TABLE 1 - FIELD PARAMETERS
DUKE ENERGY MARSHALL STEAM STATION **May 11, 2010**
FLY ASH LANDFILL - PERMIT #18-04
GROUNDWATER MONITORING REPORT
S&ME PROJECT 1411-09-047

DATE	WELL NO.	WELL DEPTH (feet)	DEPTH TO WATER (feet)	WATER ELEV. (feet)	ODOR	Purge Method	AVG * PMP RATE (ml/min)	WELL VOL (gal)	EVAC VOL (gal)	EVAC (yes/no)	TEMP (deg C)	SPECIFIC CONDUCTANCE (umho/cm)	pH (units)	TURBIDITY (NTU)	ORP (mV-NHE)	DO (mg/l)
2/8/2010	MW-1	78.75	50.68	773.02	N/A	CP	N/A	4.58	14.25	NO	15.1	144	6.1	3.1	N/A	N/A
2/8/2010	MW-2	35.10	5.94	791.28	N/A	CP	N/A	4.76	15.00	NO	15.5	330	5.6	2.2	N/A	N/A
2/8/2010	MW-3	28.15	6.99	806.08	N/A	CP	N/A	3.45	10.50	NO	14.5	103	5.2	3.1	N/A	N/A
2/8/2010	MW-4	50.20	38.82	828.56	N/A	CP	N/A	1.86	2.50	YES	13.2	47	6.3	3.6	N/A	N/A
2/8/2010	MW-5	30.71	22.90	799.79	N/A	CP	N/A	1.27	3.75	NO	14.3	39	5.8	6.6	N/A	N/A
2/8/2010	OB-1	65.50	45.43	780.42	N/A	NA	N/A	3.27	NA	N/A	NA	NA	NA	NA	NA	N/A

Sampling performed by Duke Energy

NA = Not Applicable

Purge Methods
LF = Low Flow
CP = Coventional Purge (3 to 5 well vol)
BP = No Purge (HydraSleeve)
NP = Not Purged

TABLE 2 - FIELD AND ANALYTICAL RESULTS
DUKE ENERGY MARSHALL STEAM STATION
FLY ASH LANDFILL - PERMIT #18-04
GROUNDWATER MONITORING REPORT
S&ME PROJECT 1411-09-047

May 11, 2010

Sample Date: February 8, 2010 (Field and Geochemistry Data)

Field sampling performed by Duke Energy

Laboratory Certificate Codes:
Duke Power Field #5193
Pace Lab #12
Summit Analytical Labs #631

Parameter	SW ID	Units	Certificate Codes	Monitoring Well Identification						Field Blank	SWSL	15A NCAC 2L*
				1804-MW-1	1804-MW-2	1804-MW-3	1804-MW-4	1804-MW-5	1804-OB-1			
Field pH	320	Std. Units	5193	**6.1**	**5.6**	**5.2**	**6.3**	**5.8**				**6.5-8.5**
Field Spec. Conductance	323	umho/cm	5193	144	330	103	47	39				
Temperature	325	C	5193	15.1	15.5	14.5	13.2	14.3				
Depth to Water	318	feet		50.68	5.94	6.99	38.82	22.90	45.43			
Water Elevation	319	feet		773.02	791.28	806.08	828.56	799.79	780.42			
Well Depth	41	feet		78.75	35.10	28.15	50.20	30.71	65.50			
Arsenic	14	µg/L	12	2.7	2.7 U	2.7 U	2.7 U	2.7 U		2.7 U	**10**	**10**
Barium	15	µg/L	12	68.8	59.9 J	342	51.8	39.7		0.20 U	**100**	**700**
Boron	316	µg/L	12	575	**2660**	22.0	17.3	15.0		11.5	**NE**	**700**
BOD, 5 day	NE	µg/L	12	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U			**NE**	**NE**
Cadmium	34	µg/L	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U		0.50 U	**1.0**	**2**
Chemical Oxygen Demand	317	µg/L	12	25000 U	86000	25000 U	25000 U	25000 U		25000 U	**NE**	**NE**
Chloride	301	µg/L	12	5000 U	6540	10600	5000 U	5000 U		5000 U	**NE**	**250000**
Chromium	51	µg/L	12	7.2 J	0.40 U	0.86 J	2.0 J	0.40 U		0.40 U	**10**	**10**
Copper	54	µg/L	12	0.30 U	0.56 J	0.30 U	0.32 J	0.30 U		0.30 U	**10**	**1000**
Fluoride	312	µg/L	12	100 U	100 U	100 U	100 U	100 U		100 U	**2000**	**2000**
Iron	340	µg/L	12	14.0 U	14.0 U	14.0 U	**533**	117		14.0 U	**300**	**300**
Lead	131	µg/L	12	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U		4.0 U	**10**	**15**
Manganese	342	µg/L	12	5.3 U	9.4	**56.3**	11.2	46.7		5.3 U	**50**	**50**
Mercury	132	µg/L	12	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U		0.070 U	**0.20**	**1**
Nickel	152	µg/L	12	1.7 U	2.5 J	3.0 J	1.7 U	1.7 U		1.7 U	**50**	**100**
Nitrogen, Nitrate	303	µg-N/L	12	100 U	378 J	6930	100 U	100 U		100 U	**1000**	**10000**
Selenium	183	µg/L	12	3.8 U	**23.5**	3.8 U	3.8 U	3.8 U		3.8 U	**10**	**20**
Silver	184	µg/L	12	0.42 J	1.3 J	0.10 U	0.10 U	0.10 U		4.0 J	**10**	**20**
Sulfate	315	µg/L	12	38700	111000	5000 U	5000 U	5000 U		5000 U	**250000**	**250000**
Total Dissolved Solids	311	µg/L	12	120000 U	236000	72000	52000	54000			**NE**	**500000**
Total Organic Carbon	357	µg/L	12	4650 U	13500	8180	3810	3610		1000 U	**NE**	**NE**
Total Organic Halide	396	mg/L	631	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U	**NE**	**NE**
Zinc	213	µg/L	12	1.2 J	68.1	16.9	1.5 J	2.3 J		0.59 J	**10**	**1000**

Notes:

15A NCAC 2L = 15A NCAC 2L .0200, Groundwater Quality Standards for Class GA groundwater (effective 1/1/10)

BOLD VALUES indicate values that attain or exceed the 15A NCAC 2L MCL.

Values in gray cells indicate values that equal or exceed the SWSL.

J = Parameters are values greater than Method Detection Limit (MDL) but less than the SWSL

U = Not detected above the MDL, for reporting purposes concnetrations have been set equal to the MDL.

*** Maximum Contaminant Level (MCL)**

Analytical results provided by Duke Energy and are found in
Pace Lab Report 9260764, dated January 19, 2010.

NC SWSL = North Carolina Solid Waste Section Limit

NE = Not established