SHEARON HARRIS

NUCLEAR

PLANT

SHEARON HARRIS NUCLEAR PLANT
NEW HILL, WAKE/CHATHAM COUNTY

Progress Energy operates the Shearon Harris Nuclear Plant, located about 16 miles southeast of Raleigh, N.C. The plant consists of one pressurized water reactor with a design rating of approximately 900 megawatts - electrical. Carolina Power and Light, which became Progress Energy, created an approximately 4,000-acre reservoir (Harris Lake), which is used for cooling tower makeup. Commercial production began in early 1987.

The monitoring program continued around the Harris Plant through all of calendar year 2008. A summary of the results for the air monitoring performed around the Harris Plant during this year is presented below. The mean gross beta activities in air for the co-located sites for 2008 are presented in the table below.

Location	**NCRPS (pCi/m^3)**	**HNP (pCi/m^3)**	**% Difference**
SH-APLV-04 (Indicator)	1.77 E-02	2.15 E-02	19.3
SH-APLV-9261 (Control)	1.54 E-02	2.13 E-02	32.0
SH-APLV-22	2.26 E-02	1.97 E-02	13.6
SH-APLV-28	1.87 E-02	NA	NA
SH-APLV-130	3.33 E-02	2.25 E-02	38.7

The trends for the results of RPS and CP&L at the control and indicator sites are generally in agreement for 2008. The monthly air filter composites collected at sites 04 (indicator site) and 9261 (control site) did not provide any evidence of fission products during 2008. Composite gamma analyses of air particulate samples by the RPS were not performed on a routine basis in 2008 due to detector malfunctions at the State Radiochemistry Laboratory. However, Progress Energy did perform composite gamma isotopic analyses on a quarterly basis, and found only naturally occurring radionuclides. This finding was reinforced by the results of weekly gross beta analyses of low volume air particulate samples, with no gross beta analyses exceeding the investigation level of 0.5 pCi/m^3. There were no iodine detections at either the control (SH-APLV-9261) or indicator (SH-APLV-04) locations during 2008.

Surface water samples collected from the indicator site (SH-SW-45) did not contain detectable levels of fission or activation products during 2008. Tritium levels at sites SH-SW-44 and SH-SW-45 are at or near natural levels (250 pCi/l). Tritium levels in Harris Lake averaged 6,430 pCi/l and 6,680 pCi/l for NCRPS and Progress Energy, respectively. Surface water low-level iodine values were significantly less than 1 pCi/l and there was general agreement between RPS and Progress Energy.

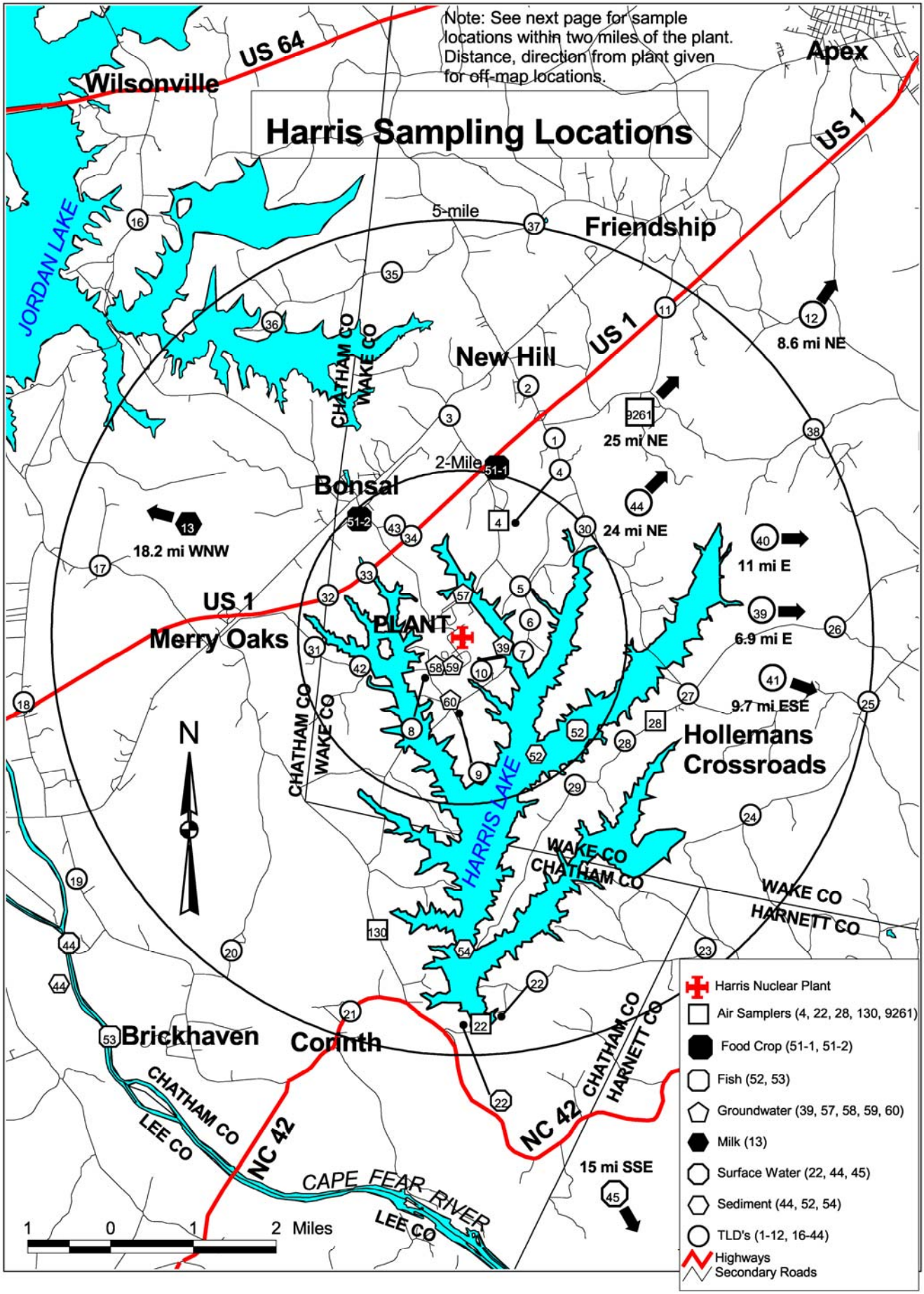
During 2008, there was no indication of fission or activation products in milk samples based on gamma isotopic results. The low-level radioiodine results were generally in agreement and were below 1 pCi/l.

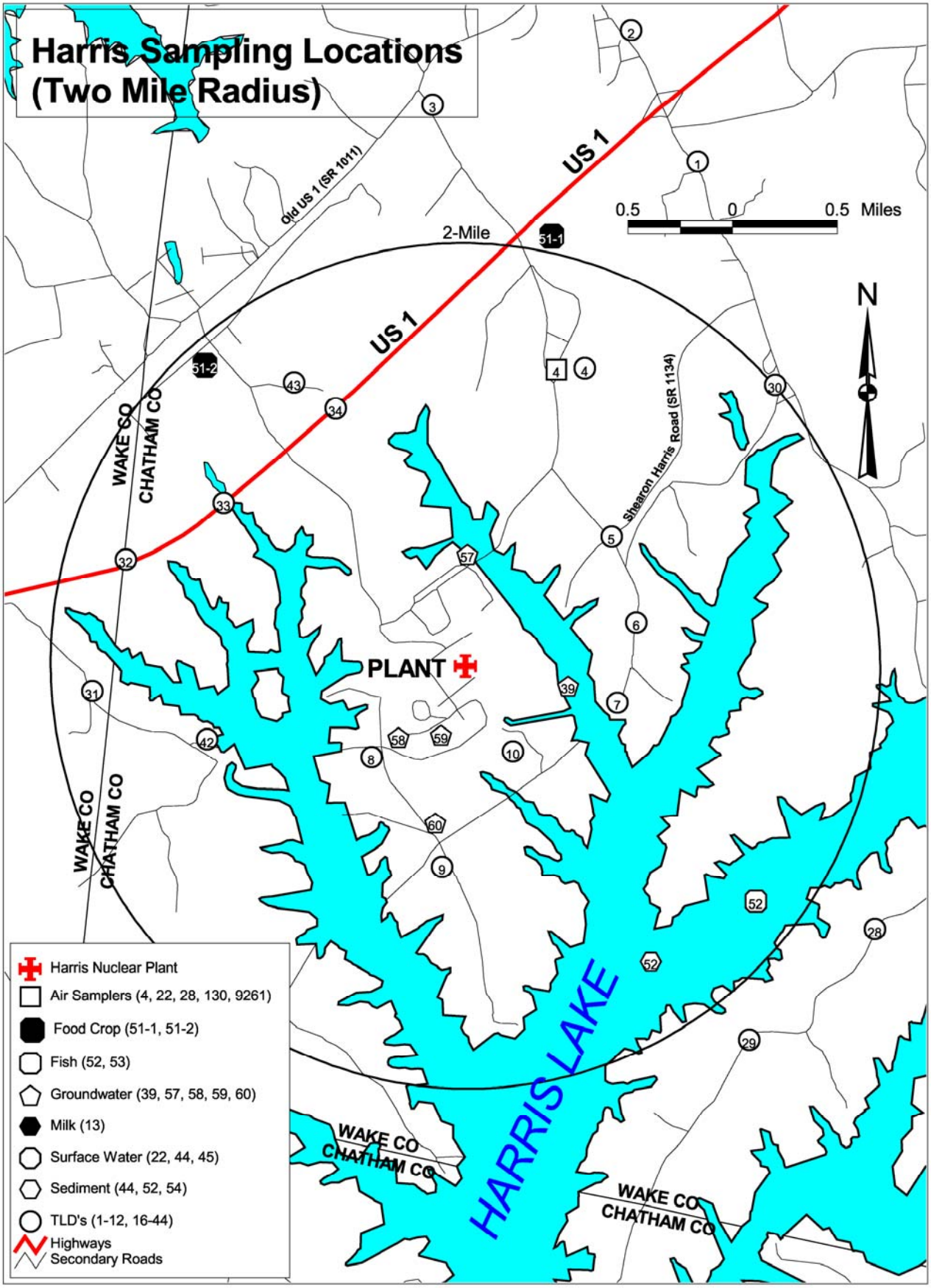
Groundwater wells around the plant did not indicate the presence of plant-related radionuclides during 2008. One sample, collected and analyzed by Harris Nuclear Plant at location SH-GW-68 on 5/20/2008 did have an elevated tritium level of 1,260 pCi/l. However, this level of tritium detected in Well 68 is still quite low. Although this well is not used as a drinking water source, the tritium level is significantly below the 20,000 pCi/l limit (corresponding to 4 mrem per year Effective Dose Equivalent) under the Safe Drinking Water Act. The tritium results at the other ground water sites were at or below detection limits (200-300 pCi/l) and do not indicate any activity resulting from plant operations.

Fish collected during 2008 do not indicate the presence of fission or activation products. The Progress Energy and NCRPS results generally show good agreement. Food crop samples collected in 2008 also showed no presence of plant-related radionuclides.

Sediment samples collected at Harris Nuclear Plant in 2008 showed no evidence of plant-related radionuclides with one exception: trace amounts of Cesium-137 and Cobalt-60 were detected in a sample collected at location SH-SD-54 on Jan. 24, 2008. These small amounts of artificial radionuclides are possibly due to releases of material from the plant waste treatment system into Harris Lake, which are then concentrated in the sediment.

Thermoluminescent dosimetry results from around the Harris Plant during 2008 do not indicate the presence of elevated ambient gamma radiation. The yearly average for all TLD sites at Harris in 2008 is 51.7 milliroentgen, which is below the statewide average of 75 mR/year.


Note: See next page for sample locations within two miles of the plant. Distance, direction from plant given for off-map locations.
Harris Sampling Locations
Wilsonville
US 64
Apex
US 1
JORDAN LAKE
5-mile
Friendship
New Hill
CHATHAM CO
WAKE CO
2-Mile
Bonsal
8.6 mi NE
25 mi NE
24 mi NE
18.2 mi WNW
11 mi E
6.9 mi E
9.7 mi ESE
PLANT
Merry Oaks
Hollemans Crossroads
HARRIS LAKE
N
WAKE CO
CHATHAM CO
HARNETT CO
Brickhaven
Corinth
LEE CO
NC 42
CAPE FEAR RIVER
15 mi SSE
1 0 1 2 Miles
Harris Nuclear Plant
Air Samplers (4, 22, 28, 130, 9261)
Food Crop (51-1, 51-2)
Fish (52, 53)
Groundwater (39, 57, 58, 59, 60)
Milk (13)
Surface Water (22, 44, 45)
Sediment (44, 52, 54)
TLD's (1-12, 16-44)
Highways
Secondary Roads


Harris Sampling Locations
(Two Mile Radius)
US 1
Old US 1 (SR 1011)
2-Mile
0.5 0 0.5 Miles
N
WAKE CO
CHATHAM CO
Shearon Harris Road (SR 1134)
PLANT
HARRIS LAKE
Harris Nuclear Plant
Air Samplers (4, 22, 28, 130, 9261)
Food Crop (51-1, 51-2)
Fish (52, 53)
Groundwater (39, 57, 58, 59, 60)
Milk (13)
Surface Water (22, 44, 45)
Sediment (44, 52, 54)
TLD's (1-12, 16-44)
Highways
Secondary Roads

Section 3: Shearon Harris Nuclear Power Plant, New Hill, North Carolina

Air Particulate - Gross Beta, (pCi/m^3)

	Indicator (SH-APLV-04)[a] All measurements x 10^{-2} pCi/m^3				Control (SH-APLV-9261)[b] All measurements x 10^{-2} pCi/m^3			
	RPS		HNP		RPS		HNP	
Date	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
1/7/08	2.85	0.11	3.09	0.35	2.07	0.09	3.32	0.37
1/14/08	1.41	0.07	1.25	0.28	1.93	0.08	1.37	0.29
1/21/08	1.96	0.08	2.14	0.32	1.45	0.06	2.23	0.33
1/28/08	2.51	0.10	3.17	0.37	2.72	0.11	3.10	0.37
2/4/08	2.38	0.10	2.63	0.34	1.93	0.08	2.78	0.35
2/11/08	1.97	0.08	2.07	0.33	1.50	0.07	2.27	0.34
2/18/08	2.02	0.09	2.37	0.33	1.62	0.07	2.41	0.34
2/25/08	1.83	0.08	2.06	0.30	1.43	0.06	1.94	0.30
3/3/08	1.47	0.07	1.71	0.30	1.48	0.07	1.94	0.30
3/10/08	1.31	0.06	1.65	0.30	1.44	0.06	1.54	0.29
3/17/08	2.31	0.10	2.71	0.37	1.40	0.07	2.69	0.37
3/24/08	1.49	0.07	1.98	0.32	1.36	0.06	1.91	0.32
3/31/08	1.95	0.09	2.07	0.32	1.07	0.05	2.15	0.34
4/7/08	0.56	0.03	1.17	0.27	0.53	0.03	0.97	0.27
4/14/08	0.81	0.05	0.97	0.27	0.82	0.05	0.99	0.28
4/21/08	1.51	0.07	2.39	0.34	1.16	0.05	2.54	0.35
4/28/08	1.44	0.07	1.63	0.31	1.48	0.06	1.54	0.29
5/5/08	2.09	0.09	2.42	0.34	1.77	0.07	2.30	0.35
5/12/08	1.39	0.06	1.66	0.31	0.56	0.04	1.93	0.34
5/19/08	1.08	0.05	1.62	0.30	0.96	0.05	1.49	0.31
5/27/08	1.34	0.06	1.75	0.28	1.09	0.06	1.91	0.31
6/2/08	1.66	0.08	2.15	0.38	1.67	0.07	1.72	0.38
6/9/08	1.87	0.08	3.02	0.37	2.25	0.09	2.95	0.39
6/16/08	1.58	0.07	2.81	0.37	0.91	0.05	2.61	0.38
6/23/08	1.76	0.08	1.73	0.32	1.56	0.07	1.93	0.35
6/30/08	1.99	0.08	2.32	0.34	1.19	0.06	2.04	0.32
7/7/08	1.40	0.06	1.96	0.32	0.87	0.04	1.70	0.29
7/14/08	1.44	0.07	1.96	0.31	1.59	0.07	1.84	0.30
7/21/08	1.94	0.08	2.43	0.34	1.93	0.08	2.09	0.31
7/28/08	2.34	0.10	2.77	0.35	2.01	0.08	2.60	0.33
8/4/08	2.19	0.09	2.97	0.39	2.57	0.10	2.69	0.36
8/11/08	2.58	0.10	2.94	0.39	1.75	0.07	2.81	0.36
8/18/08	2.05	0.09	2.12	0.36	2.62	0.11	2.37	0.37
8/25/08	2.13	0.09	2.58	0.38	0.96	0.05	2.71	0.38
9/2/08	1.35	0.06	1.57	0.30	2.08	0.09	1.71	0.30
9/8/08	2.19	0.09	2.17	0.40	1.46	0.07	2.35	0.41
9/15/08	1.09	0.05	1.27	0.31	0.78	0.04	1.43	0.32
9/22/08	1.68	0.07	1.60	0.33	1.74	0.07	1.83	0.34
9/29/08	1.53	0.07	1.63	0.30	1.22	0.06	1.97	0.33
10/6/08	2.47	0.10	2.58	0.34	2.56	0.10	2.64	0.36
10/13/08	2.62	0.10	2.84	0.37	2.48	0.10	2.72	0.36
10/20/08	2.32	0.09	1.53	0.28	1.11	0.05	2.34	0.33
10/27/08	1.57	0.07	1.82	0.33	1.26	0.06	1.56	0.31
11/3/08	2.25	0.09	2.59	0.36	2.17	0.09	2.21	0.33
11/10/08	1.99	0.08	2.50	0.37	1.70	0.08	2.35	0.34
11/17/08	1.30	0.06	1.59	0.32	1.23	0.05	1.55	0.31
11/24/08	1.88	0.08	1.66	0.32	1.07	0.06	1.39	0.29
12/1/08	1.12	0.06	2.71	0.37	1.75	0.07	2.54	0.35
12/8/08	1.74	0.08	2.27	0.36	1.71	0.08	2.29	0.34
12/15/08	1.18	0.06	1.99	0.34	0.87	0.04	2.00	0.33
12/22/08[c]	0.95	0.05	1.81	0.33			1.57	0.30
12/29/08	2.13	0.09	3.18	0.39	1.86	0.07	2.94	0.36

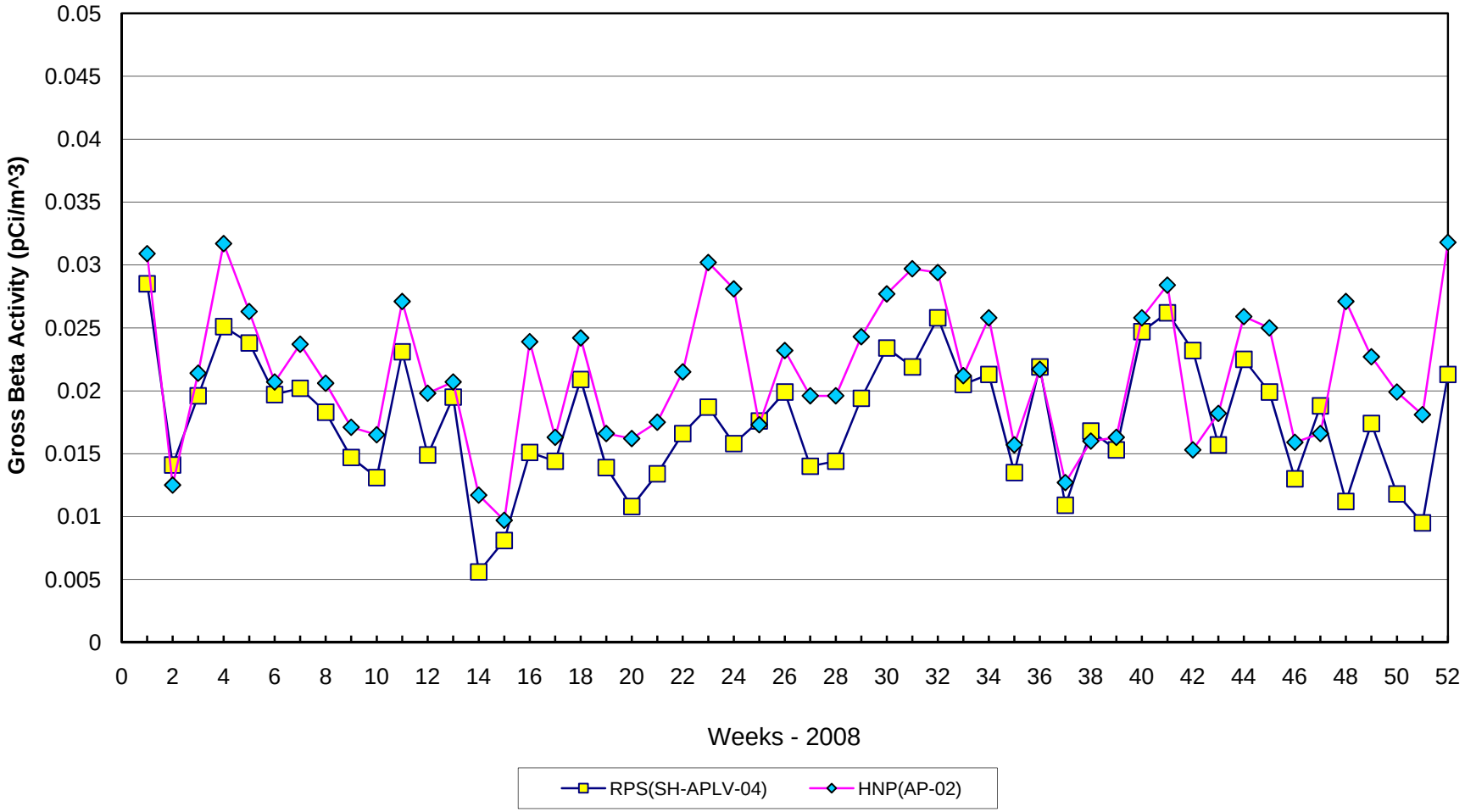
Air Particulate - Gross Beta, (pCi/m^3)

	Indicator (SH-APLV-04)[a] All measurements x 10^{-2} pCi/m^3				Control (SH-APLV-9261)[b] All measurements x 10^{-2} pCi/m^3			
	RPS		HNP		RPS		HNP	
Date	**Meas.**	**Error**	**Meas.**	**Error**	**Meas.**	**Error**	**Meas.**	**Error**
Average	1.77		2.15		1.54		2.13	
% Diff.	19.3%				32.0%			

[a] Air sampling is generally conducted over a period of one week using low volume continuous samplers. Duplicate sampling at NCRPS Site SH-APLV-04 (SHNPP Site AP-2), SR#1134, 1.4 miles south of SR#1011 at barricade.
[b] NCRPS Site SH-APLV-9261 is located at 301 S. Wilmington Street, Raleigh, NC on top of the Bath Building. It is located about 25 miles NE of the plant. SHNPP Site AP-5 is located at the Pittsboro Line and Service Office on US 64 in thee WNW Sector, 13.4 miles from the plant.
[c] Sample not collected at location SH-APLV-9261 for week of 12/22/08 due to Christmas holiday.

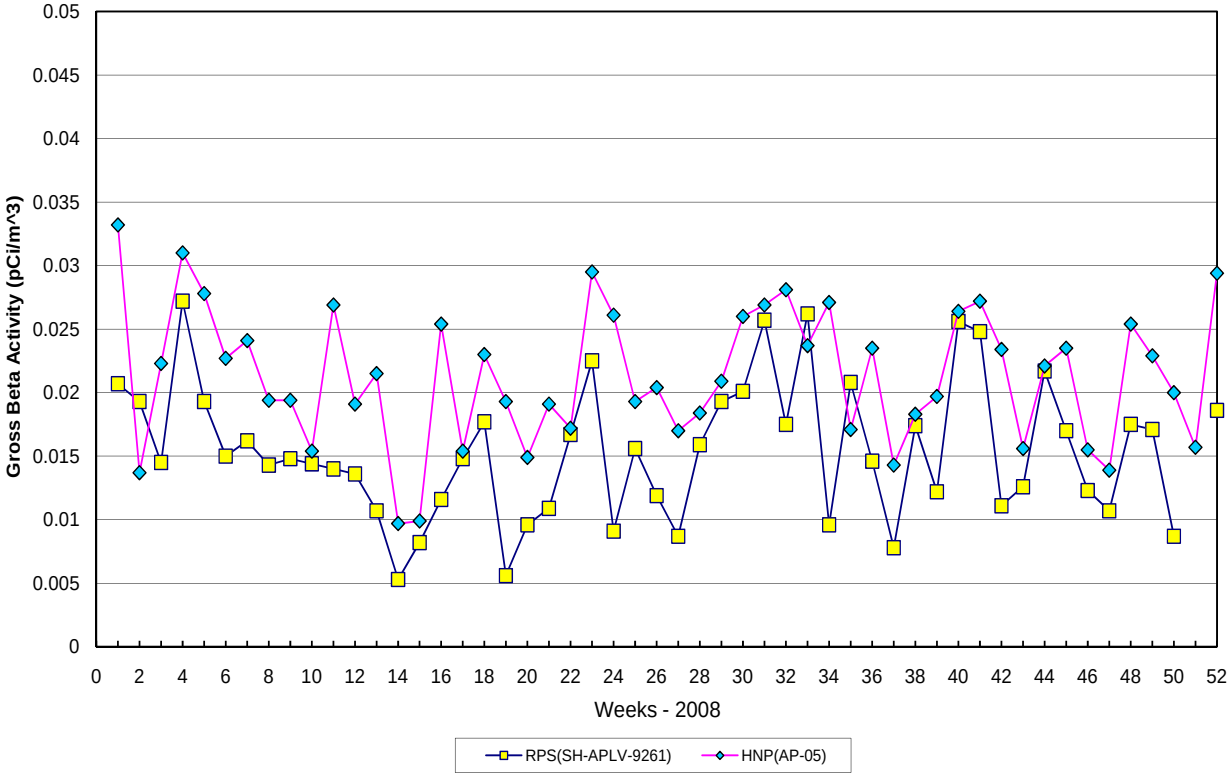
SHEARON HARRIS NUCLEAR POWER PLANT

INDICATOR SITES



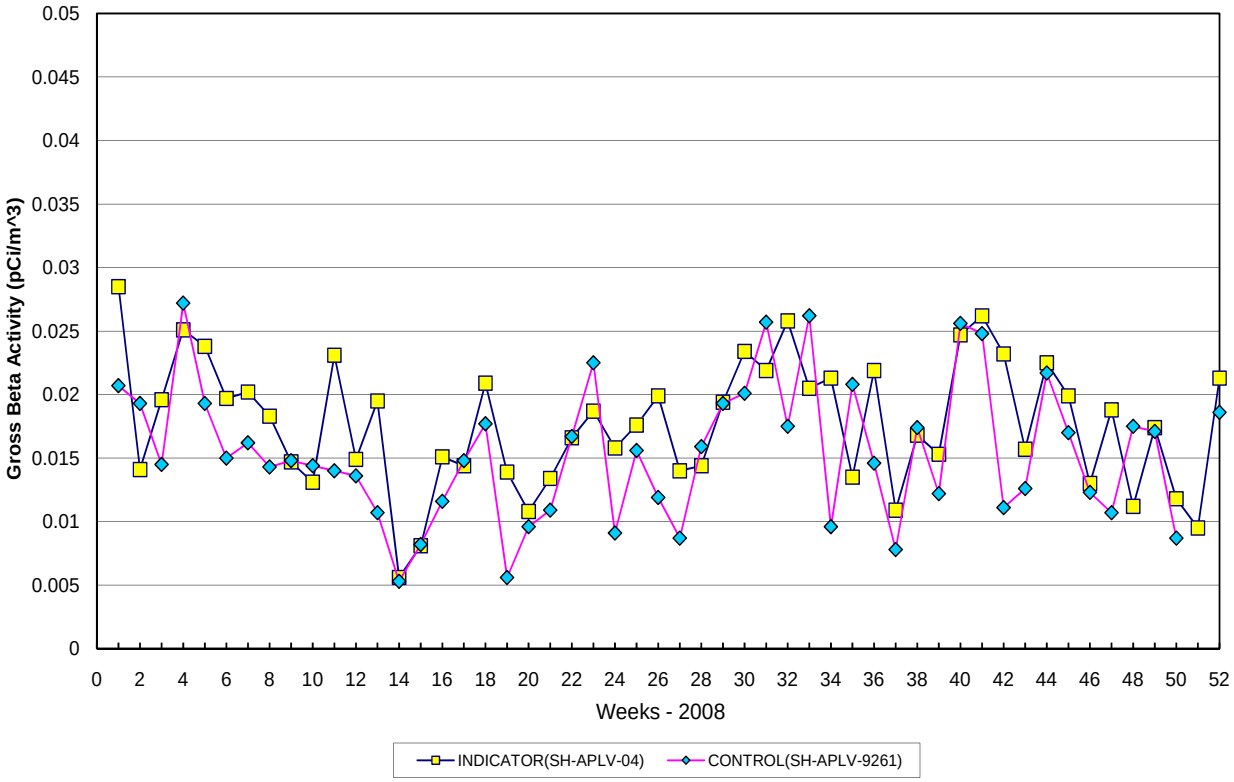
SHEARON HARRIS NUCLEAR POWER PLANT

CONTROL SITES



SHEARON HARRIS NUCLEAR POWER PLANT

RPS - INDICATOR vs CONTROL



Air Particulate - Gross Beta, (pCi/m^3)

	SH-APLV-22[a] All measurements x 10^{-2} pCi/m^3				SH-APLV-28[b] All measurements x 10^{-2} pCi/m^3		SH-APLV-130[c] All measurements x 10^{-2} pCi/m^3			
	RPS		HNP		RPS		RPS		HNP	
Date	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
1/3/08	3.02	0.12			3.04	0.12	3.91	0.15		
1/10/08	2.39	0.11	3.03	0.34	1.64	0.07	4.49	0.18	3.35	0.38
1/17/08	2.67	0.11	1.07	0.26	2.03	0.08	2.95	0.12	1.20	0.30
1/24/08	2.40	0.10	1.85	0.30	2.00	0.08	2.69	0.11	1.97	0.34
1/31/08	4.40	0.17	2.50	0.33	2.84	0.11	4.87	0.19	2.99	0.38
2/9/08	2.13	0.09	2.69	0.34	1.67	0.07	2.42	0.10	2.70	0.36
2/14/08	2.65	0.12	1.57	0.30	2.31	0.10	0.61	0.05	1.89	0.35
2/21/08	2.48	0.10	2.18	0.32	2.01	0.08	3.64	0.15	2.21	0.34
2/28/08	2.51	0.11	1.62	0.27	1.84	0.08	3.32	0.14	2.11	0.32
3/6/08[d]			1.87	0.31					2.09	0.33
3/13/08[e]			1.29	0.28					1.73	3.06
3/20/08	2.01	0.09	2.30	0.35	1.21	0.05	2.52	0.10	2.48	0.36
3/27/08	2.24	0.09	1.48	0.29	1.72	0.07	2.52	0.10	2.15	0.33
4/3/08	2.04	0.08	2.20	0.33	1.30	0.06	3.26	0.14	2.21	0.33
4/10/08[f]	0.64	0.09	0.53	0.23	1.81	0.08			1.04	0.27
4/17/08	1.42	0.07	1.10	0.28	1.31	0.06	3.55	0.17	0.95	0.27
4/24/08	2.07	0.09	2.04	0.32	1.77	0.08	3.68	0.16	2.46	0.34
5/1/08	2.04	0.09	1.91	0.32	1.56	0.07	3.61	0.16	1.83	0.34
5/8/08	2.71	0.11	1.97	0.31	2.43	0.10	4.83	0.20	2.78	0.37
5/15/08	1.16	0.06	1.77	0.31	1.10	0.05	2.04	0.10	1.95	0.35
5/22/08	1.65	0.07	1.14	0.26	1.60	0.07	2.94	0.13	1.58	0.31
5/29/08	0.55	0.03	2.10	0.30	0.71	0.03	1.37	0.06	2.27	0.32
6/5/08[g]			1.42	0.32					1.97	0.39
6/12/08	2.17	0.09	2.86	0.38	1.45	0.06	3.82	0.16	2.98	0.39
6/19/08[h]			2.03	0.35	0.95	0.06	3.59	0.03	2.83	0.39
6/26/08	2.41	0.10	1.94	0.35	1.96	0.08	4.23	0.18	2.18	0.37
7/2/08	1.99	0.09	1.76	0.33	1.78	0.08	3.85	0.17	2.64	0.35
7/10/08	1.70	0.07	1.86	0.32	1.43	0.06	3.14	0.14	1.77	0.34
7/18/08	2.06	0.09	1.78	0.32	1.58	0.07	4.14	0.19	1.56	0.33
7/24/08	2.61	0.11	2.13	0.34	2.38	0.10	4.98	0.21	2.68	0.40
7/31/08	2.75	0.11	2.44	0.35	2.49	0.10	2.10	0.09	3.11	0.41
8/7/08	3.20	0.12	2.47	0.35	2.47	0.10	3.18	0.13	3.02	0.41
8/13/08	2.48	0.10	2.79	0.37	2.25	0.10	4.72	0.21	3.09	0.41
8/21/08	3.04	0.12	2.40	0.35	2.28	0.09	5.47	0.02	2.62	0.39
8/27/08	1.75	0.08	2.35	0.35	1.37	0.07	3.77	0.17	3.04	0.42
9/4/08	2.05	0.08	1.73	0.29	1.88	0.08	4.04	0.18	2.01	0.33
9/11/08	1.86	0.08	1.93	0.37	0.80	0.04	0.75	0.07	2.50	0.43
9/18/08	1.30	0.06	1.40	0.31	1.06	0.05	2.71	0.14	1.36	0.33
9/25/08	2.53	0.10	1.52	0.31	2.22	0.09	6.14	0.25	1.88	0.35
10/1/08	1.44	0.07	1.50	0.31	1.31	0.07	3.15	0.16	1.85	0.32
10/9/08	3.40	0.13	2.34	0.36	2.59	0.10	7.04	0.28	2.44	0.38
10/16/08	3.57	0.14	3.50	0.41	5.18	0.19	7.24	0.28	3.43	0.42
10/23/08	2.44	0.10	1.68	0.31	2.25	0.09	2.36	0.10	2.56	0.35
10/30/08	1.82	0.08	2.01	0.33	1.54	0.07	1.84	0.08	1.95	0.33
11/6/08	3.16	0.12	1.92	0.31	2.81	0.11	3.10	0.12	2.43	0.34
11/13/08	2.73	0.11	2.26	0.34	2.30	0.09	2.44	0.10	2.05	0.33
11/20/08	1.57	0.07	1.47	0.30	1.51	0.07	1.45	0.07	1.70	0.31
11/27/08[i]			2.01	0.32					1.73	0.30
12/3/08	2.66	0.10	2.23	0.35	1.84	0.07	2.62	0.10	2.70	0.35
12/11/08	2.59	0.10	2.46	0.37	2.21	0.09	2.46	0.10	2.21	0.4
12/18/08	1.56	0.07	1.48	0.32	1.65	0.07	1.63	0.07	1.88	0.32
12/23/08	2.44	0.11	1.66	0.32	2.34	0.10	2.31	0.10	1.84	0.31
1/2/09	2.93	0.11	3.15	0.39	0.99	0.05	3.06	0.12	3.19	0.37
Average	2.26		1.97		1.87		3.33		2.25	

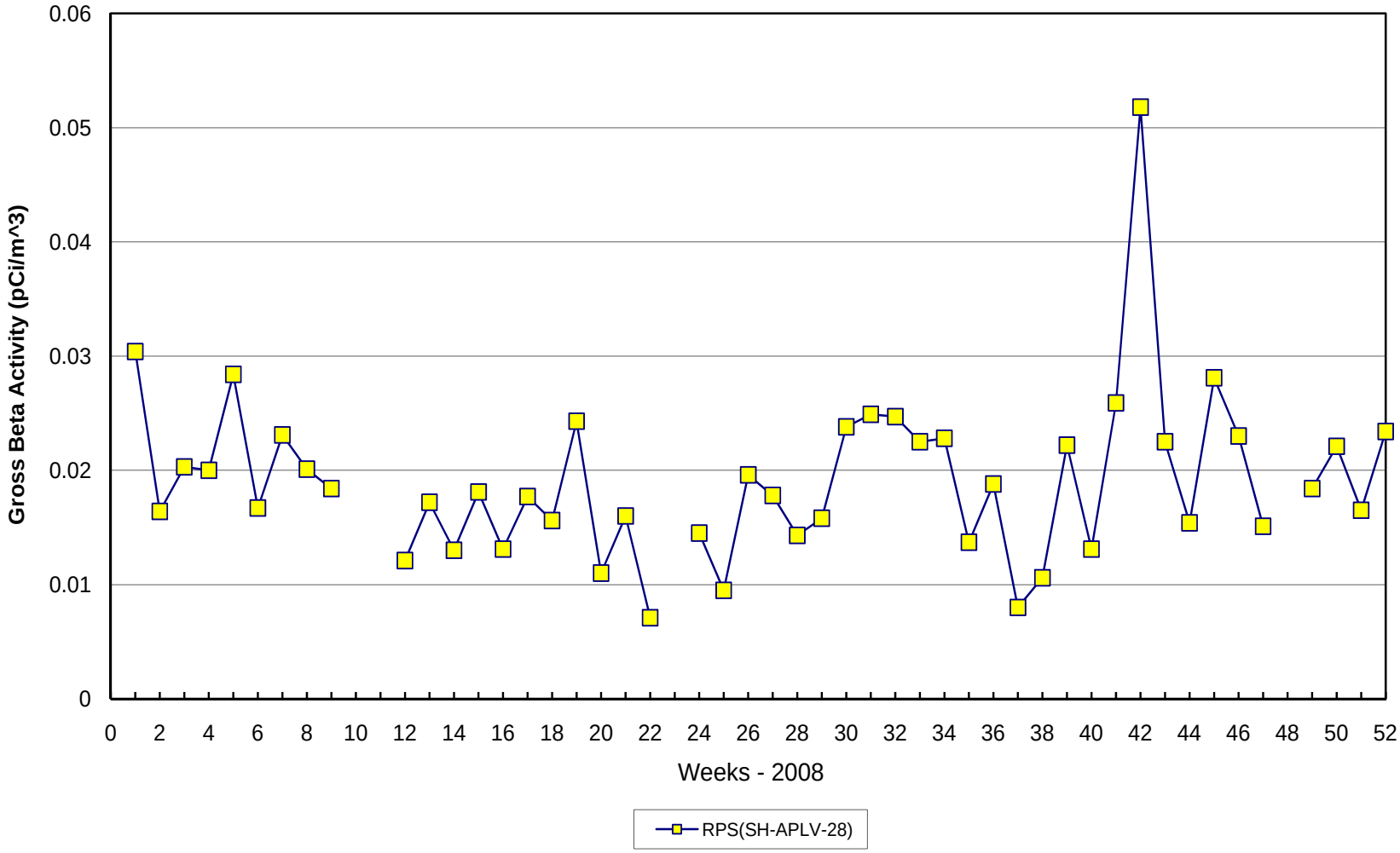
Air Particulate - Gross Beta, (pCi/m^3)

	SH-APLV-22[a] All measurements x 10^{-2} pCi/m^3				SH-APLV-28[b] All measurements x 10^{-2} pCi/m^3		SH-APLV-130[c] All measurements x 10^{-2} pCi/m^3			
	RPS		HNP		RPS		RPS		HNP	
Date	**Meas.**	**Error**	**Meas.**	**Error**	**Meas.**	**Error**	**Meas.**	**Error**	**Meas.**	**Error**
% Diff.	13.6%						38.7%			

[a] Duplicate sampling at NCRPS site SH-APLV-22 (SHNPP Site AP-26) at auxiliary dam near Hwy. 42.
[b] Duplicate sampling at NCRPS Site SH-APLV-28, at power line right-of-way on SR#1130. NCRPS samples are collected from continuous air samplers at sites 22, 28, and 130 on a one-week frequency.
[c] Duplicate sampling at NCRPS Site SH-APLV-130 (SHNPP Site AP-47), on SR-1912 approximately 0.25 mi N of Prince's Chapel C.M.E. Church.
[d] Sample analysis result not available from State Radiochemistry Laboratory database.
[e] Sample analysis result not available from State Radiochemistry Laboratory database.
[f] Sampler malfunction at location 130 for collection date of 4/10/08. Sample analyzed with activity of $5.83 \pm 0.59 \times 10^{-1}$ pCi/m^3 based on a sample flow of 5.4 m^3.
[g] Sample analysis result not available from State Radiochemistry Laboratory database.
[h] Sample analysis result not available from State Radiochemistry Laboratory database.
[i] Samples not collected by Radiation Protection personnel due to Thanksgiving holiday.

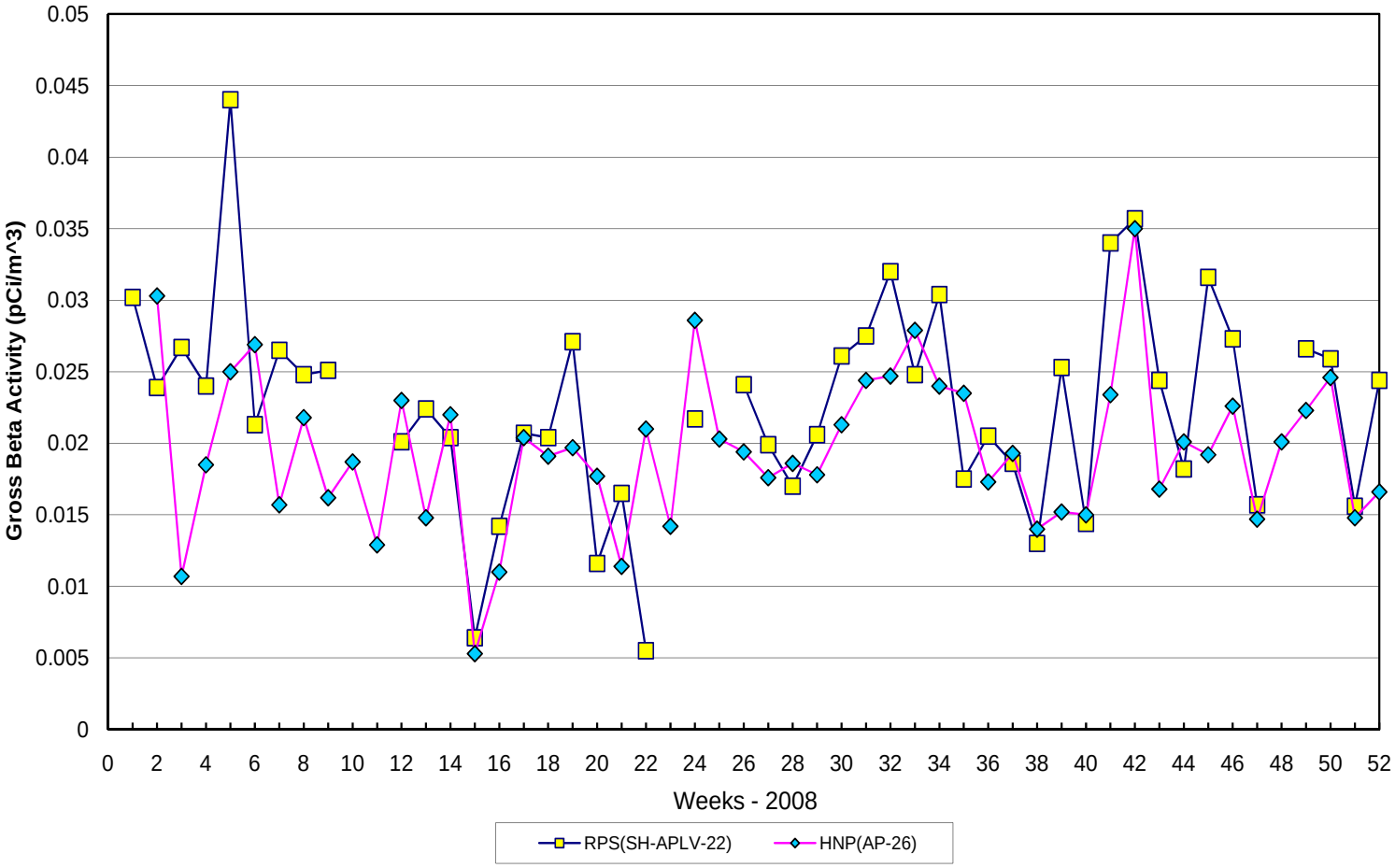
SHEARON HARRIS NUCLEAR POWER PLANT

HARRIS LAKE PARK



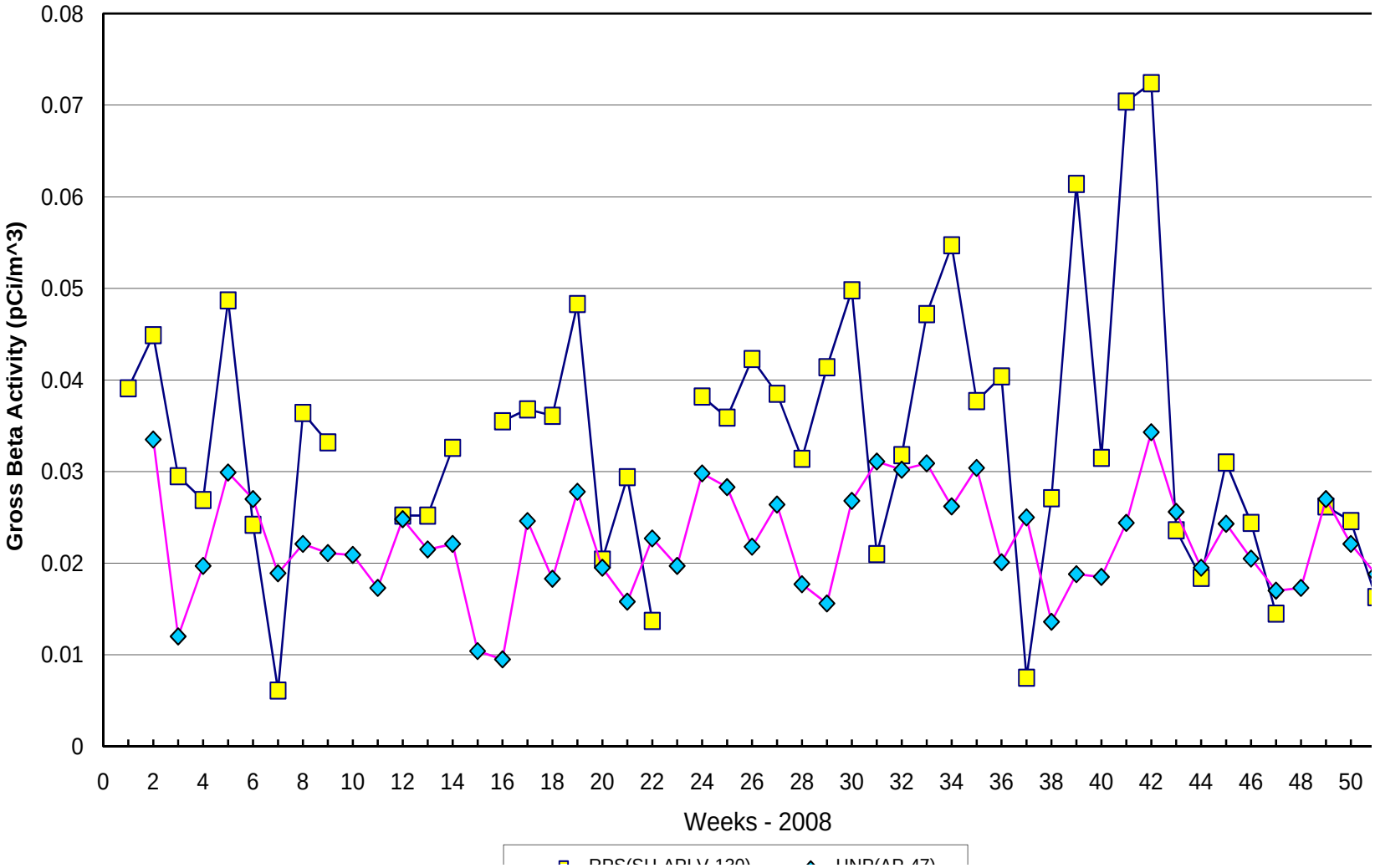
SHEARON HARRIS NUCLEAR POWER PLANT

SPILLWAY



SHEARON HARRIS NUCLEAR POWER PLANT

SR 1912



Air Particulate – Radioiodine, (pCi/m^3)

	Indicator (SH-APCC-04)[a] All measurements x 10^{-2} pCi/m^3				Control (SH-APCC-9261)[b] All measurements x 10^{-2} pCi/m^3			
	RPS		HNP		RPS		HNP	
Week	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
1/7/08[c]			< 1.52				< 3.17	
1/14/08			<1.67				< 1.99	
1/21/08			< 1.53				< 2.62	
1/28/08			< 1.84				< 3.08	
2/4/08			< 2.12				< 1.39	
2/11/08			< 1.69				< 2.32	
2/18/08			< 3.00				< 1.45	
2/25/08			< 1.43				< 1.97	
3/3/08			< 1.88				< 3.48	
3/10/08			< 1.84				< 3.12	
3/17/08			< 1.77				< 3.28	
3/24/08			< 2.00				< 2.00	
3/31/08			< 2.55				< 3.62	
4/7/08			< 1.61				< 1.63	
4/14/08			< 1.93				< 2.66	
4/21/08			< 1.65				< 2.83	
4/28/08			< 2.17				< 2.91	
5/5/08			< 2.71				< 3.24	
5/12/08			< 1.44				< 3.82	
5/19/08			< 2.50				< 3.27	
5/27/08			< 1.10				< 2.40	
6/2/08			< 1.83				< 2.13	
6/9/08			< 1.76				< 2.76	
6/16/08			< 1.83				< 2.34	
6/23/08			< 3.00				< 2.43	
6/30/08			< 2.11				< 2.53	
7/7/08			< 3.09				< 2.68	
7/14/08			< 2.68				< 2.64	
7/21/08			< 2.89				< 2.82	
7/28/08			< 2.29				< 2.26	
8/4/08			< 1.92				< 3.11	
8/11/08			< 4.80				< 3.57	
8/18/08			< 2.03				< 3.40	
8/25/08			< 2.14				< 3.17	
9/2/08			< 2.03				< 2.79	
9/8/08			< 1.46				< 2.25	
9/15/08			< 2.01				< 1.95	
9/22/08			< 2.32				< 3.20	
9/29/08			< 2.70				< 2.22	
10/6/08			< 2.07				< 1.93	
10/13/08			< 1.81				< 2.50	
10/20/08			< 2.41				< 2.89	
10/27/08			< 2.72				< 2.93	
11/3/08			< 3.30				< 1.93	
11/10/08			< 2.11				< 2.93	
11/17/08			< 1.67				< 1.79	
11/24/08			< 3.10				< 2.73	
12/1/08			< 1.88				< 2.67	
12/8/08			< 2.41				< 2.22	
12/15/08			< 2.07				< 2.83	
12/22/08			< 2.34				< 2.26	
12/29/08			< 2.86				< 1.65	
Average								

Air Particulate – Radioiodine, (pCi/m^3)

	Indicator (SH-APCC-04)[a]				Control (SH-APCC-9261)[b]			
	All measurements x 10^{-2} pCi/m^3				All measurements x 10^{-2} pCi/m^3			
	RPS		HNP		RPS		HNP	
Week	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
% Diff.								

[a] Duplicate sampling at NCRPS Site SH-APLV-04 (SHNPP Site AP-2), SR#1134, 1.4 miles south of SR#1011 at barricade.
[b] NCRPS Site SH-APLV-9261 is located at 301 S. Wilmington Street, Raleigh, NC on top of the Bath Building. It is located about 25 miles NE of the plant. SHNPP Site AP-5 is located at the Pittsboro Line and Service Office on US 64 in thee WNW Sector, 13.4 miles from the plant.
[c] Unless otherwise noted, blank space for Radiation Protection results indicates that a Radioiodine analysis was performed but that an MDA was not recorded in the State Radiochemistry Laboratory database.

Air Particulate - Gamma, (pCi/m^3)

		Indicator (SH-APLV-04)[a] All measurements in pCi/m^3				Control (SH-APLV-9261[a] All measurements in pCi/m^3			
		RPS		HNP		RPS		HNP	
Date	**Isotope**	**Meas.**	**Error**	**Meas.**	**Error**	**Meas.**	**Error**	**Meas.**	**Error**
January[b]									
February	K-40								
1st Quarter	Be-7			1.19E-01	1.34E-02			1.15E-01	2.24E-02
	K-40			3.83E-02	8.91E-03				
	Tl-208							9.50E-04	8.73E-04
	Pb-212			9.29E-04	6.02E-04				
	Bi-214			2.87E-03	1.15E-03				
	Pb-214			2.75E-03	1.38E-03				
April	Be-7								
May	Be-7								
June	Be-7								
2nd Quarter	Be-7			1.44E-01	2.18E-02			1.24E-01	1.94E-02
	K-40			6.58E-02	1.59E-02			6.35E-02	1.38E-02
	Bi-214							1.60E-03	1.29E-03
	Ra-226			2.34E-02	1.28E-02			1.46E-02	1.01E-02
July	Be-7								
August	Be-7								
September	Be-7								
3rd Quarter	Be-7			1.20E-01	1.67E-02			1.21E-01	1.96E-02
	K-40			3.48E-02	8.53E-03			5.96E-02	1.48E-02
	Pb-212			1.19E-03	5.95E-04				
	Bi-214			6.76E-03	1.54E-03			2.42E-03	1.40E-03
	Pb-214			6.22E-03	1.23E-03				
	Ra-226			1.37E-02	8.31E-03				
October	Be-7								
November	Be-7								
December	Be-7								
4th Quarter	Be-7			9.64E-02	2.08E-02			1.08E-01	2.21E-02
	K-40			9.29E-02	1.81E-02			9.36E-02	2.02E-02
	Bi-214			7.53E-03	2.21E-03				
	Pb-214			2.83E-03	1.76E-03			3.52E-03	1.41E-03

[a] RPS samples composited and analyzed monthly. SHNPP samples composited and analyzed quarterly. Duplicate sampling at NCRPS Site SH-APLV-04(SHNPP Site AP-2) on SR#1134, 1.4 mi. south of 1011 at barricade. NCRPS Site SH-APLV-9261 is located in Raleigh, NC at 301 N. Wilmington Street on top of the Bath Building. SHNPP Site AP-5 is at the Pittsboro Line and Service Office of CP&L located off US 64. The site is in the WNW sector at 13.4 miles from SHNPP.

[b] Composite gamma analyses of air particulate samples by Radiation Protection not performed in 2008 due to detector malfunctions at State Radiochemistry Laboratory: Two high purity germanium detectors were malfunctioned and could not be repaired due to budgetary concerns. Composite gamma analyses of air particulate samples on a monthly basis is due to resume in 2009.

Air Particulate - Gamma, (pCi/m^3)

		SH-APLV-22[a] All measurements in pCi/m^3				SH-APLV-130[b] All measurements in pCi/m^3			
		RPS		MNS		RPS		MNS	
Date	Isotope	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
January[c]	Be-7								
February									
March									
1st Quarter	Be-7			1.12E-01	1.45E-02			1.22E-01	1.50E-02
	K-40			2.98E-02	8.48E-03				
	Pb-212			1.27E-03	4.78E-04				
	Bi-214			2.59E-03	1.24E-03			4.49E-03	1.34E-03
	Pb-214			2.94E-03	1.47E-03			3.11E-03	1.60E-03
April									
May									
June									
2nd Quarter	Be-7			1.21E-01	2.03E-02			1.44E-01	1.82E-02
	K-40			6.36E-02	1.57E-02			3.59E-02	1.01E-02
	Pb-212							2.62E-03	7.96E-04
	Bi-214			2.06E-03	1.52E-03			4.23E-03	1.25E-03
	Pb-214			1.71E-03	1.27E-03			6.43E-03	1.20E-03
	Ra-226			1.31E-02	1.11E-02				
	Th-234							1.60E-03	1.20E-03
July									
August									
September									
3rd Quarter	Be-7			1.20E-01	1.67E-02			1.31E-01	2.40E-02
	K-40			3.06E-02	9.85E-03			8.62E-02	2.11E-02
	Pb-212			1.43E-03	1.32E-04				
	Bi-214			4.42E-03	1.27E-03				
	Pb-214			5.69E-03	1.30E-03				
	Ra-226			1.37E-02	8.31E-03				
October									
November									
December									
4th Quarter	Be-7			9.54E-02	1.87E-02			9.51E-02	1.68E-02
	K-40			3.01E-02	8.85E-02			3.13E-02	8.63E-03
	Tl-208							9.49E-04	6.77E-04
	Pb-212			2.22E-03	6.80E-04			1.87E-03	6.76E-04
	Bi-214			3.12E-03	1.36E-03			4.57E-03	1.44E-03
	Pb-214			4.89E-03	1.40E-03			4.86E-03	1.20E-03
	Ra-226			1.08E-02	7.34E-03			2.04E-02	1.10E-02
	Th-234			3.20E-02	1.55E-02			1.55E-02	1.01E-02

Air Particulate - Gamma, (pCi/m^3)

		SH-APLV-28[d] All measurements in pCi/m^3	
		RPS	
Date	Isotope	Meas.	Error
January[e]			
February			
March			
April			
May			
June			
July			

August		
September		
October		
November		
December		

[a] Duplicate sampling at NCRPS site SH-APLV-22 (SHNPP Site AP-26) at auxiliary dam near Hwy. 42.
[b] Duplicate sampling at NCRPS Site SH-APLV-130 (SHNPP Site AP-47), on SR-1912 approximately 0.25 mi N of Prince's Chapel C.M.E. Church.
[c] Composite gamma analyses of air particulate samples by Radiation Protection not performed in 2008 due to detector malfunctions at State Radiochemistry Laboratory: Two high purity germanium detectors were malfunctioned and could not be repaired due to budgetary concerns. Composite gamma analyses of air particulate samples on a monthly basis is due to resume in 2009.
[d] Sampling at NCRPS Site SH-APLV-28, at power line right-of-way on SR#1130.
[e] Composite gamma analyses of air particulate samples by Radiation Protection not performed in 2008 due to detector malfunctions at State Radiochemistry Laboratory: Two high purity germanium detectors were malfunctioned and could not be repaired due to budgetary concerns. Composite gamma analyses of air particulate samples on a monthly basis is due to resume in 2009.

Surface Water - Low-Level Iodine and Gamma

		Indicator (SH-SW-45)[a] All measurements in pCi/l				Control (SH-SW-44)[b] All measurements in pCi/l			
		RPS		HNP		RPS		HNP	
Date	Isotope	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
1/14/08	K-40	2.15E+02	2.60E+01			1.56E+02	1.53E+01		
	Ra-226	1.42E+02	3.58E+01						
	LLI			< 6.27E-01				1.26E+00	4.16E-01
January	Pb-212			2.49E+00	2.08E+00				
	Pb-214			4.29E+00	3.56E+00				
	Th-234							5.91E+01	4.73E+01
1/28/08	K-40	1.31E+02	2.34E+01			1.41E+02	1.53E+02		
	Ra-226	8.98E+01	2.66E+01						
	LLI			6.19E-01	3.96E-01			< 7.95E-01	
2/11/08	K-40	1.12E+02	2.04E+01			1.51E+02	1.87E+01		
	Ra-226	1.48E+02	4.33E+01						
	LLI	2.80E-01	3.00E-01	< 7.58E-01				< 4.67E-01	
February	Pb-212			3.48E+00	1.96E+00				
	Bi-214			8.36E+00	3.58E+00				
	Pb-214			7.70E+00	2.99E+00				
2/25/08	K-40	1.71E+02	1.64E+01			1.23E+02	1.06E+01		
	Ra-226	7.31E+01	2.42E+01						
	LLI			< 7.67E-01				< 3.87E-01	
3/10/08	K-40	1.89E+02	2.41E+01			1.07E+02	1.39E+01		
	Ra-226	1.19E+02	4.09E+01						
	LLI			< 3.58E-01				4.06E-01	2.82E-01
3/24/08	K-40	8.47E+01	1.50E+01			1.51E+02	1.76E+01		
	LLI			< 6.13E-01				< 8.36E-01	
March	Bi-214			6.20E+00	3.65E+00				
	Pb-214			5.11E+00	3.45E+00				
4/7/08	K-40	2.12E+02	2.90E+01			1.50E+02	1.52E+01		
	Ra-226	7.66E+01	4.15E+01						
	LLI			< 6.03E-01				< 8.04E-01	
4/21/08	K-40	2.24E+02	2.72E+01			1.39E+02	1.58E+01		
	Ra-226	7.67E+01	3.68E+01						
5/5/08	K-40					1.34E+02	1.43E+01		
	LLI			< 4.61E-01				< 6.41E-01	
April	Pb-214							4.48E+00	3.10E+00
5/19/08	K-40	1.77E+02	2.60E+01			2.58E+01	6.70E+00		
	LLI	8.00E-02	4.30E-01	< 6.28E-01				< 4.87E-01	
6/2/08	K-40	1.07E+02	1.60E+01			1.32E+02	1.50E+01		
	LLI	2.90E-01	4.80E-01	< 4.17E-01				< 5.73E-01	
May	Tl-208			3.42E+00	2.66E+00				
6/16/08	K-40	3.66E+02	1.60E+01			4.72E+01	4.50E+00		
	LLI	3.00E-01	4.70E-01	< 4.18E-01				< 5.87E-1	
6/30/08	K-40					1.41E+02	1.50E+01		
	LLI			< 4.91E-01				< 6.46E-01	
June	K-40			9.12E+01	1.80E+01			2.75E+02	3.25E+01
	Tl-208			3.36E+00	1.27E+00			3.08E+00	1.48E+00
	Bi-212			1.22E+01	7.36E+00				
	Pb-212			9.10E+00	1.22E+00			6.60E+00	1.90E+00
	Bi-214			6.20E+00	3.65E+00			7.31E+00	2.68E+00
	Pb-214			7.37E+00	1.99E+00				
	Ra-226			7.14E+01	1.95E+01			3.25E+01	2.34E+01
	Th-234			6.43E+01	2.15E+01			6.32E+01	2.94E+01
7/14/08	LLI			< 5.14E-01				< 6.70E-01	
7/28/08	K-40	1.22E+02	1.50E+01			1.47E+02	1.50E+01		
	LLI	0.00E+00	1.20E+00	< 5.39E-01				< 6.89E-01	
July	K-40			1.13E+02	2.09E+01			2.80E+02	3.40E+01
	Tl-208			3.80E+00	1.36E+00			1.96E+00	1.56E+00

Surface Water - Low-Level Iodine and Gamma

		Indicator (SH-SW-45)[a] All measurements in pCi/l				Control (SH-SW-44)[b] All measurements in pCi/l			
		RPS		HNP		RPS		HNP	
Date	Isotope	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
	Pb-212			8.54E+00	1.51E+00			5.77E+00	2.23E+00
	Bi-214			1.12E+01	2.60E+00			6.95E+00	3.88E+00
	Pb-214			8.11E+00	2.10E+00				
	Ra-226			5.73E+01	2.07E+01			4.07E+01	2.62E+01
	Th-234			6.08E+01	2.72E+01			5.61E+01	3.74E+01
8/11/08	K-40	1.61E+02	2.50E+01			1.41E+02	1.60E+01		
	Ra-226	8.69E+01	4.20E+01						
	LLI	7.00E-02	3.80E-01	< 8.27E-01				< 4.25E-01	
8/25/08	K-40	1.13E+02	2.00E+01			1.40E+02	1.60E+01		
	LLI	5.00E-02	2.80E-01	< 5.70E-01				< 4.33E-01	
August	K-40			3.17E+02	3.90E+01			1.20E+02	2.02E+01
	Tl-208			3.60E+00	2.36E+00			2.95E+00	1.10E+00
	Pb-212			9.22E+00	2.77E+00			7.66E+00	1.95E+00
	Bi-214			1.27E+01	3.92E+00			1.42E+01	3.40E+00
	Pb-214							1.09E+01	2.92E+00
	Ra-226			7.34E+01	3.04E+01			6.39E+01	2.22E+01
	Th-234			7.27E+01	6.41E+01			7.26E+01	2.19E+01
9/8/08	K-40	2.10E+02	2.70E+01			1.36E+02	1.60E+01		
	LLI	0.00E+00	3.90E-01	< 4.81E-01				< 4.61E-01	
9/22/08	K-40					9.47E+01	1.00E+01		
	LLI	7.10E-01	8.40E-01	< 7.61E-01				< 4.37E-01	
10/6/08	LLI	5.10E-01	9.40E-01	< 5.04E-01				< 7.45E-01	
September	K-40			1.09E+02	1.88E+01			1.43E+02	2.62E+01
	Tl-208			3.60E+00	1.42E+00			2.17E+00	1.24E+00
	Pb-212			7.13E+00	1.46E+00			7.38E+00	1.68E+00
	Bi-214			1.25E+01	3.23E+00			1.49E+01	3.24E+00
	Pb-214			1.05E+01	2.45E+00			1.05E+01	2.94E+00
	Ra-226			6.14E+01	2.23E+01			1.06E+02	2.60E+01
	Ac-228			9.78E+00	4.65E+00				
	Th-234			5.40E+01	2.88E+01			5.81E+01	2.53E+01
10/20/08	K-40	1.79E+02	2.60E+01						
	LLI	2.30E-01	2.80E-01	< 4.59E-01				< 5.17E-01	
11/3/08	LLI	3.20E-01	3.90E-01	< 4.53E-01				< 6.94E-01	
October	K-40			1.16E+02	2.04E+01			1.57E+02	2.30E+01
	Tl-208			2.52E+00	1.21E+00			2.59E+00	1.37E+00
	Pb-212			6.29E+00	1.64E+00			6.24E+00	1.82E+00
	Bi-214			1.12E+01	3.18E+00			1.12E+01	2.94E+00
	Pb-214			1.08E+01	2.89E+00			1.02E+01	2.68E+00
	Ra-226			6.60E+01	1.92E+01			7.20E+01	2.35E+01
	Th-234			7.29E+01	3.43E+01			7.94E+01	2.15E+01
11/17/08	K-40	1.62E+02	2.60E-01						
	LLI	0.00E+00	9.20E-01	< 5.97E-01				< 4.50E-01	
12/1/08	LLI	1.20E-01	2.80E-01	< 4.30E-01				< 6.65E-01	
November	K-40			2.99E+02	3.48E+01			3.54E+02	4.16E+01
	Tl-208			3.24E+00	1.46E+00			5.65E+00	2.63E+00
	Pb-212			7.90E+00	2.32E+00			8.70E+00	3.29E+00
	Bi-214							7.13E+00	3.59E+00
	Ra-226			4.30E+01	2.68E+01			7.19E+01	4.24E+01
	Ac-228							1.52E+01	7.99E+00
	Th-234							1.98E+02	8.91E+01
12/15/08	LLI	0.00E00	3.15E+00	< 6.36E-01				< 4.78E-01	
12/29/08	LLI			< 6.52E-01				< 5.18E-01	
December	K-40			4.77E+02	5.03E+01			1.18E+02	1.84E+01
	Tl-208			2.09E+00	1.70E+00			2.63E+00	1.22E+00
	Pb-212			5.73E+00	2.98E+00			6.60E+00	1.76E+00
	Bi-214			7.52E+00	3.92E+00			1.24E+01	2.57E+00
	Pb-214							1.10E+01	2.64E+00

Surface Water - Low-Level Iodine and Gamma

		Indicator (SH-SW-45)[a] All measurements in pCi/l				Control (SH-SW-44)[b] All measurements in pCi/l			
		RPS		HNP		RPS		HNP	
Date	Isotope	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
	Ra-226			3.11E+01	2.98E+01			7.23E+01	1.92E+01
	Ac-228							6.93E+00	3.68E+00
	Th-234							6.35E+01	2.32E+01

[a] Sampling at NCRPS Site SH-SW-45 (SHNPP Site DW-40) at the intake structure of the Northeast Metropolitan Water District of Harnett County on the southern bank of the Cape Fear River in Lillington. It is located in the SSE sector approximately 15 mi. from the plant. For gamma isotopic analyses, blank spaces indicate a result below LLD unless otherwise noted. For low level iodine analyses, blank spaces indicate that the result was not available from the State Public Health Radiochemistry Laboratory database.

[b] Split sampling at NCRPS Site SH-SW-44 (SHNPP Site DW-38) in the Cape Fear River at the CP&L Cape Fear Plant water intake. This site is in the WSW sector 6.1 mi. from the plant. It is 0.25 mi. downstream from the junction of the Deep River and the Haw River.

Surface Water - Tritium, pCi/l

	SH-SW-22[a]			
	All measurements in pCi/l			
	RPS		HNP	
Date	Meas.	Error	Meas.	Error
January	9.29E+03	2.84E+02	9.44E+03	2.25E+02
February	8.38E+03	2.73E+02	7.84E+03	2.15E+02
March	6.93E+03	2.61E+02	6.96E+03	2.07E+02
April	6.15E+03	2.54E+02	6.10E+03	2.01E+02
May	5.78E+03	6.59E+02	5.60E+03	1.98E+02
June	6.15E+03	2.66E+02	5.68E+03	1.99E+02
July	5.78E+02	2.64E+02	5.60E+03	1.94E+02
August	5.86E+03	2.68E+02	5.38E+03	1.93E+02
September	6.66E+03	2.75E+02	6.57E+03	2.07E+02
October	7.00E+03	2.76E+02	6.91E+03	2.05E+02
November	7.10E+03	2.31E+02	7.28E+03	2.07E+02
December	7.25E+03	3.65E+02	6.77E+03	2.05E+02
Average	6.43E+03		6.68E+03	
% Diff.	3.82%			

Surface Water - Tritium

	Indicator (SH-SW-45)[b]				Control (SH-SW-44)[c]			
	All measurements in pCi/l				All measurements in pCi/l			
	RPS		HNP		RPS		HNP	
Date	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
January[d]			< 2.51E+02				< 2.52E+02	
February	0.00E+00	1.80E+02	< 2.51E+02		3.72E+02	1.84E+02	< 2.51E+02	
March[e]			< 2.49E+02				< 2.48E+02	
April	3.82E+02	1.88E+02	< 2.46E+02		3.80E+02	1.88E+02	< 2.47E+02	
May	4.43E+02	2.18E+02	< 2.50E+02		4.41E+02	2.17E+02	< 2.48E+02	
June	2.51E+02	1.51E+02	< 2.48E+02		3.77E+02	1.86E+02	< 2.48E+02	
July[f]			< 2.40E+02				< 2.39E+02	
August	3.74E+02	1.84E+02	< 2.42E+02		0.00E+00	2.05E+02	< 2.43E+02	
September	4.26E+02	2.10E+02	< 2.50E+02		4.26E+02	2.10E+02	< 2.52E+02	
October	3.17E+02	1.56E+02	< 2.43E+02		3.21E+02	1.59E+02	< 2.43E+02	
November[g]	0.00E+00	1.42E+02	< 2.41E+02				< 2.41E+02	
December	-3.10E+02	1.45E+02	< 2.46E+02		-3.14E+02	1.46E+02	< 2.46E+02	
Average	2.09E+02		NA		2.50E+02		NA	
% Diff.	NA				NA			

[a] Split sampling at NCRPS Site SH-SW-22 (SHNPP Site DW-26) at Harris Lake near the Auxiliary Dam. This sample is a composite collected monthly.
[b] Sampling at NCRPS Site SH-SW-45 (SHNPP Site DW-40) at the intake structure of the Northeast Metropolitan Water District of Harnett County on the southern bank of the Cape Fear River in Lillington. It is located in the SSE sector approximately 15 mi. from the plant.
[c] Split sampling at NCRPS Site SH-SW-44 (SHNPP Site DW-38) in the Cape Fear River at the CP&L Cape Fear Plant water intake. This site is in the WSW sector 6.1 mi. from the plant. It is 0.25 mi. downstream from the junction of the Deep River and the Haw River.
[d] January sample analysis results not available from State Radiochemistry Laboratory database for RPS locations SH-SW-45 & SH-SW-44.
[e] March sample analysis results not available from State Radiochemistry Laboratory database for RPS locations SH-SW-45 & SH-SW-44.
[f] July sample analysis results not available from State Radiochemistry Laboratory database for RPS locations SH-SW-45 & SH-SW-44.

[g] November sample analysis results not available from State Radiochemistry Laboratory database for RPS location SH-SW-44.

Milk - Gamma and Low Level Iodine

		Indicator (SH-MS-13)[a] All measurements in pCi/l			
		RPS		HNP	
Date	Isotope	Meas.	Error	Meas.	Error
1/7/08	K-40	2.16E+03	6.48E+01	1.40E+03	1.56E+02
	Bi-214			1.27E+01	1.23E+01
	LLI			< 4.64E-01	
2/4/08	K-40	1.40E+03	4.03E+01	1.28E+03	1.98E+02
	LLI	0.00E+00	3.60E-01	< 5.38E-01	
3/3/08	K-40	2.23E+03	6.70E+01	1.29E+03	1.55E+02
	LLI			< 3.17E-01	
4/7/08	K-40	2.07E+03	6.38E+01	1.13E+03	1.46E+02
	LLI			< 2.96E-01	
5/5/08	K-40	1.68E+03	5.64E+01	1.35E+03	1.55E+02
	LLI			< 4.81E-01	
6/2/08	K-40	1.37E+03	4.00E+01	1.15E+03	1.90E+02
	LLI			< 4.40E-01	
7/7/08	K-40	1.31E+03	3.90E+01	1.58E+03	1.78E+02
	Pb-212			1.73E+01	8.25E+00
	Ra-226			1.05E+02	9.91E+01
	LLI			< 5.48E-01	
8/4/08	K-40	1.29E+03	3.80E+01	2.00E+03	2.03E+02
	Pb-212			1.24E+01	1.15E+01
	LLI	1.90E-01	1.40E-01	< 3.98E-01	
9/8/08	K-40	1.77E+03	5.80E+01	1.88E+03	2.14E+02
	Bi-214			2.30E+01	1.39E+01
	LLI	0.00E+00	2.30E-01	< 4.65E-01	
10/6/08	K-40	1.47E+03	4.80E+01	1.88E+03	2.11E+02
	Ra-226			1.44E+02	1.34E+02
	LLI	0.00E+00	1.30E-01	< 5.70E-01	
11/3/08	K-40	1.28E+03	4.20E+01	1.90E+03	2.01E+02
	Bi-214			3.26E+01	1.41E+01
	LLI	6.00E-02	2.30E-01	< 3.04E-01	
12/1/08	K-40	1.39E+03	4.00E+01	2.33E+03	2.42E+02
	LLI	3.00E-02	1.10E-01	< 3.21E-01	

[a] Split sample collected at NCRPS Site SH-MS-13 (HNP Site MK-05) from the Manco Dairy . Sample was analyzed using germanium detector in a 3.5-liter geometry. For gamma isotopic analyses, blank spaces indicate a result below LLD unless otherwise noted. For gamma isotopic analyses, blank spaces indicate a result below LLD unless otherwise noted. For low level iodine analyses, blank spaces indicate that the result was not available from the State Public Health Radiochemistry Laboratory database.

Ground Water- Alpha, Beta, Tritium and Gamma,(pCi/l)

		SH-GW-39[a] All measurements in pCi/l				SH-GW-59[b] All measurements in pCi/l			
		RPS		HNP		RPS		HNP	
Date	Isotope[c]	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
2/19/08	Alpha	9.90E-01	2.80E-01			1.94E+00	8.60E-01		
	Beta	1.34E+00	1.70E-01			2.07E+00	5.90E-01		
	H-3[d]			< 2.50E+02				< 2.51E+02	
	Pb-212			7.70E+00	3.41E+00				
	Bi-214			2.01E+01	8.62E+00			4.28E+01	1.10E+01
	Pb-214			7.67E+00	5.91E+00			3.19E+01	9.15E+00
5/20/08[e]	Alpha					1.72E+00	7.40E-01		
	Beta					1.58E+00	7.80E-01		
	H-3			< 2.46E+02		3.25E+02	1.60E+02	< 2.45E+02	
	Bi-214			7.67E+00	5.91E+00				
	Pb-214							1.04E+01	8.03E+00
8/19/08	Alpha	2.08E+00	6.40E-01			1.58E+00	7.40E-01		
	Beta	3.60E+00	6.40E-01			2.74E+00	8.00E-01		
	H-3	-3.14E+02	1.46E+02	< 2.46E+02		2.98E+02	1.47E+02	< 2.45E+02	
	K-40			2.57E+02	6.09E+01			1.60E+02	4.09E+01
	Tl-208			7.31E+00	3.65E+00				
	Pb-212			6.01E+00	4.98E+00			4.28E+00	4.21E+00
	Bi-214			1.78E+01	8.67E+00			2.42E+01	6.29E+00
	Pb-214							1.98E+01	7.30E+00
	Ra-226							9.87E+01	4.29E+01
	Th-234							6.19E+01	5.93E+01
11/18/08	Alpha	3.18E+00	6.10E-01			7.80E-01	7.20E-01		
	Beta	1.45E+00	5.90E-01			3.36E+00	8.10E-01		
	H-3	-2.95E+02	1.38E+02	< 2.43E+02		3.14E+02	1.55E+02	< 2.43E+02	
	K-40			2.67E+02	6.51E+01			1.58E+02	4.36E+01
	Tl-208							3.90E+00	2.63E+00
	Pb-212							6.44E+00	3.40E+00
	Bi-214			1.47E+01	8.47E+00				
	Ra-226							8.74E+01	4.55E+01
	Th-234							4.91E+01	4.88E+01

[a] Split sampling at NCRPS Site SH-GW-39 (SHNPP Site 39) near the diabase dikes on site, 0.7 mi SE of the plant.
[b] Split sampling at NCRPS Site SH-GW-59 (SHNPP Site GW-59) near the construction road on site, 0.50 miles from the plant in the NNE sector.
[c] Alpha, Beta analyses are routinely performed on NCRPS groundwater samples. Gamma analyses are routinely performed on Harris Nuclear Plant groundwater samples. Tritium analyses are routinely performed by both facilities.
[d] Tritium sample analyses not available from State Radiochemistry Laboratory database for NCRPS samples collected on 2/19/08 from locations SH-GW-39 & SH-GW-59.
[e] Sample analyses not available from State Radiochemistry Laboratory database for NCRPS sample collected on 5/20/08 from locations SH-GW-39.

Groundwater- Alpha, Beta, Tritium and Gamma,(pCi/l)

		SH-GW-60[a] All measurements in pCi/l				SH-GW-68[b] All measurements in pCi/l			
		RPS		HNP		RPS		HNP	
Date	Isotope[c]	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
2/19/08[d]	Alpha	9.21E+00	1.06E+00			9.00E-02	7.40E-01		
	Beta	4.00E+00	5.20E-01			1.36E+00	4.80E-01		
	H-3				< 2.51E+02				< 2.50E+02
	Tl-208							6.29E+00	5.25E+00
	Pb-212			5.55E+00	3.62E+00			7.26E+00	6.96E+00
	Bi-214			3.30E+01	9.52E+00			5.30E+01	1.36E+01
	Pb-214			2.39E+01	7.74E+00			2.99E+01	1.02E+01
5/20/08[e]	Alpha	4.30E+00	9.40E-01						
	Beta	3.65E+00	8.20E-01						
	H-3	3.04E+02	1.50E+02		< 2.45E+02				< 2.46E+02
	Pb-212							5.74E+00	5.21E+00
	Bi-214			5.97E+01	9.77E+00			3.94E+01	1.23E+01
	Pb-214			5.46E+01	8.38E+00			3.12E+01	9.93E+00
8/19/08	Alpha	9.81E+00	1.26E+00			2.70E-01	8.80E-01		
	Beta	4.84E+00	8.40E-01			1.97E+00	6.30E-01		
	H-3	0.00E+00	1.44E+02		< 2.45E+02	1.26E+03	1.67E+02		< 2.45E+02
	K-40			1.48E+02	4.27E+01			1.35E+02	4.57E+01
	Pb-212			9.56E+00	3.81E+00			9.53E+00	3.28E+00
	Bi-214			2.16E+01	6.47E+00			3.95E+01	8.34E+00
	Pb-214			1.84E+01	5.83E+00			2.50E+01	7.37E+00
	Ra-226			1.26E+02	5.59E+01				
	Th-234			6.28E+01	4.45E+01				
11/18/08	Alpha	8.43E+00	1.11E+00			2.24E+00	7.70E-01		
	Beta	6.65E+00	8.70E-01			2.45E+00	5.90E-01		
	H-3	3.17E+02	1.56E+02		< 2.43E+02	-3.10E+02	1.44E+02		< 2.42E+02
	K-40			1.83E+02	4.29E+01			3.07E+02	6.16E+01
	Tl-208			4.15E+00	2.17E+00				
	Pb-212			6.76E+00	3.73E+00				
	Bi-214			8.22E+01	1.14E+01			7.61E+00	4.16E+00
	Pb-214			6.07E+01	1.11E+01				
	Th-234			6.28E+01	4.45E+01				

[a] Split sampling at NCRPS Site SH-GW-60(SHNPP Site GW-60) near the west bank of Thomas Creek on site, 0.5 mi. from the plant in the ESE Sector.
[b] Split sampling at NCRPS Site SH-GW-68(SHNPP Site GW-68) 0.2 miles from the plant in the W sector.
[c] Alpha, Beta analyses are routinely performed on NCRPS groundwater samples. Gamma analyses are routinely performed on Harris Nuclear Plant groundwater samples. Tritium analyses are routinely performed by both facilities.
[d] Tritium sample analyses not available from State Radiochemistry Laboratory database for NCRPS samples collected on 2/19/08 from locations SH-GW-60 & SH-GW-68.
[e] Sample analyses not available from State Radiochemistry Laboratory database for NCRPS sample collected on 5/20/08 from locations SH-GW-58.

Groundwater- Alpha, Beta, Tritium and Gamma,(pCi/l)

		SH-GW-69[a] All measurements in pCi/l				SH-GW-70[b] All measurements in pCi/l			
		RPS		HNP		RPS		HNP	
Date	Isotope[c]	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
2/19/08[d]	Alpha	1.45E+00	6.80E-01			8.00E-02	9.40E-01		
	Beta	5.29E+00	5.50E-01			4.18E+00	8.90E-01		
	H-3			< 2.50E+02				< 2.51E+02	
	Bi-214							9.73E+00	7.28E+00
	Pb-214			9.73E+00	7.07E+00			1.34E+01	5.66E+00
5/20/08	Alpha	1.55E+00	7.60E-01			1.50E+00	9.20E-01		
	Beta	4.57E+00	8.30E-01			4.21E+00	8.40E-01		
	H-3	3.04E+02	1.50E+02	< 2.46E+02		0.00E+00	1.45E+02	< 2.44E+02	
	K-40			4.43E+02	8.57E+01				
	Pb-212			8.28E+00	4.64E+00				
	Bi-214			1.82E+01	1.09E+01			1.44E+01	6.05E+00
	Pb-214			2.24E+01	8.06E+00			8.00E+00	7.00E+00
8/19/08	Alpha	3.39E+00	8.40E-01			2.33E+00	9.60E-01		
	Beta	4.25E+00	8.30E-01			5.41E+00	8.60E-01		
	H-3	3.01E+02	1.48E+02	< 2.45E+02		0.00E+00	1.45E+02	< 2.45E+02	
	K-40			3.22E+02	8.81E+01			3.00E+02	6.41E+01
	Tl-208							4.31E+00	3.18E+00
	Pb-212			6.94E+00	6.28E+00			9.79E+00	4.22E+00
	Bi-214			2.95E+01	8.31E+00			2.00E+01	8.22E+00
11/18/08	Alpha	8.50E-01	7.10E-01			2.90E+00	1.04E+00		
	Beta	3.34E+00	8.10E-01			5.21E+00	8.60E-01		
	H-3	3.16E+02	1.56E+02	< 2.42E+02		3.13E+02	1.54E+02	< 2.41E+02	
	K-40			3.77E+02	7.68E+01			1.09E+02	4.42E+01
	Pb-212							5.93E+00	3.47E+00
	Bi-214			3.29E+01	1.08E+01			1.29E+01	6.37E+00
	Pb-214			2.47E+01	1.12E+01			1.16E+01	5.88E+00
	Ra-226							5.12E+01	4.79E+01

[a] Split sampling at NCRPS Site SH-GW-69(SHNPP Site GW-69), 0.2 mi. from the plant in the NNE Sector.
[b] Split sampling at NCRPS Site SH-GW-70(SHNPP Site GW-70), 0.4 mi. from the plant in the E Sector.
[c] Alpha, Beta analyses are routinely performed on NCRPS groundwater samples. Gamma analyses are routinely performed on Harris Nuclear Plant groundwater samples. Tritium analyses are routinely performed by both facilities.
[d] Tritium sample analyses not available from State Radiochemistry Laboratory database for NCRPS samples collected on 2/19/08 from locations SH-GW-69 & SH-GW-70.

Groundwater- Alpha, Beta, Tritium and Gamma,(pCi/l)

		SH-GW-71[a] All measurements in pCi/l				SH-GW-72[b] All measurements in pCi/l			
		RPS		HNP		RPS		HNP	
Date	Isotope[c]	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
2/19/08[d]	Alpha								
	Beta								
	H-3			< 2.50E+02				< 2.50E+02	
	K-40								
	Bi-212							2.34E+01	2.16E+01
	Pb-212			4.60E+00	4.40E+00			9.73E+00	6.11E+00
	Bi-214			2.86E+01	8.78E+00			2.41E+01	1.18E+01
	Pb-214							1.33E+01	9.23E+00
5/20/08	Alpha	1.33E+01	2.94E+00			3.51E+01	3.02E+00		
	Beta	1.01E+01	1.78E+00			1.81E+01	1.21E+00		
	H-3	3.03E+02	1.49E+02	< 2.46E+02		0.00E+00	1.46E+02	< 2.45E+02	
	K-40							2.72E+02	8.42E+01
	Tl-208							5.44E+00	4.19E+00
	Pb-212							1.26E+01	6.71E+00
	Bi-214							2.06E+01	6.89E+00
	Pb-214							1.52E+01	8.67E+00
	Ra-226							8.16E+01	6.43E+01
	Th-234			2.00E+02	1.83E+02				
8/19/08	Alpha	1.21E+01	3.27E+00			3.76E+01	3.25E+00		
	Beta	1.20E+01	1.86E+00			2.85E+01	1.54E+00		
	H-3	-2.98E+02	1.39E+02	< 2.45E+02		3.19E+02	1.57E+02	< 2.45E+02	
	K-40			1.30E+02	4.60E+01			4.28E+02	8.14E+01
	Tl-208			3.87E+00	2.56E+00				
	Pb-212			8.51E+00	3.49E+00				
	Pb-214			1.55E+01	7.07E+00				
	Bi-214			1.59E+01	6.83E+00			8.49E+00	7.61E+00
	Ra-226			1.18E+02	4.95E+01				
	Th-234			7.88E+01	5.28E+01				
11/18/08	Alpha	8.58E+00	1.77E+00			3.60E+01	3.21E+00		
	Beta	4.19E+00	8.70E-01			3.45E+01	1.74E+00		
	H-3	0.00E+00	1.50E+02	< 2.42E+02		3.14E+02	1.55E+02	< 2.42E+02	
	K-40			4.76E+02	9.39E+01			3.14E+02	6.93E+01
	Tl-208			5.95E+00	4.40E+00			4.50E+00	3.88E+00
	Pb-212							1.35E+01	4.98E+00
	Bi-214			7.66E+01	1.35E+01			9.19E+01	1.56E+01
	Pb-214			5.81E+01	1.34E+01			6.28E+01	1.17E+01

[a] Split sampling at NCRPS Site SH-GW-71(SHNPP Site GW-71), 0.3 mi. from the plant in the SE Sector.
[b] Split sampling at NCRPS Site SH-GW-72 (SHNPP Site GW-72), 0.2 mi. from the plant in the SE Sector.
[c] Alpha, Beta analyses are routinely performed on NCRPS groundwater samples. Gamma analyses are routinely performed on Harris Nuclear Plant groundwater samples. Tritium analyses are routinely performed by both facilities.
[d] Sample analyses not available from State Radiochemistry Laboratory database for NCRPS samples collected on 2/19/08 from locations SH-GW-71 & SH-GW-72.

Fish - Gamma

		Indicator (SH-FL-52)[a] All measurements in pCi/kg			
		RPS		HNP	
Date	Isotope	Meas.	Error	Meas.	Error
5/19/08 Bass	K-40	2.23E+03	1.20E+02	2.58E+03	6.33E+02
5/19/08 Sunfish	K-40	3.37E+03	1.60E+02	2.26E+03	5.57E+02
5/19/08 Catfish	K-40	3.06E+03	2.10E+02	2.83E+03	6.53E+02
	Bi-214			6.40E+01	4.20E+01
	Ra-226	6.54E+02	1.90E+02		
11/17/08 Bass	K-40	2.80E+03	1.40E+02	3.18E+03	7.00E+02
11/17/08 Catfish	K-40	2.59E+03	1.00E+02	3.55E+03	7.37E+02
11/18/08 Sunfish	K-40	2.59E+03	1.10E+02	3.82E+03	7.30E+02

[a] Duplicate sampling at NCRPS Site SH-FL-52-1 or SH-FL-52-2(SHNPP Site F1-44 or F2-44). Blank spaces indicate a result below LLD unless otherwise noted.

Food Crop - Gamma, pCi/g

		Indicator (SH-FC-51-2)[a] All measurements in pCi/kg			
		RPS		HNP	
Date	Isotope	Meas.	Error	Meas.	Error
11/24/08[b]	Be-7	4.12E-01	5.10E-02	1.94E-01	1.16E-01
	K-40	3.37E+00	1.40E-01	2.54E+00	2.91E-01
	Tl-208			1.68E-02	9.97E-03
	Pb-212			6.41E-02	1.71E-02
	Bi-214			8.60E-02	2.23E-02
	Pb-214			5.81E-02	1.98E-02
	Ra-226	3.43E-01	9.40E-02	3.26E-02	1.96E-02

[a] Duplicate sampling at NCRPS site SH-51-2 (SHNPP Site#55-State Site #43) at the intersection of SR#1136 and SR#1137 in the NNW sector approximately 1.7 mi. from the plant.
[b] Radiation Protection sample mislabeled as SH-FC-50 collected on 12/1/08 in Radiation Protection Sample database. Sample actually collected on 11/24/08 at location SH-FC-51-2.

Sediment - Gamma, pCi/kg

		SH-SD-54[a] All measurements in pCi/g				SH-SD-52[b] All measurements in pCi/g			
		RPS		HNP		RPS		HNP	
Date	Isotope	Meas.	Error	Meas.	Error	Meas.	Error	Meas.	Error
1/24/08	Be-7					9.90E-02	5.82E-02		
	K-40	1.07E+01	2.98E-01	1.14E+01	1.33E+00	1.15E+01	3.15E-01	1.17E+01	1.02E+00
	Co-60	1.43E+00	2.44E-02	1.40E+00	1.52E-01				
	Cs-137	3.52E-01	1.48E-02	3.06E-01	8.67E-02				
	Tl-208			3.60E-01	8.66E-02			5.24E-02	3.39E-02
	Bi-212			9.91E-01	4.14E-01			2.51E-01	2.13E-01
	Pb-212			1.01E+00	1.08E-01			2.26E-01	4.96E-02
	Bi-214			8.35E-01	1.57E-01				
	Pb-214			7.56E-01	1.66E-01			3.03E-01	7.20E-02
	Ra-226	1.95E+00	2.61E-01	2.09E+00	7.94E-01	4.96E-01	1.33E-01	8.04E-01	5.47E-01
	Ac-228			1.17E+00	2.86E-01			2.43E-01	9.18E-02

Sediment - Gamma

		Indicator (SH-SD-22)[c] All measurements in pCi/g			
		RPS		HNP	
Date	Isotope	Meas.	Error	Meas.	Error
1/24/08	Be-7	1.11E-01	4.30E-02		
	K-40	1.59E+01	4.01E-01	1.10E+01	1.05E+00
	Tl-208			7.49E-02	2.83E-02
	Pb-212			2.42E-01	7.72E-02
	Bi-214			1.89E-01	7.04E-02
	Pb-214			2.19E-01	7.18E-02
	Ra-226	8.74E-01	1.30E-01	1.09E+00	6.23E-01
	Ac-228			2.54E-01	1.12E-01

[a] Duplicate sampling at NCRPS Site SH-SD-54 (SHNPP Site 52) is 3.8 miles south of the plant. Sample is collected from the bottom of Harris Lake.
[b] Duplicate sampling at NCRPS Site SH-SD-52(SHNPP Site 41). This is a shoreline sediment area near cooling tower blowdown zone.
[c] Duplicate shoreline sediment sampling at NCRPS Site SH-SD-22 (SHNPP Site SH-SS-26) is 4.6 miles South of the plant.

TLD

		All readings in mR/year.							
		1st Qtr		2nd Qtr		3rd Qtr		4th Qtr	
Loc #	Location	Meas	Error	Meas	Error	Meas	Error	Meas	Error
1	SR #1127 at Wake Trash Collection Area	54.8	1.6	65.1	6.5	72.2	2.1	43.5	1.5
2	New Hill near First Baptist Church	48.4	1.4	58.6	6.1	54.6	1.0	36.0	2.1
3	SR #1011 Dixie Pipeline	56.0	2.5	65.9	6.2	53.5	1.1	35.4	1.6
4	SR #1134, 4 mi. S of SR#1011 Barricade	52.1	0.9	61.1	7.2	61.3	1.5	40.1	2.1
5	Intersection of SR #1134 and SR #1135	38.6	2.3	49.3	6.1	47.8	1.3	46.8	2.4
6	House Ruins on SR #1134	39.4	1.2	50.3	6.2	47.1	1.6	52.2	1.3
7	Dead End on SR #1134	48.1	2.7	55.8	6.2	54.2	3.2	72.6	2.1
8	Dirt Road Int. Between Plant & Aux. Reservoir	42.1	1.3	54.4	6.7	51.7	2.6	98.3	1.8
9	1 mi. south on Dirt Road from TLD 8	44.2	2.6	58.1	6.6	47.5	2.1	102.0	5.7
10	Earthen Dam at Harris Plant	43.1	1.8	57.6	6.2	47.9	3.0	70.6	5.2
11	Intersection of SR #1149 and US1	61.1	4.2	67.6	7.8	60.5	3.2	Missing	
12	Apex at Jones Park	60.7	3.3	67.8	6.1	60.1	3.5	38.1	2.5
16	3 mi. on SR #1008 from Int. w/ SR #1011	48.4	1.3	Missing		Missing		35.2	1.3
17	Intersection of SRs #1910, 1909 and 1908	40.4	2.0	48.3	6.2	43.5	2.5	Missing	
18	Intersection of SR #1972 and US 1	39.8	3.0	49.2	6.9	45.9	1.4	Missing	
19	Neste Resin Corporation on SR #1916	48.7	4.6	63.3	6.6	55.7	2.3	37.1	2.2
20	0.6 mi. from Int. of SR #1916 and SR #1924	42.8	0.7	60.1	7.5	50.7	1.6	54.3	2.0
21	Buckhorn United Methodist Church on NC 42	35.9	2.2	49.8	6.7	45.4	2.9	42.0	2.0
22	North of Spillway Maintenance	43.1	2.4	50.0	6.6	48.8	0.8	44.1	5.5
23	Junction of SRs #1401 and #1402 on SR #1402	47.8	3.1	58.8	6.0	52.1	2.6	56.2	3.8
24	Sweet Springs Church on SR #1116	45.7	1.7	53.7	6.0	49.4	3.5	47.1	2.5
25	Int. of SR #1116 and SR #1127	45.5	1.5	61.1	7.1	54.4	2.4	43.3	2.8
26	2.0 mi. E of Hollemans Crossroads, SR #1115	41.6	2.7	45.4	7.3	42.2	4.6	48.7	1.4
27	Hollemans Crossroads	37.8	2.6	52.4	6.6	49.2	4.5	54.3	1.1
28	1 mi. SW of Hollemans Crossroads on SR #1130	34.6	1.6	50.1	6.2	47.8	3.6	48.1	4.1
29	2 mi. SW of Hollemans Crossroads on SR #1130	43.5	1.4	50.5	7.1	44.5	2.1	56.4	2.1
30	Rear of Harris E&E Center	44.9	3.0	49.3	6.5	52.3	1.7	47.9	2.9
31	Cemetary on SR #1191	40.2	2.3	51.8	6.5	51.3	4.5	43.2	2.4
32	US 1 at Wake/Chatham County Line	43.4	3.6	61.6	6.5	52.0	1.7	44.7	0.9
33	US 1 at Harris Lake	42.6	1.3	54.6	6.1	48.7	7.3	46.9	1.7
34	0.6 mi. N on US1 from TLD 33	44.9	1.4	56.7	8.2	55.2	2.0	52.6	2.4
35	SR #1142 and Underground Cable Sign	46.8	1.7	66.1	8.0	59.9	0.9	43.8	2.8
36	SR #1142 at Barricade	44.4	3.9	51.5	6.8	54.2	4.7	57.0	1.5
37	SR #1142-Olive's Dairy	46.9	1.9	58.1	7.4	46.7	1.9	52.8	0.7
38	1.3 mi. on SR #1152 from Int. with SR #1153	42.5	1.1	48.9	6.6	42.2	1.3	52.7	4.1
39	Holly Springs on Earp Street	54.2	2.4	58.9	6.8	52.5	2.5	63.6	1.3
40	Intersection on SR #1393 and SR #1421	46.1	5.3	57.3	6.6	45.3	3.8	45.4	0.9
41	Century 21 Office Parking Lot	57.8	2.1	77.0	6.7	70.4	2.2	49.9	1.4
42	Access Road (East) to Auxiliary Reservoir	39.4	4.1	51.4	6.5	43.7	1.4	44.3	2.6
43	SR #1136 at Parra Residence(mobile home)	49.2	1.1	58.8	6.3	58.1	3.4	53.2	1.1
44	1330 St. Mary's Street, Raleigh	69.8	4.4	78.4	7.2	69.9	1.2	50.8	3.2
	Average	46.3		57.1		52.3		51.3	
	Yearly Average, All Sites	51.7							