TABLE 1 - FIELD DATA PARAMETERS
DUKE ENERGY McGUIRE NUCLEAR STATION
LANDFILL #2 - PERMIT #60-04
GROUNDWATER MONITORING REPORT
S&ME PROJECT 1411-09-047

Febuary 18, 2010

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)
12/7/2009	MW-5	63.90	61.84	706.47	N/A	NA	CP	N/A	0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12/7/2009	MW-5A	96.00	62.73	705.69	N/A	NA	CP	N/A	5.43	16.50	NO	15.0	58	6.2	2.7	N/A	N/A
12/7/2009	MW-6	37.20	29.71	698.74	N/A	NA	CP	N/A	1.22	6.25	NO	15.3	128	6.0	1.4	N/A	N/A
12/7/2009	MW-6A	47.90	28.92	700.06	N/A	NA	CP	N/A	3.10	9.75	NO	15.0	52	5.6	2.1	N/A	N/A
12/7/2009	MW-7	37.30	***	***	N/A	NA	CP	N/A	***	***	***	***	***	***	***	N/A	N/A
12/7/2009	MW-7A	59.40	32.74	691.92	N/A	NA	CP	N/A	4.35	13.50	NO	15.1	108	6.7	2.9	N/A	N/A
12/7/2009	MW-8	71.50	63.06	696.54	N/A	NA	CP	N/A	1.38	1.50	YES	14.1	126	6.7	13.8	N/A	N/A
12/7/2009	MW-8A	84.40	63.05	696.63	N/A	NA	CP	N/A	3.48	10.50	NO	15.1	88	6.9	2.4	N/A	N/A
12/7/2009	MW-9	30.80	24.80	687.07	N/A	NA	CP	N/A	0.98	4.00	NO	17.1	58	5.7	1.5	N/A	N/A
12/7/2009	MW-9A	47.80	25.23	686.90	N/A	NA	CP	N/A	3.68	11.25	NO	17.0	97	6.5	1.1	N/A	N/A
12/7/2009	MW-10A	59.23	50.89	704.89	N/A	NA	CP	N/A	1.36	1.50	YES	14.1	38	5.8	11.7	N/A	N/A
12/7/2009	SW-1	N/A	N/A	NA	N/A	NA	NP	NA	NA	NA	NA	6.7	102	6.5	31.7	NA	NA
12/7/2009	SW-2	N/A	N/A	NA	N/A	NA	NP	NA	NA	NA	NA	9.8	74	6.8	13.1	NA	NA
12/7/2009	LEACHATE POND	N/A	N/A	NA	N/A	NA	NP	NA	NA	NA	NA	14.2	789	7.4	9.1	NA	NA

Sampling Performed by Duke Energy

Purge Methods
LF = Low Flow
CP = Coventional Purge (3 to 5 well vol)
BP = No Purge (HydraSleeve)
*** = Not measured / water level below pump

TABLE 2 - FIELD AND ANALYTICAL RESULTS
DUKE ENERGY McGUIRE NUCLEAR STATION
LANDFILL #2 - PERMIT #60-04
GROUNDWATER MONITORING REPORT
S&ME PROJECT 1411-09-047

Facility: McGuire Nuclear Station - Synthetically Lined Solid Waste Landfill No.2 - Permit #60-04

Sample Date: December 7, 2009 (Field and Geochemistry Data)

Field sampling performed by Duke Energy

Laboratory Certificate Codes:
Duke Power Field #5193
Pace Lab #12
Pace Lab #40

Parameter	SW ID	Units	Certificate Code	Monitoring Well Identification							SWSL	15A NCAC 2L*
				6004-MW-5	6004-MW-5A	6004-MW-6	6004-MW-6A	6004-MW-7	6004-MW-7A	6004-MW-8		
Field pH	320	Std. Units	5193	NS	**6.2**	**6.0**	**5.6**	NS	6.7	6.7		**6.5-8.5**
Field Spec. Cond.	323	umho/cm	5193	NS	58	128	52	NS	108	126		
Temperature	325	C	5193	NS	15.0	15.3	15.0	NS	15.1	14.1		
Top Casing	328	msl-feet		768.31	768.42	728.45	728.98	725.86	724.66	759.60		
Depth to Water	318	feet		61.84	62.73	29.71	28.92	***	32.74	63.06		
Water Elevation	319	msl-feet		706.47	705.69	698.74	700.06	***	691.92	696.54		
Well Depth	41	feet		63.90	96.00	37.20	47.90	37.30	59.40	71.50		
Arsenic	14	ug/L	40	NS	2.7 U	2.7 U	2.7 U	NS	2.7 U	2.7 U	**10**	**50**
Barium	15	ug/L	40	NS	25.6 J	49.6 J	51.7 J	NS	4.1 J	27.6 J	**100**	**2000**
Cadmium	34	ug/L	40	NS	0.50 U	0.50 U	0.50 U	NS	0.50 U	0.50 U	**1.0**	**1.75**
Chloride	301	ug/L	40	NS	5000 U	12500	5690	NS	5000 U	5000 U	**NE**	**250000**
Chromium	51	ug/L	40	NS	0.42 J	1.5 J	0.78 J	NS	0.40 U	1.1 J	**10**	**50**
Lead	131	ug/L	40	NS	4.0 U	4.0 U	4.0 U	NS	4.0 U	4.0 U	**10**	**15**
Mercury	132	ug/L	40	NS	0.070 U	0.070 U	0.070 U	NS	0.070 U	0.070 U	**0.20**	**1.05**
Selenium	183	ug/L	40	NS	3.8 U	3.8 U	3.8 U	NS	3.8 U	3.8 U	**10**	**50**
Silver	184	ug/L	40	NS	0.19 J	0.10 U	0.10 U	NS	0.10 U	0.10 J	**10**	**17.5**
Sulfate	315	ug/L	40	NS	5000 U	5000 U	5000 U	NS	5000 U	5000 U	**250000**	**250000**
TPH(DRO)		ug/L	12	NS	0.062 U	0.062 U	0.062 U	NS	0.062 U	0.062 U	**NE**	**NE**
VOCs **												
Acetone	3	ug/L	12	NS	2.2 U	2.2 U	2.2 U	NS	2.2 U	2.2 U	**100**	**700**
2-Butanone (MEK)	141	ug/L	12	NS	0.96 U	0.96 U	0.96 U	NS	0.96 U	0.96 U	**100**	**4200**
Chloromethane	137	ug/L	12	NS	0.11 U	0.11 U	0.11 U	NS	0.11 U	1.0	**1.0**	**2.6**
Toluene	196	ug/L	12	NS	0.26 U	0.26 U	0.26 U	NS	0.26 U	0.26 U	**1.0**	**1000**

Notes:

15A NCAC 2L = 15A NCAC 2L .0200, Groundwater Quality Standards for Class GA groundwater
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.
NS = No Sample - Insufficient volume in well to collect samples (MW-5 and MW-7).
TPH(DRO) = Diesel Range Organics
MEK = Methyl ethyl ketone
*** Maximum Contaminant Level (MCL)**
**** All EPA method 8260 compounds not specifically listed were less than laboratory method detection limits for all samples.**
***** Groundwater level not measured, water level was below pump.**
Analytical results provided by Duke Energy and are found in
Pace Lab Report 9259006, dated December 29, 2009.

NC SWSL = North Carolina Solid Waste Section Limit
NE = Not established

Groundwater sampling at this site occurred prior to the 15 A NCAC 02L .0202 Groundwater Quality Standards revision date of January 1, 2010.
Therefore the analytical results were compared to the Groundwater Standards in effect at the time of sampling.

TABLE 2 - FIELD AND ANALYTICAL RESULTS
DUKE ENERGY McGUIRE NUCLEAR STATION
LANDFILL #2 - PERMIT #60-04
GROUNDWATER MONITORING REPORT
S&ME PROJECT 1411-09-047

Facility: McGuire Nuclear Station - Synthetically Lined Solid Waste Landfill No.2 - Permit #60-04

Sample Date: December 7, 2009 (Field and Geochemistry Data)

Field sampling performed by Duke Energy

Laboratory Certificate Codes:
Duke Power Field #5193
Pace Lab #12
Pace Lab #40

Parameter	SW ID	Units	Certificate Code	Monitoring Well Identification							TRIP BLANK	FIELD BLANK	SWSL	15A NCAC 2L*
				6004-MW-8A	6004-MW-9	6004-MW-9A	6004-MW-10A	6004-Leachate	6004-SW-1	6004-SW-2				
Field pH	320	Std. Units	5193	6.9	**5.7**	**6.5**	**5.8**	7.4	**6.5**	6.8				**6.5-8.5**
Field Spec. Cond.	323	umho/cm	5193	88	58	97	38	789	102	74				
Temperature	325	C	5193	15.1	17.1	17.0	14.1	14.2	6.7	9.8				
Top Casing	328	msl-feet		759.68	711.87	712.13	755.78							
Depth to Water	318	feet		63.05	24.80	25.23	50.89							
Water Elevation	319	msl-feet		696.63	687.07	686.90	704.89							
Well Depth	41	feet		84.40	30.80	47.80	59.23							
Arsenic	14	ug/l	40	2.7 U	2.7 U	2.7 U	2.7 U	9.7 J	2.7 U	2.7 U		2.7 U	**10**	**50**
Barium	15	ug/l	40	22.8 J	21.4 J	8.7 J	33.3 J	51.7 J	32.5 J	19.6 J		0.20 U	**100**	**2000**
Cadmium	34	ug/l	40	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U		0.50 U	**1.0**	**1.75**
Chloride	301	ug/l	40	5000 U	5000 U	5000 U	5000 U	18600	5000 U	5350		5000 U	**NE**	**250000**
Chromium	51	ug/l	40	0.40 U	0.64 J	1.4 J	0.58 J	0.40 U	0.40 U	0.40 U		0.81 J	**10**	**50**
Lead	131	ug/l	40	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U		4.0 U	**10**	**15**
Mercury	132	ug/l	40	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U		0.070 U	**0.20**	**1.05**
Selenium	183	ug/l	40	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U		3.8 U	**10**	**50**
Silver	184	ug/l	40	0.10 U	0.10 U	0.10 U	0.10 U	0.24 J	0.10 U	0.10 U		0.10 U	**10**	**17.5**
Sulfate	315	ug/l	40	5000 U	5220 J	5000 U	5000 U	128000	5000 U	5000 U		5000 U	**250000**	**250000**
TPH(DRO)		ug/l	12	0.062 U	0.062 U	0.062 U	0.17	0.64	0.062 U	0.062 U		0.062 U	**NE**	**NE**
VOCs **														
Acetone	3	ug/L	12	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	10.6 J	**100**	**700**
2-Butanone (MEK)	141	ug/L	12	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	7.1 J	**100**	**4200**
Chloromethane	137	ug/L	12	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	**1.0**	**2.6**
Toluene	196	ug/L	12	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.32 J	0.26 U	0.26 U	0.26 U	**1.0**	**1000**

Notes:

15A NCAC 2L = 15A NCAC 2L .0200, Groundwater Quality Standards for Class GA groundwater
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
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NS = No Sample - Insufficient volume in well to collect samples (MW-5 and MW-7).
TPH(DRO) = Diesel Range Organics
MEK = Methyl ethyl ketone
*** Maximum Contaminant Level (MCL)**
**** All EPA method 8260 compounds not specifically listed were less than laboratory method detection limits for all samples.**
***** Groundwater level not measured, water level was below pump.**
Analytical results provided by Duke Energy and are found in
Pace Lab Report 9259006, dated December 29, 2009.

NC SWSL = North Carolina Solid Waste Section Limit
NE = Not established

Groundwater sampling at this site occurred prior to the 15 A NCAC 02L .0202 Groundwater Quality Standards revision date of January 1, 2010.
Therefore the analytical results were compared to the Groundwater Standards in effect at the time of sampling.

TABLE 3 - RADIOLOGICAL ANALYTICAL RESULTS
DUKE ENERGY McGUIRE NUCLEAR STATION
LANDFILL #2 - PERMIT #60-04
GROUNDWATER MONITORING REPORT
S&ME PROJECT 1411-09-047

February 18, 2010

Facility: McGuire Nuclear Station - Synthetically Lined Solid Waste Landfill No.2 - Permit #60-04

Laboratory Certificate Codes:
Duke Power Field #248

Sample Date: December 7, 2009 (Radiological Data)

Field sampling performed by Duke Energy

Parameter	Units	Certificate Code	Monitoring Well Identification											Leachate Pond	Surface Water 1	Surface Water 2
			MW-5	MW-5A	MW-6	MW-6A	MW-7	MW-7A	MW-8	MW-8A	MW-9	MW-9A	MW-10A			
ALPHA	pCi/l	248	NS	< -0.049	0.631	< 0.087	NS	< -0.160	< -0.170	< -0.200	< -0.045	< -0.260	< 0.170	1.470	< 0.230	< 0.036
BALA140	pCi/l	248	NS	< 4.150	< 4.565	< 5.174	NS	< 5.519	< 5.631	< 6.202	< 3.905	< 4.686	< 5.417	< 5.806	< 4.741	< 6.128
BE7	pCi/l	248	NS	< 30.60	< 36.84	< 34.45	NS	< 37.38	< 36.73	< 39.16	< 36.28	< 34.96	< 42.79	< 36.81	< 30.84	< 41.07
BETA	pCi/l	248	NS	0.964	< 0.460	< 0.150	NS	< -0.0016	1.000	1.300	< -0.160	< 0.260	0.799	11.60	1.430	1.950
CO58	pCi/l	248	NS	< 3.389	< 4.018	< 3.638	NS	< 4.427	< 5.793	< 5.377	< 4.000	< 4.172	< 4.316	< 3.344	< 3.277	< 5.018
CO60	pCi/l	248	NS	< 4.877	< 4.822	< 4.769	NS	< 5.055	< 4.598	< 5.067	< 5.826	< 3.867	< 7.804	< 2.840	< 3.565	< 5.085
CS134	pCi/l	248	NS	< 3.254	< 4.483	< 3.751	NS	< 3.384	< 4.886	< 4.635	< 4.432	< 3.120	< 5.262	<3.952	< 3.551	< 4.947
CS137	pCi/l	248	NS	< 3.789	< 4.176	< 4.221	NS	< 4.273	< 4.984	< 5.499	< 4.884	< 4.504	< 3.543	<4.401	< 3.272	< 3.504
FE59	pCi/l	248	NS	< 8.017	< 10.56	< 7.041	NS	< 9.371	< 10.02	< 9.077	< 9.583	< 7.258	< 8.916	< 7.042	< 8.360	< 9.639
H3	pCi/l	248	NS	< -12.3	< 8.17	< 4.09	NS	< 55.4	< -16.3	< -34.9	< 65.6	< -12.3	< -12.4	551.0	< -115	286.0
I131	pCi/l	248	NS	< 3.970	< 4.361	< 3.996	NS	< 4.485	< 5.621	< 5.336	< 5.159	< 4.064	< 5.460	< 4.620	< 4.429	< 4.712
K40	pCi/l	248	NS	86.29	88.80	86.30	NS	107.4	68.37	134.5	97.52	114.4	< 97.81	97.28	< 59.11	63.60
MN54	pCi/l	248	NS	< 3.603	< 4.165	< 3.567	NS	< 3.648	< 2.934	< 5.235	< 4.142	< 3.692	< 5.050	< 4.338	< 3.207	< 5.858
NB95	pCi/l	248	NS	< 3.689	< 5.056	< 4.336	NS	< 4.607	< 5.484	< 5.174	< 4.871	< 4.274	< 6.425	< 4.244	< 4.296	< 5.564
ZN65	pCi/l	248	NS	< 8.579	< 9.825	< 9.390	NS	< 9.834	< 7.883	< 9.727	< 8.606	< 8.615	< 9.436	< 9.887	< 7.882	< 9.838
ZR95	pCi/l	248	NS	< 6.075	< 8.447	< 6.624	NS	< 7.307	< 8.046	< 8.657	< 9.142	< 7.593	< 7.541	< 5.285	< 6.960	< 6.702

Notes:
NS = No Sample - Insufficient volume in well to collect samples (MW-5 and MW-7).
Analytical results provided by Duke Energy and are found in
Duke Energy Lab Report 09-NOV-0014, 10-Jan-0003, dated January 26, 2010.