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TOWN OF KERNERSVILLE
PUBLIC WORKS DEPARTMENT

Marvin W. Davis, Town Manager

Timothy G. Shields, Director

P.O. Box 728
Kernersville, N.C. 27285-0728

720 McKaughan Street
Telephone (336) 996-6916
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June 15, 2007

Received
JUN 2007
Solid Waste Section

Mr. Bobby Lutfy
NC Department of Environment and Natural Resources
Division of Solid Waste Management
PO BOX 27687
Raleigh, NC 27611-7687

RE: Kernersville, NC-Landfill Permit #34-04

Dear Mr. Lutfy:

Enclosed are copies of the semi-annual groundwater monitoring data collected at the subject landfill on the following dates: May 17th, 2006, December 22nd, 2006, and May 10th, 2007. Mr. Glenn Price with Research and Analytical Laboratories, Inc (RAL) conducted the groundwater monitoring program in accordance with the North Carolina Water Quality Monitoring Guidance Document for Solid Waste Facilities.

If you should have any questions concerning these reports or require further information, please feel free to contact me at any time.

Regards,

Tim Shields
Public Works Director

Enclosures (3)

RESEARCH & ANALYTICAL LABORATORIES, INC.
Analytical/Process Consultations

Table I - Volatile Organic Analysis for Selected Monitoring Wells at the Town of Kernersville Landfill - 22 December 2006

I. Volatile Organics EPA Method 8260 B Parameter	Quantitation Limit (mg/L)	GW-2 (mg/L)	GW-3S (mg/L)	GW-3D (mg/L)	GW-4 (mg/L)	GW-5 (mg/L)	GW-5 Duplicate (mg/L)	GW-6 (mg/L)	SW-1 (mg/L)	SW-2 (mg/L)	Field Blank (mg/L)	Travel Blank (mg/L)
Methylene Chloride	0.005	**0.0012 J**	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Trichlorofluoromethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1-Dichloroethene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1-Dichloroethane	0.005	**0.030**	**0.003 J**	**0.0056**	**0.0029 J**	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chloroform	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Carbon Tetrachloride	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichloropropane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Trichloroethene	0.005	**0.019**	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dibromochloromethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1,2-Trichloroethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Tetrachloroethene	0.005	**0.0062**	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chlorobenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Trans-1,2-Dichloroethene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichloroethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1,1-Trichloroethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bromodichloromethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Cis-1,3-Dichloropropene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzene	0.005	**0.011**	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Trans-1,3-Dichloropropene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bromoform	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1,2,2-Tetrachloroethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Toluene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Ethyl Benzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chloromethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bromomethane	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Vinyl Chloride	0.005	**0.0032 J**	**0.0074**	**0.0084**	**0.051**	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chloroethane	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Acetone	0.100	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Carbon Disulfide	0.100	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Vinyl Acetate	0.050	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Butanone	0.100	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
4-Methyl-2-Pentanone	0.100	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Hexanone	0.050	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Styrene	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Total Xylenes	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Acrylonitrile	0.200	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichlorobenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,4-Dichlorobenzene	0.005	**0.0034 J**	**0.0019 J**	**0.0031 J**	**0.0025 J**	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Trans-1,4-Dichloro-2-butene	0.100	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Cis-1,2-Dichloroethene	0.005	**0.068**	**0.020**	**0.067**	**0.024**	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Methyl Iodide	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bromochloromethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dibromomethane	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1,1,2-Tetrachloroethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2,3-Trichloropropane	0.008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dibromo-3-Chloropropane(DBCP)	0.025	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dibromoethane (EDB)	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Sample Number		578809	578810	578811	578812	578813	578815	578814	578816	578817	578818	578819
Sample Date		12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06
Sample Time (hrs)		1240	1259	1328	1222	1347	1347	1356	1412	1431	1419	0600

BQL = Below Quantitation Limits
mg/L = milligrams per Liter = parts per million (ppm)

N/A = Not Available
J = Estimated Concentration. Present but below detection limit.

Research & Analytical Laboratories, Inc.

Analytical/Process Consultations

RESEARCH & ANALYTICAL LABS SIDNEY L. CHAMPION NC #34 DIRECTOR CERTIFIED ANALYSIS

Table II - Inorganic Analysis (Appendix I - Subtitle D) for Selected Monitoring Wells at the Kernersville Landfill - 20 Dececmber 2006

II. Inorganics Parameter	EPA Method	Quantitation Limits (mg/L)	GW-2 (mg/L)	GW-3S (mg/L)	GW-3D (mg/L)	GW-4 (mg/L)	GW-5 (mg/L)	GW-5 Duplicate (mg/L)	GW-6 (mg/L)	SW-1 (mg/L)	SW-2 (mg/L)	Field Blank (mg/L)	Travel Blank (mg/L)
Antimony	7041	0.006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Arsenic	200.7	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Barium	200.7	0.100	**0.577**	**0.203**	BQL	BQL	**0.102**	**0.120**	**0.104**	BQL	BQL	BQL	BQL
Beryllium	200.7	0.001	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Cadmium	200.7	0.001	**0.003**	**0.026**	BQL	BQL	BQL	**0.001**	**0.004**	BQL	BQL	BQL	BQL
Chromium	200.7	0.010	BQL	**0.011**	BQL	BQL	BQL	BQL	**0.045**	BQL	BQL	BQL	BQL
Lead	200.7	0.010	BQL	**0.010**	BQL	BQL	BQL	BQL	**0.024**	BQL	BQL	BQL	BQL
Nickel	200.7	0.050	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Cobalt	200.7	0.010	BQL	BQL	BQL	BQL	**0.014**	**0.015**	BQL	BQL	BQL	BQL	BQL
Selenium	200.7	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Silver	200.7	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Thallium	200.7	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Zinc	200.7	0.010	**0.042**	**0.111**	BQL	BQL	**0.027**	**0.044**	**0.308**	BQL	**0.024**	BQL	BQL
Vanadium	200.7	0.025	BQL	**0.086**	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Sample Number			578809	578810	578811	578812	578813	578815	578814	578816	578817	578818	578819
Sample Date			12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06
Sample Time (hrs)			1240	1259	1328	1222	1347	1347	1356	1412	1431	1419	0600

mg/L = milligrams per Liter = parts per million (ppm)

GROUNDWATER MONITORING FIELD LOG

			Personnel Present:	**COMMENTS:**
Facility	**Kernersville**		**Glenn Price**	
	Landfill	**December 20, 2006**		
Weather	**Clear 54° F**	**Date**		

Monitoring Well No..	**GW-1**	**GW-2**	**GW-3S**	**GW-3D**	**GW-4**	**GW-5**	**GW-6**	**SW-1**	**SW-2**				
Total Depth (FT.)	34.69	13.18	24.00	56.95	14.40	11.36	24.00						
Surface Depth (FT.)	34.59	3.21	13.83	11.97	6.48	3.44	18.63						
Water Depth (FT.)	0.10	9.97	10.17	44.98	7.92	7.92	5.37						
Diameter (IN.)	2"	2"	2"	2"	2"	2"	2"						
Conversion Factor	0.16	0.16	0.16	0.16	0.16	0.16	0.16						
Well Volume (GAL.)	0.02	1.6	1.63	7.19	1.27	1.27	0.86						
Volume (GAL.) X 3	***WELL DRY***	4.79	4.88	21.60	3.80	3.80	2.58						
# Bails (L)		20	20	87	16	16	11						
Purge Date	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06						
Purge Time (hrs.)		1230	1247	1302	1216	1335	1150						
Purge Method	**Bailer**	**Bailer**	**Bailer**	**Bailer**	**Bailer**	**Bailer**	**Bailer**						
Volume Removed (GAL.)		5.00	5.00	22.00	1.25-Dry	4.00	2.75						
Sampling Date	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06	12/20/06				
Sampling Time (hrs.)		1240	1259	1328	1222	1347	1356	1412	1431				
Sampling Method	**Bailer**	**Bailer**	**Bailer**	**Bailer**	**Bailer**	**Bailer**	**Bailer**	**Grab**	**Grab**				
pH (Standard Units)		6.61	6.37	6.24	6.78	6.49	6.11	6.37	6.44				
Temperature (EC)		13.1	14.3	13.0	13.4	12.9	13.0	9.4	9.6				
Conductivity (µmhos/cm)		610	144	780	93.6	87.6	940	60.6	73.7				
Dissolved Oxygen (mg/L)													
Observations\Sampling		**Clear**	**Sl. Turbid**	**Clear**	**Clear**	**Clear**	**Sl. Turbid**	**Clear**	**Clear**				

* Duplicate

RESEARCH & ANALYTICAL LABORATORIES, INC.

Analytical / Process Consultations
Phone (336) 996-2841

CHAIN OF CUSTODY RECORD

COMPANY: Kernersville Landfill
JOB NO.:
STREET ADDRESS:
PROJECT:
CITY, STATE, ZIP:
SAMPLER NAME (PLEASE PRINT): Glenn Price
CONTACT: PHONE:
SAMPLER SIGNATURE:

WATER / WASTEWATER | MISC.

SAMPLE NUMBER (LAB USE ONLY)	DATE	TIME	COMP	GRAB	TEMP °C	RES Cl	CHLORINE REMOVED (Y or N)	SAMPLE MATRIX (S or W)	SAMPLE LOCATION / I.D.	NO. OF CONTAINERS	2L G (BNA, Herb. / Pest.)	2 40ml Vials (VOA) HCL	250ml G (TOX)	250ml P (TOC) H_2SO_4	1L P, G (BOD, TSS, Unpreserved, etc.)	1L G (Phenol, Oil & Grease) H_2SO_4	1L P, G (COD, N, P) H_2SO_4	1L P, G (Metals, Hardness) HNO_3	1L P, G (CYANIDE) NaOH	Sterile P, G (Coliform)				REQUESTED ANALYSIS
578809	12/20/00	1246		✓				W	GW-2	5		4						1						See Remarks
810		1259		✓				W	GW-3S	5		4						1						
811		1328		✓				W	GW-3D	5		4						1						
812	12/20/00	[illegible]		✓				W	GW-4	5		4						1						
813		1347		✓				W	GW-5	5		4						1						
814		1356		✓				W	GW-6	5		4						1						
815		1347		✓				W	Duplicate	5		4						1						
816		1412		✓				W	SW-1	5		4						1						
817		1431		✓				W	SW-2	5		4						1						
818		1419		✓				W	FB	5		4						1						
819	✓	0600		✓				W	TB	5		4						1						

RELINQUISHED BY	DATE/TIME	RECEIVED BY
[signature]	12/20/00	
RELINQUISHED BY	DATE/TIME 12-20-00 15:59	RECEIVED BY [signature]

REMARKS: * Sb, As, Ba, Be, Cd, Cr, Co, Pb, Ni, Se, Ag, Ti, V, Zn, VOA (8260)

SAMPLE TEMPERATURE AT RECEIPT 3 °C