State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director

DEHNR

January 6, 1995

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59-01	9/19/2011	DIN 15177

Mr. Tom Beggs
Law Engineering, Inc.
P.O. Box 11297
Charlotte, N.C. 28220

RE: Water Quality Sampling Parameters, Martin County Construction and Demolition Landfill (Permit #59-~~02~~ 01)

Dear Mr. Beggs,

In the Permit To Construct that was issued for the Martin County C&D Landfill today, the Monitoring And Reporting Requirements state in 1. f. that "Sampling equipment, procedures, and parameters shall conform to specifications outlined in the above referenced guidance document, (Attachment 2), or the current guidelines established by DSWM at the time of sampling". The "current guidelines" specify a **different set of parameters** than those referenced in Attachment 2, the "North Carolina Water Quality Guidance Document For Solid Waste Facilities". The parameter list currently required by the Solid Waste Section at C&D landfills is the one referenced in my letter of December 13, 1994, with the attachment: *Sampling And Analysis Requirements*.

In Law Engineering's December 16, 1994, response to my letter of December 13, no change of parameters was made from the list referenced in the November 25, 1994, response to comments. This document states: "The parameters to be analyzed will be the 15 metals and 47 volatile organics listed in Appendix I of RCRA Subtitle D (40 CFR 258.54)".

Therefore we now have three different sampling parameter lists referenced for the Martin County Construction and Demolition Landfill facility. The correct list currently required by the Solid Waste Section for C&D landfills includes the 8 RCRA metals and 47 volatile organic constituents as referenced in the attached *Sampling And Analysis Requirements* document.

The parameters listed in the *Sampling And Analysis Requirements* document will be the parameters that will be specified in the Permit To Operate. Martin County should plan on using this parameter list for the baseline sampling and all subsequent sampling (unless there is a change of policy by the Solid Waste Section in the future). All water quality sampling should also include field testing for pH, temperature, and specific conductivity.

Please reference the parameter list in the *Sampling And Analysis Requirements* document in any future correspondence related to water quality monitoring at the Martin County Construction and Demolition Landfill. If you have any questions regarding this letter, please contact me at (919) 733-0692.

Sincerely,

Bobby Lutfy

Bobby Lutfy
Hydrogeologist
Solid Waste Section

cc: Jim Barber, Solid Waste Section
Chuck Boyette, Solid Waste Section
Donnie Pittman, Martin County Manager

Attachment

SAMPLING AND ANALYSIS REQUIREMENTS
N.C. SOLID WASTE SECTION

LAB CERTIFICATION REQUIREMENTS:
The Solid Waste Section now requires water quality sample analysis by a laboratory certified by the Division of Environmental Management for groundwater analysis (15A NCAC 2H .0800). The laboratories used for water quality analysis for Solid Waste Section facilities shall be certified under the Division of Environmental Management (DEM) Certification program for the approved methods and at the approved levels of certification.

SAMPLING ANALYTICAL METHODS AND REPORTING LIMITS:
Each parameter on the following constituent list shall be certified at the designated level and an appropriately certified method used for the sample analysis. The data shall be reported at the specified Practical Quantitation Limit (PQL).

Parameter	Certification by DEM	PQL in ppb
Arsenic	Metals, Group I - low level	10
Barium	Barium (20)	500
Cadmium	Metals, Group I - low level	1
Chromium	Metals, Group I - low level	10
Lead	Metals, Group I - low level	10
Mercury	Metals (21)	1
Selenium	Metals, Group I - low level	20
Silver	Metals, Group II - low level	10

Volatile Organic Compounds
For the parameters and PQLs required for volatile organic compound analysis, refer to the next page of this attachment. For volatile organic analysis the laboratory shall be certified for an SW-846 GC/MS Method (8240 or 8260). The recommended method of analysis is EPA Method 8260.

SAMPLING AND ANALYSIS:
In addition to sampling for the constituents referenced above, all sampling should also include field testing of pH, temperature, and specific conductivity. EPA requires analysis for total metals. No filtering of samples is allowed. The 3030C preparation method for metals analysis is not allowed.

VOLATILE ORGANIC COMPOUNDS

ORGANIC CONSTITUENT	PQL (UG/L)	ORGANIC CONSTITUENT	PQL (UG/L)
(16) ACETONE	100	(40) T-1,3-DICHLOROPROPENE	10
(17) ACRYLONITRILE	200	(41) ETHYLBENZENE	5
(18) BENZENE	5	(42) METHYL BUTYL KETONE	50
(19) BROMOCHLOROMETHANE	5	(43) METHYL BROMIDE	10
(20) BROMODICHLOROMETHANE	5	(44) METHYL CHLORIDE	10
(21) BROMOFORM	5	(45) METHYLENE BROMIDE	10
(22) CARBON DISULFIDE	100	(46) METHYLENE CHLORIDE	10
(23) CARBON TETRACHLORIDE	10	(47) MEK; 2-BUTANONE	100
(24) CHLOROBENZENE	5	(48) METHYL IODIDE	10
(25) CHLOROETHANE	10	(49) METHYL ISOBUTYL KETONE	100
(26) CHLOROFORM	5	(50) STYRENE	10
(27) CHLORODIBROMOMETHANE	5	(51) 1,1,1,2-TETRACHLOROETHANE	5
(28) DBCP	25	(52) 1,1,2,2-TETRACHLOROETHANE	5
(29) ETHYLENE DIBROMIDE	5	(53) TETRACHLOROETHYLENE	5
(30) O-DICHLOROBENZENE	5	(54) TOLUENE	5
(31) P-DICHLOROBENZENE	5	(55) 1,1,1,-TRICHLOROETHANE	5
(32) T-1,4-DICHLORO-2-BUTENE	100	(56) 1,1,2-TRICHLOROETHANE	5
(33) 1,1-DICHLOROETHANE	5	(57) TRICHLOROETHYLENE	5
(34) ETHYLENE DICHLORIDE	5	(58) CFC-11	5
(35) VINYLIDENE CHLORIDE	5	(59) 1,2,3-TRICHLOROPROPANE	15
(36) CIS-1,2-DICHLOROETHENE	5	(60) VINYL ACETATE	50
(37) T-1,2-DICHLOROETHENE	5	(61) VINYL CHLORIDE	10
(38) PROPYLENE DICHLORIDE	5	(62) XYLENES	5
(39) CIS-1,3-DICHLOROPROPENE	10		

ALSO KNOWN AS: (21)-TRIBROMOMETHANE, (25)-ETHYL CHLORIDE, (26)-TRICHLOROMETHANE, (27)-DIBROMOCHLOROMETHANE, (28)-1,2-DIBROMO-3-CHLOROPROPANE, (29)-1,2-DIBROMOETHANE, (30)-1,2-DICHLOROBENZENE, (31)-1,4-DICHLOROBENZENE, (33)-ETHYLIDENE CHLORIDE, (34)-1,2-DICHLOROETHANE, (35)-1,1-DICHLOROETHENE (ETHYLENE), (36)-CIS-1,2-DICHLOROETHYLENE, (37)-TRANS-1,2-DICHLOROETHYLENE, (38)-1,2-DICHLOROPROPANE, (42)-2-HEXANONE, (43)-BROMOMETHANE, (44)-CHLOROMETHANE, (45)-DIBROMOMETHANE, (46)-DICHLOROMETHANE, (47)-METHYL ETHYL KETONE, (48)-IODOMETHANE, (49)-4-METHYL-2-PENTANONE, (53)-TETRACHLOROETHENE, PERCHLOROETHYLENE, (55)-METHYLCHLOROFORM, (57)-TRICHLOROETHENE, (58)-TRICHLOROFLUOROMETHANE

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MEMORANDUM

To: Jim Barber

Date: January 3, 1995

Through: Bobby Lutfy

From : Jim Bateson JB

RE: Proposed Martin County C&D Landfill; Hydrogeological Considerations

The Solid Waste Section has reviewed the December 16, 1994 response of Law Environmental, Inc. to earlier comments of the Section. As amended, the permit application appears to satisfy those requirements of the Solid Waste Management Rules which concern the hydrogeology and water quality monitoring of the proposed facility.

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