TABLE 1
DUKE ENERGY PINE HALL ROAD ASH LANDFILL
GROUNDWATER MONITORING REPORT
S&ME PROJECT 1411-09-047

Facility: Belews Creek Steam Station Pine Hall Fly-Ash Landfill #85-03
Stokes County, North Carolina
Field Data and Analytical Results
Sample Date: April 21-22, 2009

Certificate Codes:
Duke Power Lab #248
Duke Power Field #5193
Pace Analytical #12

Parameter	SWS ID	Units	Certificate Code	Monitoring Well Identification						SWSL	15A NCAC 2L*
				8503-MW-1	8503-MW-1D	8503-MW-2	8503-MW-3	8503-MW-4	8503-MW-5		
Field pH	320	Std. Units	5193	**4.9**	6.6	**5.6**	**5.4**	**6.0**	**5.7**		**6.5-8.5**
Field Spec. Conductance	323	umho/cm	5193	16	385	65	48	151	34		
Temperature	325	C	5193	13.2	13.5	14.7	13.6	13.9	16.2		
Top Casing	328	feet		853.02	854.33	853.39	843.19	768.11	787.17		
Depth to Water	318	feet		36.50	41.01	44.51	40.72	13.24	25.46		
Water Elevation	319	feet		816.52	813.32	808.88	802.47	754.87	761.71		
Well Depth	41	feet		47.20	90.53	50.00	49.50	40.20	60.20		
Arsenic	14	ug/l	12	ND U	3.6 J	ND U	ND U	ND U	ND U	**10**	**50**
Barium	15	ug/l	12	15.8 J	3.9 J	71.5 J	48.5 J	2.4 J	26.8 J	**100**	**2000**
BOD	316	ug/l	12	ND U	7	ND U	ND U	ND U	ND U	**NE**	**NE**
Boron	NE	ug/l	12	19.5	26	15.6	13.8	166.0	12.9	**NE**	**315**
Cadmium	34	ug/l	12	ND U	ND U	ND U	ND U	ND U	ND U	**1.0**	**1.75**
Chemical Oxygen Demand	317	ug/l	12	ND U	30000	ND U	ND U	ND U	ND U	**NE**	**NE**
Chloride	301	ug/l	12	ND U	13800	6800	8500	ND U	ND U	**NE**	**250000**
Chromium	51	ug/l	12	1.2 J	ND U	6.9 J	1.6 J	11.7	1.0 J	**10**	**50**
Copper	54	ug/l	12	0.8 J	0 J	0.7 J	ND U	ND U	74.0	**10**	**1000**
Fluoride	312	ug/l	12	ND U	130 J	ND U	ND U	ND U	ND U	**2000**	**2000**
Iron	340	ug/l	12	**466.0**	40 J	**615.0**	**432.0**	148.0 J	**329.0**	**300**	**300**
Lab pH	321	Std. Units	12	**5.3**	6.9	**6.1**	**5.9**	**6.2**	**5.9**		**6.5-8.5**
Lead	131	ug/l	12	ND U	ND U	ND U	ND U	ND U	5.8 J	**10**	**15**
Manganese	342	ug/l	12	31.2 J	**483**	13.2 J	7.5 J	8.4 J	9.7 J	**50**	**50**
Mercury	132	ug/l	12	ND U	ND U	ND U	ND U	ND U	ND U	**0.20**	**1.05**
Nickel	152	ug/l	12	ND U	2.8 J	4.1 J	2.0 J	ND U	ND U	**50**	**100.00**
Nitrate (as Nitrogen)	303	ug-N/l	12	253.0 J	1200 J	569.0 J	ND U	582.0 J	959.0 J	**1000**	**10000**
Selenium	183	ug/l	12	ND U	ND U	ND U	ND U	ND U	ND U	**10**	**50**
Silver	184	ug/l	12	ND U	0.16 J	ND U	ND U	ND U	ND U	**10**	**17.5**
Sulfate	315	ug/l	12	ND U	75000 J	ND U	ND U	29600 J	ND U	**250000**	**250000**
Total Dissolved Solids	311	ug/l	12	26000	240000	66000	40000	104000	38000	**NE**	**500000**
Total Organic Carbon	357	ug/l	12	5960	11800	7970	4930	8660	4330	**NE**	**NE**
Total Organic Halogen	396	ug/l	12	0.0	0	0.0	0.0	ND U	ND U	**NE**	**NE**
Zinc	213	ug/l	12	4.1 J	3 J	4.4 J	3.6 J	1.1 J	43.0	**10**	**1050**

*** Maximum Contaminant Level (MCL)**

Notes:

15A NCAC 2L = 15A NCAC 2L .0200, Groundwater Quality Standards for Class GA groundwater
BOLD VALUES indicate a values that attain or exceed the 15A NCAC 2L MCL.
ND = Not detected by Lab at or above adjusted reporting limit.
J = Parameters are estimated values greater than Method Detection Limit (MDL) but less than the SWSL
U = Value below Laboratory Reporting Limit

NC SWSL = North Carolina Solid Waste Section Limit
NE = Not established
Values in gray cells indicate values that attain or exceed the SWSL.

TABLE 1
DUKE ENERGY PINE HALL ROAD ASH LANDFILL
GROUNDWATER MONITORING REPORT
S&ME PROJECT 1411-09-047

Facility: Belews Creek Steam Station Pine Hall Fly-Ash Landfill #85-03
(Field and Geochemistry Data)
Sample Date: **April 21-22, 2009**

Certificate Codes:
Duke Power Lab #248
Duke Power Field #5193
Pace Analytical #12

Parameter	SWS ID	Units	Certificate Code	Monitoring Well Identification						SWSL	15A NCAC 2L*
				8503-MW-6	8503-MW-7	8503-MW2-7	8503-MW2-9	8503-OB-4	8503-OB-5		
Field pH	320	Std. Units	5193	**5.6**	**5.6**	**5.5**	**6.3**	8.1	**5.1**		**6.5-8.5**
Field Spec. Conductance	323	umho/cm	5193	57.0	66	1813	498	2735	36		
Temperature	325	C	5193	14.0	14.8	15.6	11.9	15.5	15.3		
Top Casing	328	feet		837.70	815.57	778.79	798.04	777.60	780.53		
Depth to Water	318	feet		32.07	5.46	14.27	4.63	23.24	25.83		
Water Elevation	319	feet		805.63	810.11	764.52	793.41	754.36	754.70		
Well Depth	41	feet		36.84	14.26	30.62	14.61	30.03	36.60		
Arsenic	14	ug/l	12	ND U	7.1 J	7.6 J	3.5 J	**75.6**	ND U	**10**	**50**
Barium	15	ug/l	12	53.1 J	194	37.3 J	78.7 J	29.2 J	175.0	**100**	**2000**
BOD	316	ug/l	12	ND U	ND U	ND U	6.0	ND U	ND U	**NE**	**NE**
Boron	NE	ug/l	12	12.5	12	**17900**	**1520**	**44600**	8.9	**NE**	**315**
Cadmium	34	ug/l	12	ND U	ND U	0.7 J	ND U	ND U	ND U	**1.0**	**1.75**
Chemical Oxygen Demand	317	ug/l	12	ND U	ND U	ND U	25200.0	ND U	ND U	**NE**	**NE**
Chloride	301	ug/l	12	6440	6100	16600	14900	5540	7440	**NE**	**250000**
Chromium	51	ug/l	12	ND U	10 J	0.5 J	1.5 J	ND U	0.6 J	**10**	**50**
Copper	54	ug/l	12	ND U	7 J	ND U	ND U	ND U	0.9 J	**10**	**1000**
Fluoride	312	ug/l	12	ND U	ND U	ND U	120.0 J	1000.0 J	ND U	**2000**	**2000**
Iron	340	ug/l	12	**880.0**	**28100**	ND U	**5080.0**	ND U	**731.0**	**300**	**300**
Lab pH	321	Std. Units	12	**5.5**	**5.7**	**5.6**	**6.4**	8.1	**5.6**		**6.5-8.5**
Lead	131	ug/l	12	ND U	11	ND U	ND U	ND U	ND U	**10**	**15**
Manganese	342	ug/l	12	40.9 J	**661**	**234.0**	**5140**	**130.0**	23.2 J	**50**	**50**
Mercury	132	ug/l	12	ND U	0.54	ND U	ND U	ND U	ND U	**0.20**	**1.05**
Nickel	152	ug/l	12	ND U	4.2 J	7.2 J	3.7 J	ND U	ND U	**50**	**100.00**
Nitrate (as Nitrogen)	303	ug-N/l	12	ND U	146 J	**29600**	1380 J	6740 J	ND U	**1000**	**10000**
Selenium	183	ug/l	12	ND U	ND U	**134.0**	ND U	**257.0**	ND U	**10**	**50**
Silver	184	ug/l	12	ND U	ND U	0.7 J	0.2 J	9.1 J	ND U	**10**	**17.5**
Sulfate	315	ug/l	12	ND U	ND U	**900000**	86900 J	**1520000**	ND U	**250000**	**250000**
Total Dissolved Solids	311	ug/l	12	34000	66000	**1710000**	200000	**2820000**	ND U	**NE**	**500000**
Total Organic Carbon	357	ug/l	12	10700	16400	15600	31700	4810	ND U	**NE**	**NE**
Total Organic Halogen	396	ug/l	12	ND U	0	0.0	0.0	ND U	ND U	**NE**	**NE**
Zinc	213	ug/l	12	1.4 J	120	6.8 J	ND U	ND U	7.5 J	**10**	**1050**

*** Maximum Contaminant Level (MCL)**

Notes:

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BOLD VALUES indicate a values that attain or exceed the 15A NCAC 2L MCL.
ND = Not detected by Lab at or above adjusted reporting limit.
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Values in gray cells indicate values that attain or exceed the SWSL.

TABLE 1
DUKE ENERGY PINE HALL ROAD ASH LANDFILL
GROUNDWATER MONITORING REPORT
S&ME PROJECT 1411-09-047

Facility: Belews Creek Steam Station Pine Hall Fly-Ash Landfill #85-03
(Field and Geochemistry Data)
Sample Date: **April 21-22, 2009**

Certificate Codes:
Duke Power Lab #248
Duke Power Field #5193
Pace Analytical #12

Parameter	SWS ID	Units	Certificate Code	Monitoring Well Identification						SWSL	15A NCAC 2L*
				8503-OB-9		8503-SW-1A	8503-SW-2	FIELD BLANK			
Field pH	320	Std. Units	5193	**5.1**							**6.5-8.5**
Field Spec. Conductance	323	umho/cm	5193	2187							
Temperature	325	C	5193	14.7							
Top Casing	328	feet		853.02							
Depth to Water	318	feet		48.57							
Water Elevation	319	feet		804.45							
Well Depth	41	feet		47.20							
Arsenic	14	ug/l	12	10.7				ND	U	**10**	**50**
Barium	15	ug/l	12	14.7	J	**NO FLOW**	**NO SAMPLE**	ND	U	**100**	**2000**
BOD	316	ug/l	12	ND	U	**OBSERVED**	**COLLECTED**	8.4		**NE**	**NE**
Boron	NE	ug/l	12	**31400**		**NO SAMPLE**	**DUE TO**	ND	U	**NE**	**315**
Cadmium	34	ug/l	12	**4.0**		**COLLECTED**	**UNSAFE**	ND	U	**1.0**	**1.75**
Chemical Oxygen Demand	317	ug/l	12	ND	U		**CONDITIONS**	ND	U	**NE**	**NE**
Chloride	301	ug/l	12	12700				ND	U	**NE**	**250000**
Chromium	51	ug/l	12	0.5	J			ND	U	**10**	**50**
Copper	54	ug/l	12	ND	U			ND	U	**10**	**1000**
Fluoride	312	ug/l	12	ND	U			ND	U	**2000**	**2000**
Iron	340	ug/l	12	ND	U			5.0		**300**	**300**
Lab pH	321	Std. Units	12	**5.4**				ND	U		**6.5-8.5**
Lead	131	ug/l	12	ND	U			ND	U	**10**	**15**
Manganese	342	ug/l	12	**2170.0**				ND	U	**50**	**50**
Mercury	132	ug/l	12	0.1	J			ND	U	**0.20**	**1.05**
Nickel	152	ug/l	12	10.6	J			ND	U	**50**	**100.00**
Nitrate (as Nitrogen)	303	ug-N/l	12	4160	J			ND	U	**1000**	**10000**
Selenium	183	ug/l	12	**243.0**				ND	U	**10**	**50**
Silver	184	ug/l	12	0.7	J			ND	U	**10**	**17.5**
Sulfate	315	ug/l	12	**1300000**				ND	U	**250000**	**250000**
Total Dissolved Solids	311	ug/l	12	**2070000**				ND	U	**NE**	**500000**
Total Organic Carbon	357	ug/l	12	2090				4.0	J	**NE**	**NE**
Total Organic Halogen	396	ug/l	12	0.03				ND	U	**NE**	**NE**
Zinc	213	ug/l	12	59.5				15.8	J	**10**	**1050**

*** Maximum Contaminant Level (MCL)**

Notes:

15A NCAC 2L = 15A NCAC 2L .0200, Groundwater Quality Standards for Class GA groundwater
BOLD VALUES indicate a values that attain or exceed the 15A NCAC 2L MCL.
ND = Not detected by Lab at or above adjusted reporting limit.
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Values in gray cells indicate values that attain or exceed the SWSL.

Table 2
Groundwater Analytical Results
Appendix I - 40 CFR Part 258 Compounds
Belews Creek Steam Station Pine Hall Fly-Ash Landfill #85-03
S&ME Project No. 1411-09-047
Sample Date: April 21-22, 2009

	Compound	NCAC 2L Stds. (ug/L)	SWSL (ug/L)	8503-MW-1		8503-MW-1D		8503-MW-2		8503-MW-3		8503-MW-4		8503-MW-5	
(1)	Antimony	NE	6	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(2)	Arsenic	50	10	ND	U	3.6	J	ND	U	ND	U	ND	U	ND	U
(3)	Barium	2000	100	15.8	J	3.9	J	71.5	J	48.5	J	2.4	J	26.8	J
(4)	Beryllium	NE	1	ND	U	ND	U	0.51	J	0.14	J	ND	U	ND	U
(5)	Cadmium	1.75	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(6)	Chromium	50	10	1.2	J	ND	U	6.9	J	1.6	J	11.7		0.98	J
(7)	Cobalt	NE	10	4.1	J	5.8	J	4.9	J	3.6	J	2.2	J	4.2	J
(8)	Copper	1000	10	0.82	J	0.44	J	0.67	J	ND	U	ND	U	74	
(9)	Lead	15	10	ND	U	ND	U	ND	U	ND	U	ND	U	5.8	J
(10)	Nickel	100	50	ND	U	2.8	J	4.1	J	2	J	ND	U	ND	U
(11)	Selenium	50	10	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(12)	Silver	17.5	10	ND	U	0.16	J	ND	U	ND	U	ND	U	ND	U
(13)	Thallium	NE	5.5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(14)	Vanadium	NE	25	0.2	J	0.38	J	0.75	J	1.2	J	1.8	J	0.37	J
(15)	Zinc	1050	10	4.1	J	3.4	J	4.4	J	3.6	J	1.1	J	43	
(16)	Acetone	700	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(17)	Acrylonitrile	NE	200	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(18)	Benzene	1	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(19)	Bromochloromethane	NE	3	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(20)	Bromodichloromethane	0.56	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(21)	Bromoform	4.43	3	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(22)	Carbon disulfide	700	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(23)	Carbon tetrachloride	0.269	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(24)	Chlorobenzene	50	3	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(25)	Chloroethane	2800	10	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(26)	Chloroform	70	5	ND	U	ND	U	ND	U	0.3	J	ND	U	ND	U
(27)	Dibromochloromethane	0.41 (1)	3	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(28)	1,2-Dibromo-3-chloropropane	0.025	13	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(29)	1,2-Dibromoethane (EDB)	0.0004	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(30)	1,2-Dichlorobenzene	24	5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(31)	1,4-Dichlorobenzene	1.4	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(32)	trans-1,4-Dichloro-2-butene	NE	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(33)	1,1-Dichloroethane	70	5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(34)	1,2-Dichloroethane	0.38	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(35)	1,1-Dichloroethene	7	5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(36)	cis-1,2-Dichloroethene	70	5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(37)	trans-1,2-Dichloroethene	100	5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(38)	1,2-Dichloropropane	0.51	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(39)	cis-1,3-Dichloropropene	0.19	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(40)	trans-1,3-Dichloropropene	0.19	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(41)	Ethylbenzene	550	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(42)	2-Hexanone	28 (1)	50	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(43)	Bromomethane	NE	10	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(44)	Chloromethane	2.6	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(45)	Dibromomethane	NE	10	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(46)	Methylene Chloride	2.6	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(47)	2-Butanone (MEK)	4200	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(48)	Iodomethane	NE	10	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(49)	4-Methyl-2-pentanone (MIBK)	NE	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(50)	Styrene	100	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(51)	1,1,1,2-Tetrachloroethane	NE	5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(52)	1,1,2,2-Tetrachloroethane	0.17 (1)	3	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(53)	Tetrachloroethene	0.7	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(54)	Toluene	1000	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(55)	1,1,1-Trichloroethane	200	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(56)	1,1,2-Trichloroethane	NE	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(57)	Trichloroethene	2.8	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(58)	Trichlorofluoromethane	2100	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(59)	1,2,3-Trichloropropane	0.005	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(60)	Vinyl acetate	NE	50	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(61)	Vinyl chloride	0.015	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(62)	m,p,o-Xylenes	1050	5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U

Notes:

15A NCAC 2L = 15A NCAC 2L .0200, Groundwater Quality Standards for Class GA groundwater

(1) Interim Maximum Allowable Concentration

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

ND = Not detected by Lab at or above adjusted reporting limit.

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

U = Indicates compound was analyzed for, but not detected above the Laboratory Reporting Limit

NC SWSL = North Carolina Solid Waste Section Limit

NE = Not established

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

Analyses performed by Pace Analytical Charlotte; NC Wastewater Certification #:12

Table 2
Groundwater Analytical Results
Appendix I - 40 CFR Part 258 Compounds
Belews Creek Steam Station Pine Hall Fly-Ash Landfill #85-03
S&ME Project No. 1411-09-047
Sample Date: April 21-22, 2009

	Compound	NCAC 2L Stds. (ug/L)	SWSL (ug/L)	8503-MW-6		8503-MW-7		8503-MW2-7		8503-MW2-9		8503-OB-4		8503-OB-5	
(1)	Antimony	NE	6	ND	U	ND	U	ND	U	ND	U	27.6		ND	U
(2)	Arsenic	50	10	ND	U	7.1	J	7.6	J	3.5	J	**75.6**		ND	U
(3)	Barium	2000	100	53.1	J	194		37.3	J	78.7	J	29.2	J	175	
(4)	Beryllium	NE	1	0.42	J	2.2		1.7		ND	U	ND	U	0.44	J
(5)	Cadmium	1.75	1	ND	U	ND	U	0.7	J	ND	U	ND	U	ND	U
(6)	Chromium	50	10	ND	U	9.7	J	0.54	J	1.5	J	ND	U	0.58	J
(7)	Cobalt	NE	10	5.3	J	6.9	J	ND	U	20.6		ND	U	3.2	J
(8)	Copper	1000	10	ND	U	7.4	J	ND	U	ND	U	ND	U	0.9	J
(9)	Lead	15	10	ND	U	11.3		ND	U	ND	U	ND	U	ND	U
(10)	Nickel	100	50	ND	U	4.2	J	7.2	J	3.7	J	ND	U	ND	U
(11)	Selenium	50	10	ND	U	ND	U	**134**		ND	U	**257**		ND	U
(12)	Silver	17.5	10	ND	U	ND	U	0.71	J	0.17	J	9.1	J	ND	U
(13)	Thallium	NE	5.5	ND	U	0.72	J	ND	U	ND	U	9.4		ND	U
(14)	Vanadium	NE	25	ND	U	25.3		0.44	J	0.23	J	189		1.9	J
(15)	Zinc	1050	10	1.4	J	120		6.8	J	ND	U	ND	U	7.5	J
(16)	Acetone	700	100	ND	U	ND	U	ND	U	7.9	J	ND	U	ND	U
(17)	Acrylonitrile	NE	200	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(18)	Benzene	1	1	ND	U	**32.6**		ND	U	ND	U	ND	U	ND	U
(19)	Bromochloromethane	NE	3	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(20)	Bromodichloromethane	0.56	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(21)	Bromoform	4.43	3	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(22)	Carbon disulfide	700	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(23)	Carbon tetrachloride	0.269	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(24)	Chlorobenzene	50	3	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(25)	Chloroethane	2800	10	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(26)	Chloroform	70	5	1.2	J	ND	U	ND	U	ND	U	ND	U	ND	U
(27)	Dibromochloromethane	0.41 (1)	3	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(28)	1,2-Dibromo-3-chloropropane	0.025	13	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(29)	1,2-Dibromoethane (EDB)	0.0004	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(30)	1,2-Dichlorobenzene	24	5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(31)	1,4-Dichlorobenzene	1.4	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(32)	trans-1,4-Dichloro-2-butene	NE	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(33)	1,1-Dichloroethane	70	5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(34)	1,2-Dichloroethane	0.38	1	ND	U	**1.1**		ND	U	ND	U	ND	U	ND	U
(35)	1,1-Dichloroethene	7	5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(36)	cis-1,2-Dichloroethene	70	5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(37)	trans-1,2-Dichloroethene	100	5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(38)	1,2-Dichloropropane	0.51	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(39)	cis-1,3-Dichloropropene	0.19	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(40)	trans-1,3-Dichloropropene	0.19	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(41)	Ethylbenzene	550	50	ND	U	0.54	J	ND	U	ND	U	ND	U	ND	U
(42)	2-Hexanone	28 (1)	10	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(43)	Bromomethane	NE	1	ND	U	6.9		ND	U	ND	U	ND	U	ND	U
(44)	Chloromethane	2.6	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(45)	Dibromomethane	NE	10	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(46)	Methylene Chloride	2.6	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(47)	2-Butanone (MEK)	4200	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(48)	Iodomethane	NE	10	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(49)	4-Methyl-2-pentanone (MIBK)	NE	100	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(50)	Styrene	100	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(51)	1,1,1,2-Tetrachloroethane	NE	5	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(52)	1,1,2,2-Tetrachloroethane	0.17 (1)	3	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(53)	Tetrachloroethene	0.7	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(54)	Toluene	1000	1	ND	U	42.1		ND	U	ND	U	ND	U	ND	U
(55)	1,1,1-Trichloroethane	200	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(56)	1,1,2-Trichloroethane	NE	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(57)	Trichloroethene	2.8	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(58)	Trichlorofluoromethane	2100	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(59)	1,2,3-Trichloropropane	0.005	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(60)	Vinyl acetate	NE	50	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(61)	Vinyl chloride	0.015	1	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
(62)	m,p,o-Xylenes	1050	5	ND	U	26.8		ND	U	ND	U	ND	U	ND	U

Notes:

15A NCAC 2L = 15A NCAC 2L .0200, Groundwater Quality Standards for Class GA groundwater

(1) Interim Maximum Allowable Concentration

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

ND = Not detected by Lab at or above adjusted reporting limit.

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

U = Indicates compound was analyzed for, but not detected above the Laboratory Reporting Limit

NC SWSL = North Carolina Solid Waste Section Limit

NE = Not established

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

Analyses performed by Pace Analytical Charlotte; NC Wastewater Certification #:12

Table 2
Groundwater Analytical Results
Appendix I - 40 CFR Part 258 Compounds
Belews Creek Steam Station Pine Hall Fly-Ash Landfill #85-03
S&ME Project No. 1411-09-047
Sample Date: April 21-22, 2009

	Compound	NCAC 2L Stds. (ug/L)	SWSL (ug/L)	8503-OB-9		8503-SW-1A	8503-SW-2	FIELD BLANK	
(1)	Antimony	NE	6	ND	U			ND	U
(2)	Arsenic	50	10	10.7				ND	U
(3)	Barium	2000	100	14.7	J	**No Flow**	**No Sample**	ND	U
(4)	Beryllium	NE	1						
(5)	Cadmium	1.75	1	4		**Observed**	**Collected**	ND	U
(6)	Chromium	50	10	0.5	J	**No Sample**	**Due to**	ND	U
(7)	Cobalt	NE	10	ND	U	**Collected**	**Safety**	2.6	J
(8)	Copper	1000	10	ND	U		**Concerns**	ND	U
(9)	Lead	15	10	ND	U			ND	U
(10)	Nickel	100	50	10.6	J			ND	U
(11)	Selenium	50	10	**243**				ND	U
(12)	Silver	17.5	10	0.66	J			ND	U
(13)	Thallium	NE	5.5	ND	U			ND	U
(14)	Vanadium	NE	25	0.37	J			ND	U
(15)	Zinc	1050	10	59.5				4	J
(16)	Acetone	700	100	ND	U			ND	U
(17)	Acrylonitrile	NE	200	ND	U			ND	U
(18)	Benzene	1	1	ND	U			ND	U
(19)	Bromochloromethane	NE	3	ND	U			ND	U
(20)	Bromodichloromethane	0.56	1	ND	U			ND	U
(21)	Bromoform	4.43	3	ND	U			ND	U
(22)	Carbon disulfide	700	100	ND	U			ND	U
(23)	Carbon tetrachloride	0.269	1	ND	U			ND	U
(24)	Chlorobenzene	50	3	ND	U			ND	U
(25)	Chloroethane	2800	10	ND	U			ND	U
(26)	Chloroform	70	5	ND	U			ND	U
(27)	Dibromochloromethane	0.41 (1)	3	ND	U			ND	U
(28)	1,2-Dibromo-3-chloropropane	0.025	13	ND	U			ND	U
(29)	1,2-Dibromoethane (EDB)	0.0004	1	ND	U			ND	U
(30)	1,2-Dichlorobenzene	24	5	ND	U			ND	U
(31)	1,4-Dichlorobenzene	1.4	1	ND	U			ND	U
(32)	trans-1,4-Dichloro-2-butene	NE	100	ND	U			ND	U
(33)	1,1-Dichloroethane	70	5	ND	U			ND	U
(34)	1,2-Dichloroethane	0.38	1	ND	U			ND	U
(35)	1,1-Dichloroethene	7	5	ND	U			ND	U
(36)	cis-1,2-Dichloroethene	70	5	ND	U			ND	U
(37)	trans-1,2-Dichloroethene	100	5	ND	U			ND	U
(38)	1,2-Dichloropropane	0.51	1	ND	U			ND	U
(39)	cis-1,3-Dichloropropene	0.19	1	ND	U			ND	U
(40)	trans-1,3-Dichloropropene	0.19	1	ND	U			ND	U
(41)	Ethylbenzene	550	50	ND	U			ND	U
(42)	2-Hexanone	28 (1)	10	ND	U			ND	U
(43)	Bromomethane	NE	1	ND	U			ND	U
(44)	Chloromethane	2.6	1	ND	U			ND	U
(45)	Dibromomethane	NE	10	ND	U			ND	U
(46)	Methylene Chloride	2.6	1	ND	U			ND	U
(47)	2-Butanone (MEK)	4200	100	ND	U			ND	U
(48)	Iodomethane	NE	10	ND	U			ND	U
(49)	4-Methyl-2-pentanone (MIBK)	NE	100	ND	U			ND	U
(50)	Styrene	100	1	ND	U			ND	U
(51)	1,1,1,2-Tetrachloroethane	NE	5	ND	U			ND	U
(52)	1,1,2,2-Tetrachloroethane	0.17 (1)	3	ND	U			ND	U
(53)	Tetrachloroethene	0.7	1	ND	U			ND	U
(54)	Toluene	1000	1	ND	U			0.5	J
(55)	1,1,1-Trichloroethane	200	1	ND	U			ND	U
(56)	1,1,2-Trichloroethane	NE	1	ND	U			ND	U
(57)	Trichloroethene	2.8	1	ND	U			ND	U
(58)	Trichlorofluoromethane	2100	1	ND	U			ND	U
(59)	1,2,3-Trichloropropane	0.005	1	ND	U			ND	U
(60)	Vinyl acetate	NE	50	ND	U			ND	U
(61)	Vinyl chloride	0.015	1	ND	U			ND	U
(62)	m,p,o-Xylenes	1050	5	ND	U			ND	U

Notes:

15A NCAC 2L = 15A NCAC 2L .0200, Groundwater Quality Standards for Class GA groundwater

(1) Interim Maximum Allowable Concentration

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

Analyses performed by Pace Analytical Charlotte; NC Wastewater Certification #:12

Table 3
Groundwater Monitoring Field Data
Belews Creek Steam Station Pine Hall Fly-Ash Landfill #85-03
S&ME Project No. 1411-09-047
Sample Date: April 21-22, 2009

DATE	WELL NO.	WELL DEPTH (feet)	DEPTH TO WATER (feet)	WATER ELEV. (feet)	DEPTH TO PRODUCT (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)
4/22/2009	MW-1	47.20	36.50	816.52	N/A	NA	CP	N/A	1.75	1.75	YES	13.2	16	4.9	107.0	N/A	N/A
4/22/2009	MW-1D	90.53	41.01	813.32	N/A	NA	CP	N/A	8.08	24.00	NO	13.5	385	6.6	3.4	N/A	N/A
4/21/2009	MW-2	50.00	44.51	808.88	N/A	NA	CP	N/A	0.90	0.75	YES	14.7	65	5.6	39.1	N/A	N/A
4/21/2009	MW-3	49.50	40.72	802.47	N/A	NA	CP	N/A	1.43	2.00	YES	13.6	48	5.4	15.8	N/A	N/A
4/22/2009	MW-4	40.20	13.24	754.87	N/A	NA	CP	N/A	4.40	13.50	NO	13.9	151	6.0	4.9	N/A	N/A
4/21/2009	MW-5	60.20	25.46	761.71	N/A	NA	CP	N/A	5.67	17.25	NO	16.2	34	5.7	11.0	N/A	N/A
4/22/2009	MW-6	36.84	32.07	805.63	N/A	NA	CP	N/A	0.78	3.00	NO	14.0	57	5.6	3.1	N/A	N/A
4/21/2009	MW-7	14.26	5.46	810.11	N/A	NA	CP	N/A	1.44	4.50	NO	14.8	66	5.6	664.0	N/A	N/A
4/21/2009	MW2-7	30.62	14.27	764.52	N/A	NA	CP	N/A	2.67	13.75	NO	15.6	1813	5.5	3.5	N/A	N/A
4/21/2009	MW2-9	14.61	4.63	793.41	N/A	NA	CP	N/A	1.63	3.00	YES	11.9	498	6.3	6.6	N/A	N/A
4/21/2009	OB-4	30.03	23.24	754.36	N/A	NA	CP	N/A	1.11	3.75	NO	15.5	2735	8.1	4.1	N/A	N/A
4/22/2009	OB-5	36.60	25.83	755.10	N/A	NA	CP	N/A	1.76	5.25	NO	15.3	36	5.1	26.9	N/A	N/A
4/21/2009	OB-9	48.57	37.84	762.32	N/A	NA	CP	N/A	1.75	5.25	NO	14.7	2187	5.1	2.4	N/A	N/A
4/22/2009	SW-1A	N/A	N/A	N/A	N/A	NA	CP	N/A	N/A	N/A	N/A	NS	NS	NS	NS	N/A	N/A
4/22/2009	SW-2	N/A	N/A	N/A	N/A	NA	CP	N/A	N/A	N/A	N/A	NS	NS	NS	NS	N/A	N/A

Purge Methods
LF = Low Flow
CP = Coventional Purge (3 to 5 well vol)
BP = No Purge (HydraSleeve)
LO - Level Only
N/A - Not applicable
NS - Not Sampled

Note: Sampling and collection of Field Data performed by Duke Energy.