
SA 6	08-Jul-93	20544	7.4	226	<0.01	<0.01	1.4	50.4	593	196	0.8	173
GC 2	08-Jul-93	20544	6.4	189	<0.01	<0.01	3.0	44.9	338	69.6	1.1	103
LR II 1	08-Jul-93	20544	6.4	180	<0.01	<0.01	2.4	27.0	367	86.6	2.7	64.8
LR II 2	08-Jul-93	20544	6.0	91	<0.01	<0.01	1.1	7.44	84	1.64	2.3	41.2
SMR I	12-Jul-93	20545	5.8	244	<0.01	<0.01	1.8	21.7	172	49.1	1.8	33.1
SMR II	12-Jul-93	20545	7.4	632	<0.01	<0.01	0.8	90.2	390	3.69	3.9	201
SA 7	12-Jul-93	20545	7.6	495	<0.01	<0.01	2.3	53.1	283	5.85	0.4	156
SA 8	12-Jul-93	20545	8.3	445	<0.01	<0.01	1.0	50.6	256	6.72	0.9	128
LR II 3	12-Jul-93	20545	5.0	107	<0.01	<0.01	1.2	9.28	53	15.8	3.3	7.1
LR II 4	12-Jul-93	20545	6.3	419	<0.01	<0.01	0.9	10.5	225	12.8	0.5	219
MW 1	13-Jul-93	20528	5.6	198	0.01	<0.01	1.1	40.6	155	11.6	1.0	6.4
MW 6	13-Jul-93	20528	5.7	148	0.02	<0.01	1.2	11.9	131	27.0	1.5	6.7
CW 4	13-Jul-93	20528	6.8	1180	0.02	<0.01	1.7	142	928	159	2.2	207
CW 5	13-Jul-93	20528	5.7	311	0.04	<0.01	1.5	44.4	254	56.0	1.0	43.6
LR II 5	13-Jul-93	20528	6.5	266	0.02	<0.01	1.0	8.40	165	4.51	1.2	121
MW 2	14-Jul-93	20529	5.1	318	<0.01	<0.01	2.3	32.8	405	82.6	2.6	8.2
MW 3	14-Jul-93	20529	5.9	609	<0.01	<0.01	1.5	121	505	91.5	4.5	31.2
MW 5	14-Jul-93	20529	6.2	442	<0.01	<0.01	7.3	29.0	368	29.2	2.0	156
GC 5	14-Jul-93	20529	5.6	211	<0.01	<0.01	1.9	13.3	170	9.04	6.9	62.0
GC 6	14-Jul-93	20529	5.3	229	<0.01	<0.01	1.5	24.2	214	58.9	2.3	3.9

** Unless otherwise specified, all results for fecal coliform were <1/100mL

MANATEE COUNTY PUBLIC WORKS

CENTRAL LABORATORY (HRS No. E54139)

PROJECT: LENA ROAD LANDFILL

DATES COLLECTED: July 7, 8, 12, 13, 14, 1993
COLLECTED BY: D. Elliott

LABORATORY METALS ANALYSES

LOCATION	DATE	ID No.	Chromium (mg/l)	Iron (mg/l)	Cadmium (mg/l)	Arsenic (mg/l)	Mercury* (mg/l)	Lead (mg/l)	Sodium (mg/l)
GC 1	07-Jul-93	20543	BDL	15.9	BDL	BDL	BDL	BDL	
GC 2	07-Jul-93	20543	BDL	6.33	BDL	BDL	BDL	BDL	49.3
GC 4	07-Jul-93	20543	BDL	13.5	BDL	BDL	BDL	BDL	21.5
SA 3	07-Jul-93	20543	BDL	0.160	BDL	BDL	BDL	BDL	22.7
SA 4	07-Jul-93	20543	BDL	0.159	BDL	BDL	BDL	BDL	38.0
									62.8
SA 2	08-Jul-93	20544	BDL	BDL	BDL	BDL	BDL	BDL	
SA 5	08-Jul-93	20544	BDL	0.173	BDL	BDL	BDL	BDL	29.3
SA 6	08-Jul-93	20544	BDL	0.218	BDL	BDL	BDL	BDL	57.0
GC 2	08-Jul-93	20544	BDL	31.5	BDL	BDL	BDL	BDL	44.6
LRII 1	08-Jul-93	20544	BDL	24.0	BDL	BDL	BDL	BDL	25.9
LRII 2	08-Jul-93	20544	BDL	BDL	BDL	BDL	BDL	BDL	22.5
									4.65
SMR I	12-Jul-93	20545	BDL	7.08	BDL	BDL	BDL	BDL	
SMR II	12-Jul-93	20545	BDL	BDL	BDL	BDL	BDL	BDL	22.3
SA 7	12-Jul-93	20545	BDL	1.48	BDL	BDL	BDL	BDL	57.0
SA 8	12-Jul-93	20545	BDL	0.142	BDL	BDL	BDL	BDL	9.99
RIT 3	12-Jul-93	20545	BDL	BDL	BDL	BDL	BDL	BDL	39.9
RIT 4	12-Jul-93	20545	BDL	BDL	BDL	BDL	BDL	BDL	39.5
									10.8
W 1	13-Jul-93	20528	BDL	4.81	BDL	BDL	BDL	BDL	
W 6	13-Jul-93	20528	BDL	4.59	BDL	BDL	BDL	BDL	12.7
W 4	13-Jul-93	20528	BDL	4.04	BDL	BDL	BDL	BDL	8.62
W 5	13-Jul-93	20528	BDL	4.20	BDL	BDL	BDL	BDL	47.7
RIT 5	13-Jul-93	20528	BDL	2.71	BDL	BDL	BDL	BDL	20.4
									7.88
W 2	14-Jul-93	20529	BDL	5.39	BDL	BDL	BDL	BDL	
W 3	14-Jul-93	20529	BDL	14.0	BDL	BDL	BDL	BDL	24.1
W 5	14-Jul-93	20529	BDL	5.54	BDL	BDL	BDL	BDL	59.4
C 5	14-Jul-93	20529	BDL	2.82	BDL	BDL	BDL	BDL	34.0
C 6	14-Jul-93	20529	BDL	5.34	BDL	BDL	BDL	BDL	13.6
									7.68
Detection Limits (mg/L)			0.040	0.100	0.040	0.055	0.0001	0.050	0.300

* Mercury analysis performed at P.E.Lafloreux & Associates (HRS 84183)

MANATEE COUNTY PUBLIC WORKS

CENTRAL LABORATORY (HRS No. E54139)

PROJECT: LENA ROAD LANDFILL

DATES COLLECTED: July 7, 8, 12, 13, 14, 1993

COLLECTED BY: D. Elliott

LOCATION	DATE	ID No.	Mercury *	EPA 601 *	EPA 602 *
			(ug/L) **	(note 1,2)	(note 1,2)
GC 1	07-Jul-93	20543	BDL	(note 3)	(note 3)
GC 3	07-Jul-93	20543	BDL	BDL	BDL
GC 4	07-Jul-93	20543	BDL	BDL	BDL
SA 3	07-Jul-93	20543	BDL	BDL	BDL
SA 4	07-Jul-93	20543	BDL	BDL	BDL
SA 2	08-Jul-93	20544	BDL	BDL	BDL
SA 5	08-Jul-93	20544	BDL	BDL	BDL
SA 6	08-Jul-93	20544	BDL	BDL	BDL
GC 2	08-Jul-93	20544	BDL	BDL	BDL
LR II 1	08-Jul-93	20544	BDL	BDL	BDL
LR II 2	08-Jul-93	20544			
SMR I	12-Jul-93	20545	0.0002	BDL	BDL
SMR II	12-Jul-93	20545	BDL	BDL	BDL
SA 7	12-Jul-93	20545	BDL	BDL	BDL
SA 8	12-Jul-93	20545	BDL	BDL	BDL
LR II 3	12-Jul-93	20545	BDL	BDL	BDL
LR II 4	12-Jul-93	20545	BDL	BDL	BDL
MW 1	13-Jul-93	20528	BDL	BDL	BDL
MW 6	13-Jul-93	20528	BDL	BDL	BDL
CW 4	13-Jul-93	20528	BDL	BDL	BDL
CW 5	13-Jul-93	20528	BDL	BDL	BDL
LR II 5	13-Jul-93	20528	BDL	BDL	BDL
MW 2	14-Jul-93	20529	BDL	BDL	BDL
MW 3	14-Jul-93	20529	BDL	BDL	BDL
MW 5	14-Jul-93	20529	BDL	BDL	BDL
GC 5	14-Jul-93	20529	BDL	BDL	BDL
GC 6	14-Jul-93	20529	BDL	BDL	BDL

* All analyses performed by P.E.LaMoreaux & Assoc. (HRS 84183)

** Reported detection limit - 0.0001 mg/L

note 1 : For analytes and detection limits see attached

note 2 : Reported "BDL" is for all analytes within the method

note 3 : For results see attached

MANATEE COUNTY PUBLIC WORKS
CENTRAL LABORATORY (HRS : E54139)
5100 65TH STREET WEST
BRADENTON, FL 32210

PARAMETER	Detection
=====	limit *
=====	=====

EPA 601

Bromodichloromethane	0.10
Bromoform	0.20
Bromomethane	1.00
Carbon tetrachloride	0.12
Chlorobenzene	0.25
Chloroethane	0.10
2-Chloroethylvinyl ether	0.13
Chloroform	0.05
Chloromethane	0.08
Dibromochloromethane	0.09
1,2-Dichlorobenzene	0.15
1,3-Dichlorobenzene	0.32
1,4-Dichlorobenzene	0.24
Dichlorodifluoromethane	1.00
1,1-Dichloroethane	0.07
1,2-Dichloroethane	0.03
1,1-Dichloroethene	0.13
trans 1,2-Dichloroethene	0.10
1,2-Dichloropropane	0.01
cis 1,3-Dichloropropene	0.10
trans 1,3-Dichloropropene	0.10
Methylene chloride	0.25
1,1,2,2-Tetrachloroethane	0.03
Tetrachloroethylene	0.03
1,1,1-Trichloroethane	0.03
1,1,2-Trichloroethane	0.02
Trichloroethene	0.12
Trichlorofluoromethane	1.00
Vinyl chloride	0.18

EPA 602

Benzene	0.009
Chlorobenzene	0.003
1,2-Dichlorobenzene	0.05
1,3-Dichlorobenzene	0.02
1,4-Dichlorobenzene	0.30
Ethylbenzene	0.20
Toluene	0.20
Xylenes (total)	0.02
Methyl t-butyl ether	1.00

* - Reported by P.E. LaMoreaux & Assoc. (HRS.84098) in ug/L

MANATEE COUNTY PUBLIC WORKS
CENTRAL LABORATORY (HRS : ES4139)
5100 65TH STREET WEST
BRADENTON, FL 32210

PARAMETER	GC-1 RESULTS	GC-1 ** Resample	GC-1 ** Resample Duplicate
=====	=====	=====	=====
EPA 601			
Bromodichloromethane	BDL		
Bromoform	BDL		
Bromomethane	BDL		
Carbon tetrachloride	BDL		
Chlorobenzene	4.87		
Chloroethane	BDL		
2-Chloroethylvinyl ether	BDL		
Chloroform	BDL		
Chloromethane	BDL		
Dibromochloromethane	BDL		
1,2-Dichlorobenzene	0.46		
1,3-Dichlorobenzene	BDL		
1,4-Dichlorobenzene	1.38		
Dichlorodifluoromethane	BDL		
1,1-Dichloroethane	BDL		
1,2-Dichloroethane	BDL		
1,1-Dichloroethene	BDL		
trans 1,2-Dichloroethene	BDL		
1,2-Dichloropropane	BDL		
cis 1,3-Dichloropropene	BDL		
trans 1,3-Dichloropropene	BDL		
Methylene chloride	BDL		
1,1,2,2-Tetrachloroethane	BDL		
Tetrachloroethylene	BDL		
1,1,1-Trichloroethane	BDL		
1,1,2-Trichloroethane	BDL		
Trichloroethene	BDL		
Trichlorofluoromethane	BDL		
Vinyl chloride	BDL		

EPA 602

Benzene	1.39	1.18	1.23
Chlorobenzene	4.87	3.16	3.17
1,2-Dichlorobenzene	0.46	BDL	BDL
1,3-Dichlorobenzene	BDL	BDL	BDL
1,4-Dichlorobenzene	1.38	0.67	0.56
Ethylbenzene	BDL	BDL	BDL
Toluene	0.54	0.51	0.63
Xylenes (total)	BDL	BDL	BDL
Methyl t-butyl ether	BDL	BDL	BDL

* - Analysis reported by P.E. LaMoreaux & Assoc. (HRS 84098)

** Collected July 19, 1993