Section F - Joseph M. Farley Nuclear Plant

Alabama Power Company Joseph M. Farley Nuclear Plant is a two unit Pressurized Water Reactor (PWR) facility located on the Chathoochee River in Houston County, Alabama, adjacent to Early County, Georgia. This facility, which was supplied by the Westinghouse Corporation, and which is operated by Southern Nuclear Operating Company, has been in operation since 1977.

Figure F-1 (Plant Farley)

The Georgia Department of Natural Resources (DNR) has monitored Plant Farley since approximately 1978, with low-level Co-60 in river sediment and low-level H-3 in river water being the only Site-related radionuclides detected. However, several global fallout-related radionuclides (including Nb-95, Zr-95, Ru-103, Ru-106, Ce-141, Ce-144, and Cs-137) were also detected one year (1981) during the Chinese weapons testing period. Cs-137 is the only one of these nuclides that is still detectable. During the current 2000-2002 period, H-3 in river water and Co-60 in river sediment were the only site-related radionuclides detected. Maps detailing the locations monitored are provided in **Figure F-3** (locations on land) and **Figure F-4** (locations on water) on subsequent pages.

H-3 (up to **23x** Bkg.) which was detected in several downstream river-water grab samples (**Figure F-2** and **Table F-6**) during the current period is attributed to Plant operations. (H-3 is a non-filterable, water-borne byproduct often formed in PWR reactors as a result of neutron interactions with boron). Downstream H-3 concentrations averaged 1,100 pCi/L (detectable results only) during the current monitoring period, which is equivalent to less than 6 % of the Safe Drinking Water MCL. Concentrations of H-3 in the Chattahoochee River were somewhat higher during this period compared to previous periods, possibly due to lower river-water flow, which provided less dilution.

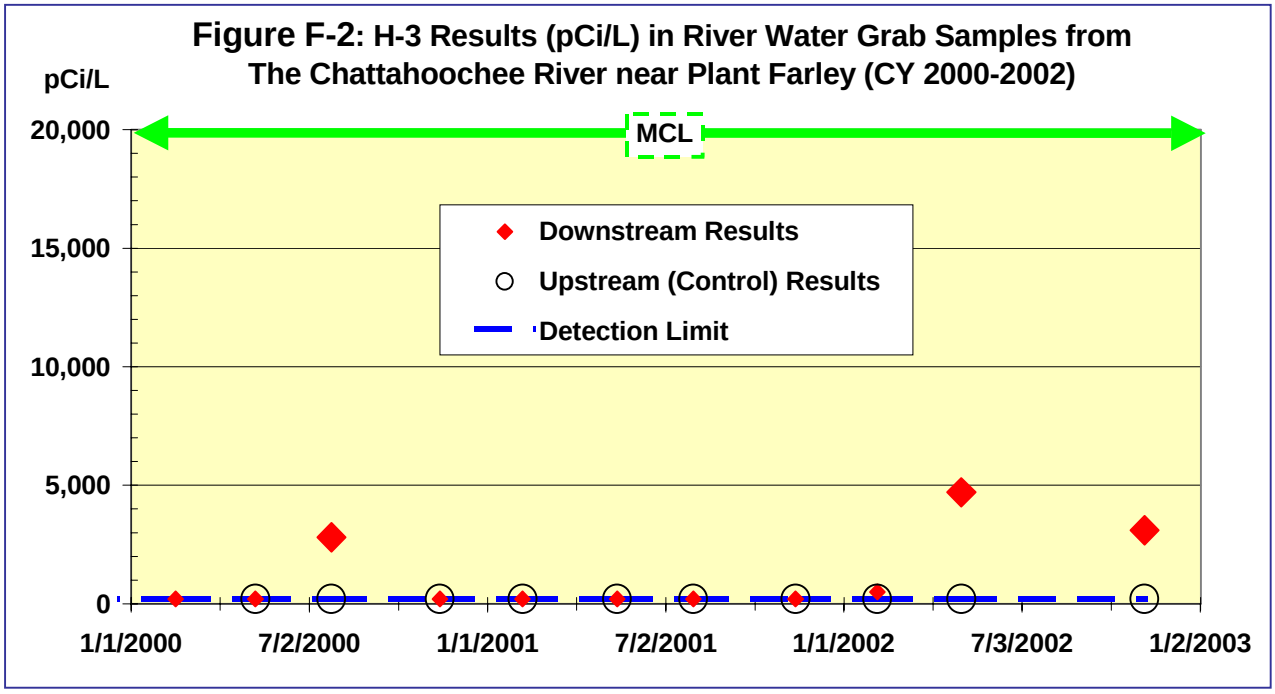


Figure F-3: Farley Land-Based Sample and TLD Locations
(TLD, Air, Soil, Vegetation, and Groundwater)

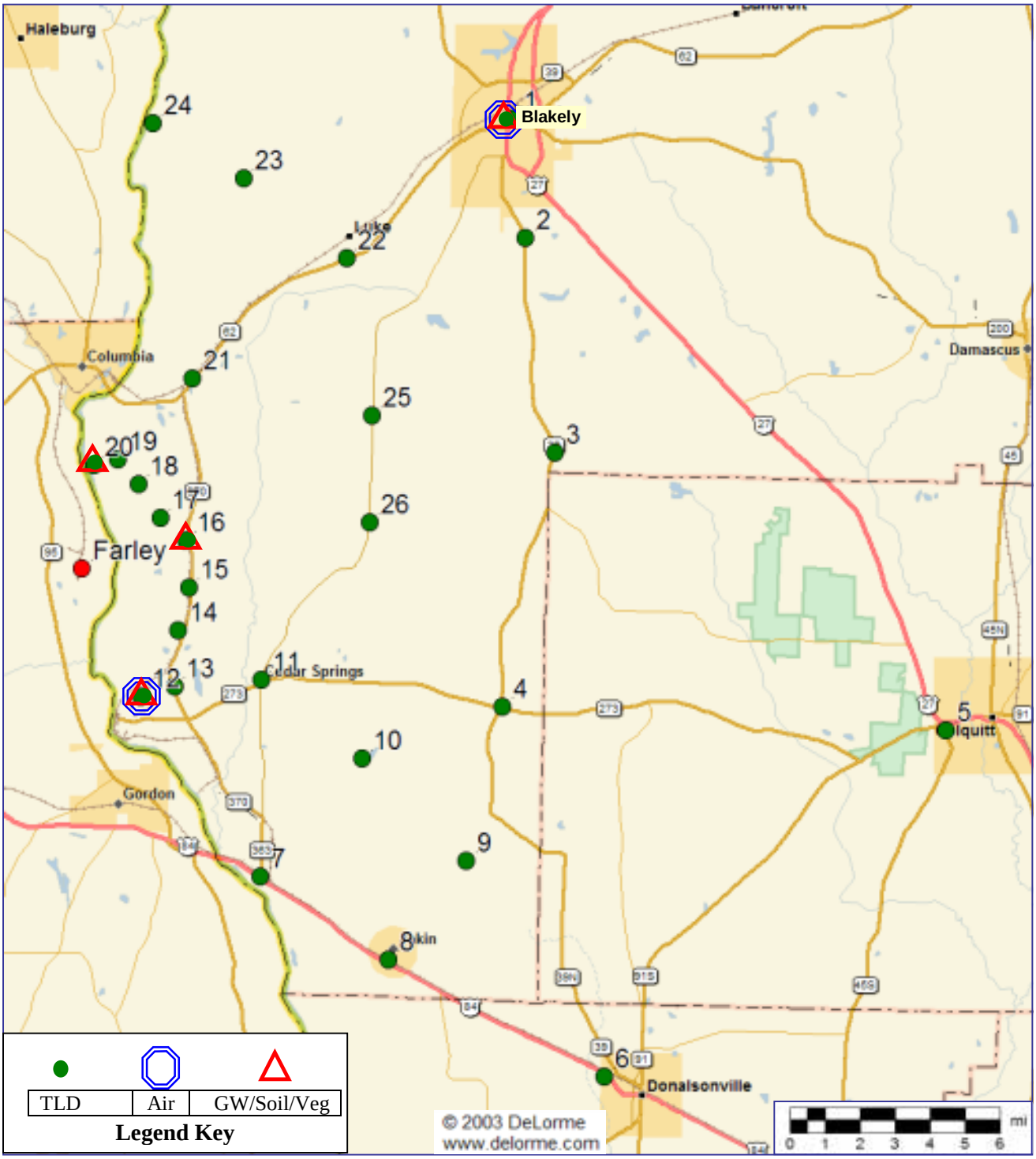
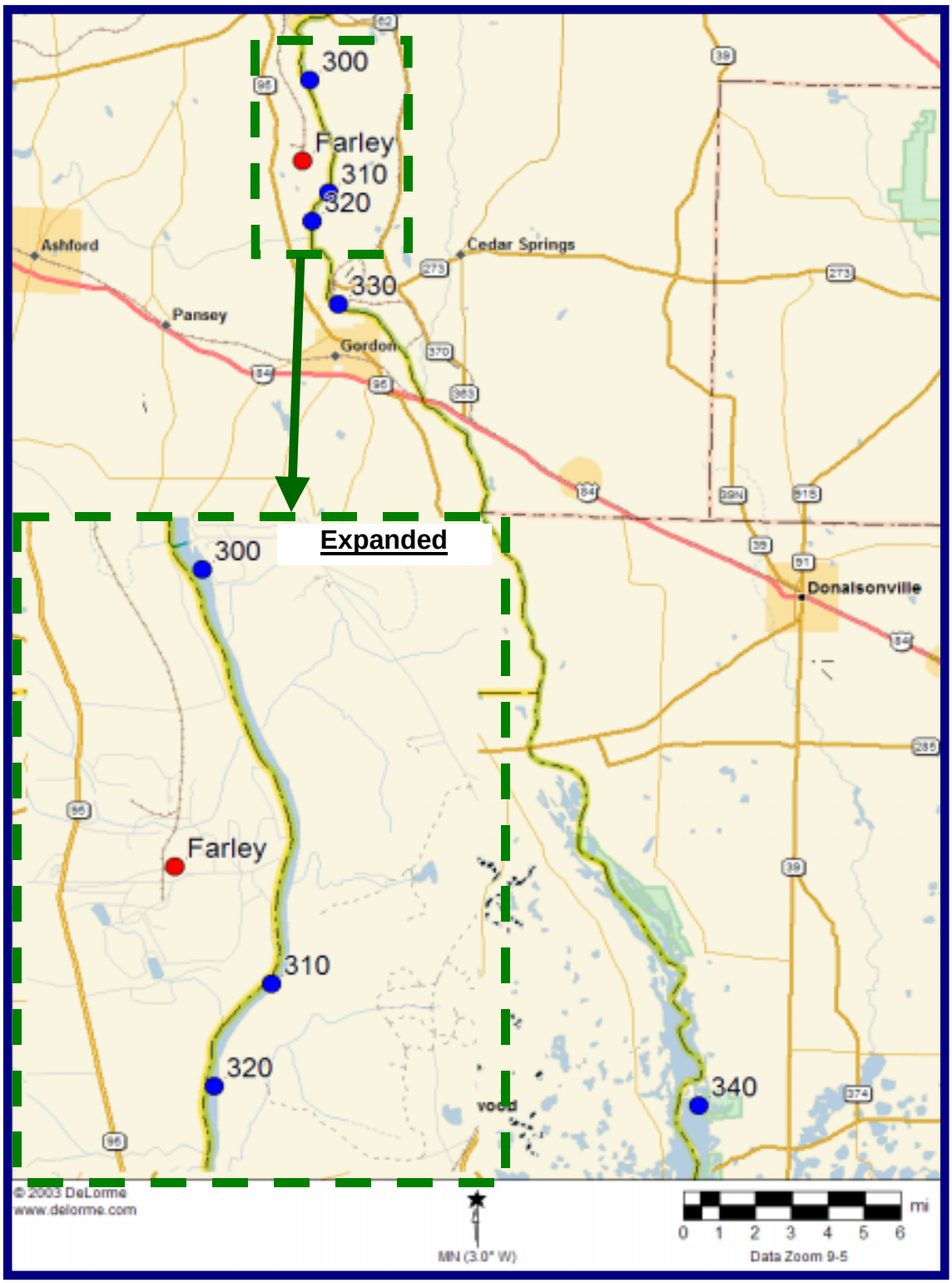
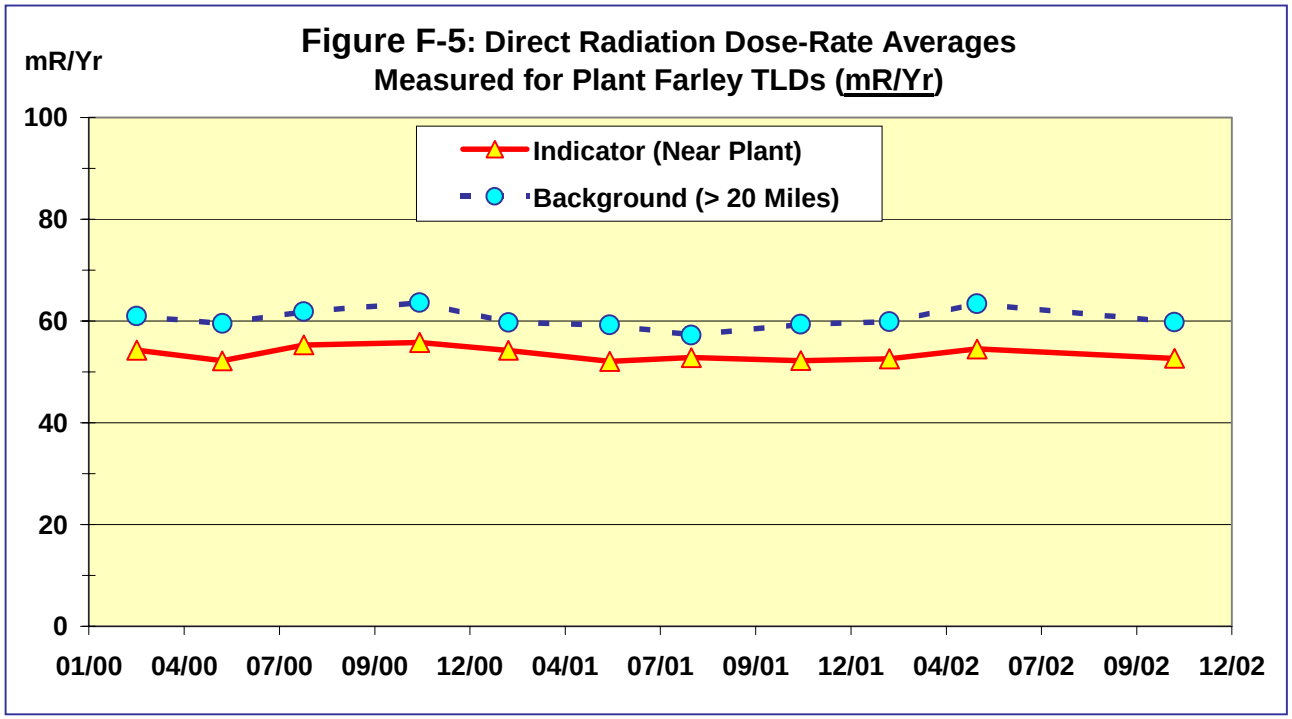


Figure F-4 Farley Aquatic Sample Locations (River Water, Sediment, Fish)



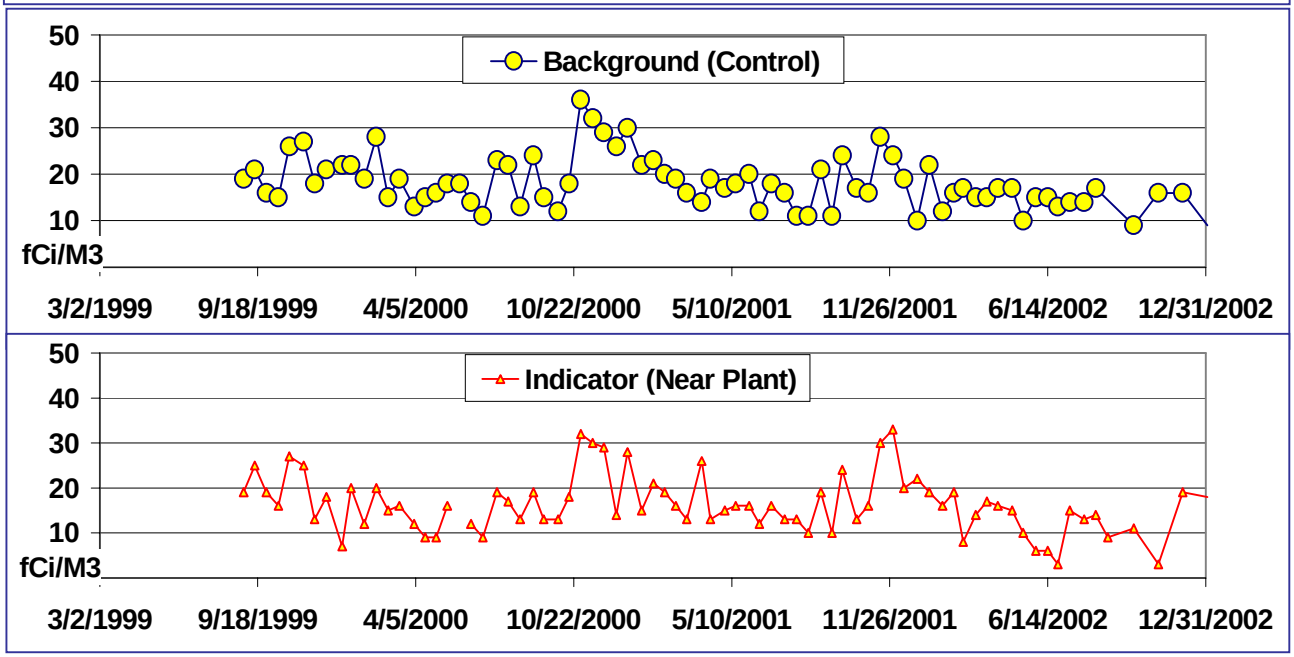
River Sediment: As noted earlier, Co-60 in river sediment (**Table F-7**) was the only other site-related radionuclide detected (up to **2x** Bkg) during the current monitoring period. Naturally occurring radionuclides from the Uranium (Ra-226), Thorium (Ra-228), and Potassium (K-40) series were also detected, along with a trace of Cs-137, which is primarily related to global fallout. Concentrations of Co-60 in sediment were insignificant (just above the detection limit) and did not result in any detectable activity in dose-significant pathways to humans, including fish and drinking water.

Direct Radiation (TLDs): Direct radiation doses, as measured by TLDs (Thermo-Luminescent Dosimeters – **Table F-1**) were within the normal (expected) range, with indicator locations (near Plant Farley) measuring slightly less than background (or control) locations (**Figure F-5**). This is probably due to the difference in construction of roads, along which TLDs are located. Dose rates near paved roads tend to be higher, due to naturally occurring radionuclides often found in some road bed materials (such as concrete and gravel). Dose rates along un-paved roads, such as those near the river and closer to the Plant, tend to be lower. Based on a review of the soil samples results, naturally occurring radionuclides in the Uranium, Thorium, and Potassium series appear to account for over 99% of the direct radiation dose recorded on the TLDs. Indicator and background locations show similar seasonal variability, which is typically caused by seasonal variability in naturally occurring airborne radon.



Air Samples: Air samples results (**Table F-2**) were also within the normal (expected) range, with similar results observed for the indicator and background locations. Comparable seasonal variability (for the beta portion of the results) is also noted for both locations (indicator and background), as illustrated in **Figure F-6**. This is assumed to be due to variability in the airborne concentration of the long-lived radon daughter Pb-210. Naturally occurring Be-7, which is formed from cosmic-ray interactions in the atmosphere, is the only gamma emitting nuclide that was detected. (Pb-210, which was detected in some samples and found to be comparable to the beta results, isn't reported here, as it wasn't tested in all samples, since it requires use of a specialized low-energy detector).

Figure F-6: Air Sample Trends for Gross Beta Radioactivity at Farley Air Samplers (fCi/M3)



Soil Samples: Soil sample results (**Table F-3**) were normal and generally comparable for background and indicator locations, with no detectable radionuclide activity attributable to Plant operations. Cs-137 was the only manmade radionuclide detected, but it was attributed to global fallout rather than Plant operations, since background concentrations were comparable to indicator concentrations. Naturally occurring radionuclides (Ra-226, Ra-228, K-40, and progeny) were also detected and accounted for most of the activity in the samples. Higher levels of naturally occurring K-40 were detected in soil samples taken near the river

Ground Water: Ground water results (**Table F-4**) were normal, with no detectable man-made activity. Low levels of alpha and beta activity were detected in some samples, including the background sample, which is attributed to naturally occurring radionuclides, such as Ra-226 and Ra-228.

Vegetation: Vegetation samples (**Table F-5**) were also normal, except possibly for one sample, with no man-made activity attributable to Plant operations. Naturally occurring Be-7 and K-40 were found in most samples. Global fallout-related Cs-137 was non-detectable in all samples, except for one sample, which was collected approximately 3 miles east of the Plant near the end of 1999. This sample contained Cs-137 at a concentration that was approximately eight times the detection limit, which makes this result somewhat unusual for the sample group. Cs-137 uptake in vegetation can be quite variable from one plant species to another and from one soil type to another. The most likely explanation for the unusual result is believed to be selection of a different plant species, which is sometimes done by the field crew, if the primary vegetation type isn't available.

Fish: Fish samples (**Table F-8**) contained naturally occurring K-40 and low levels of Cs-137, which is a man-made radionuclide primarily related to global fallout. Concentrations of Cs-137 were slightly higher, but more variable, downstream (in Lake Seminole), than for other locations (**Figure F-7**). However the high variability for this location suggest the possibility that the data may be comparable to the background location, since the error bars overlap. Thus the slightly higher downstream concentration isn't considered to be statistically significant. Also, the concentration isn't significant from a risk perspective either: < 4.0E-07 or less than one out of one million … well below DNR's guide (1.0E-05).

Figure F-7: Cs-137 in Largemouth Bass near Plant Farley vs. River Mile

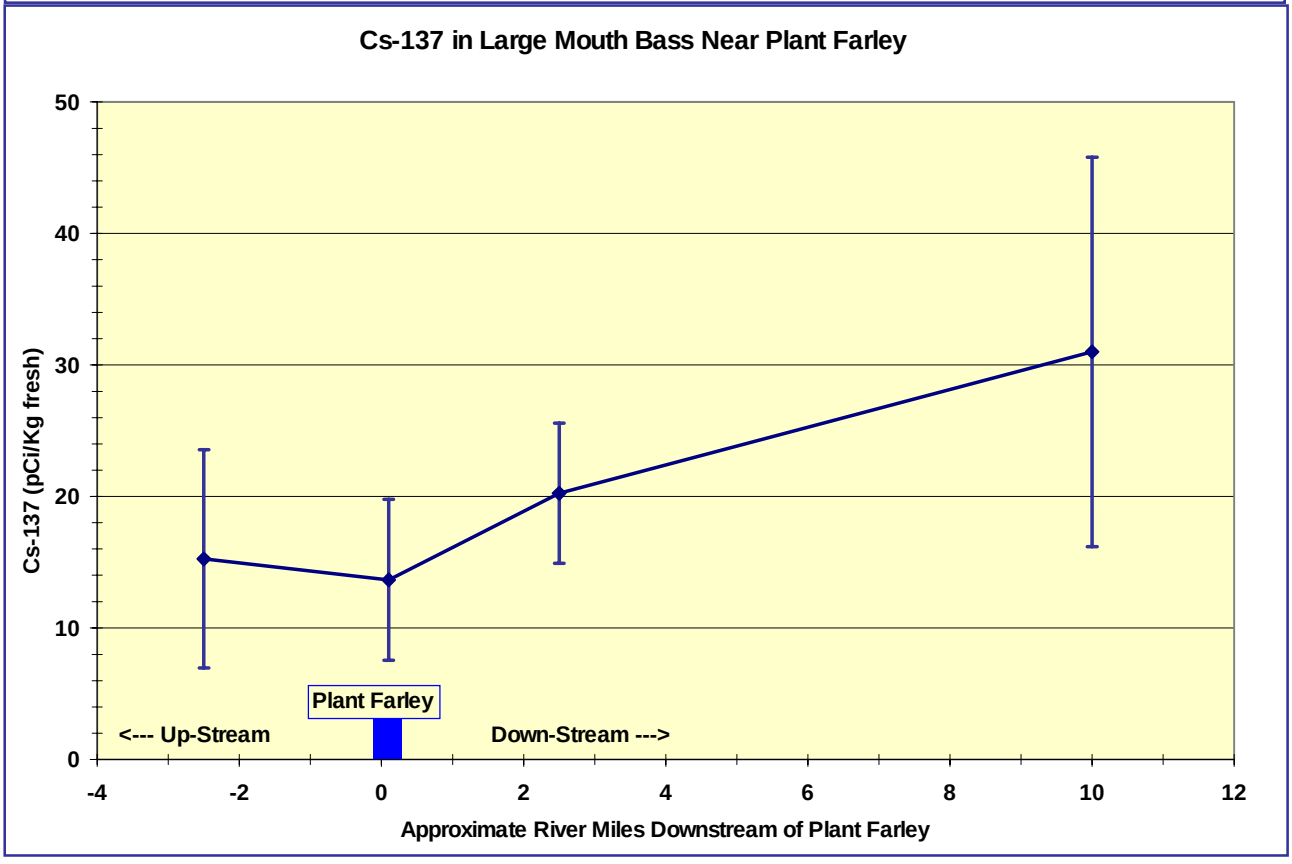


Table F-1 Farley TLD Dosimetry Data (mRem per Year)

Sta	Type	Dir	Dis	mR/Yr 2/16/00	mR/Yr 5/8/00	mR/Yr 7/25/00	mR/Yr 11/13/00	mR/Yr 2/6/01	mR/Yr 5/14/01	mR/Yr 7/31/01	mR/Yr 11/13/01	mR/Yr 2/6/02	mR/Yr 5/1/02	mR/Yr 11/6/02
1	B	NE	15	64	59	62	66	59	59	61	59	59	63	60
2	B	NE	13	51	46	53	51	49	48	48	49	46	49	46
3	B	ENE	12.5	46	45	48	49	49	44	47	46	48	46	49
4	B	ESE	12	45	44	46	48	45	43	44	43	45	42	
5	B	ESE	22	49	50	51	51	49	48	48	49	45	48	45
6	B	SE	20	51	51	53	57	53	53	52	54	49	54	48
7	B	SSE	11	70	71	74	74	71	66	72	69	71	72	68
8	B	SSE	14	74	70	76	79	77	75	78	74	77	82	76
9	B	SE	13.5	50	48	52	53	51	46	49	47	48	47	48
10	B	ESE	10	45	45	46	47	46	46	46	46	44	46	42
11	I	ESE	5	57	56	57	61	57	58	57	55	52	57	51
12	I	SSE	3.5	56	51	58	56	57	53	57	54	56	58	57
13	I	SE	3.5	48	46	45	48	47	45		44	43	49	42
14	I	SE	3	45	45	44	47	44	44	39	42	41	44	40
15	I	ESE	2.8	45	41	46	47	45	43	40	43	48	52	47
16	I	E	2.8	46	47	47	47	48	46	44	45	48	48	
17	I	ENE	2.3	42	41	45	43	45	40		40	40	43	41
18	I	NE	2.3	68	62	72	69	69	64	65	66	69	65	66
19	I	NNE	2.3	58	57	59	60	58	57	53	56	57	60	57
20	I	N	2.5	60	55	62	58	59	52	54	54	59	56	58
21	I	NNE	5.3	56	52	60	56	57	53	53	55	58	59	58
22	B	NE	10	64	59	62	62	61	61	58	61	57	64	58
23	B	NNE	10.5	54	53	57	56	53	50	51	52	53	53	53
24	B	N	11	63	62	63	61	62	60	57	58	63	59	60
25	I	NE	6	56	53	54	56	53	53	50	52	49	54	50
26	I	ENE	6	48	48	46	49	46	47	44	45	46	48	46
109	B	N	99	64	57	65	64	63	57	60	58	64	66	66
110	B	N	99	78	73	83	86	79	80	77	81	81	79	81
111	B	N	80	56	55	55	59	51	54	50	54	54	58	53
112	B	NNE	40	47	45	48	47	47	47	43	46	48	50	48
129	B	NNE	99	68	64	65	67	65	61	61	63	63	71	62
130	B	NE	99	58	62	60	63	58	57	57	60	58	60	58
131	B	NE	90		63	63	65	61	62	58	58	57	65	57
132	B	ENE	55	56	57	56	58	54	56	52	55	54	59	53

Table F-2 Farley Air Sample Data (fCi/M3)

Sta	Samp	Begin	Collect	Agy	M3	Alpha	Be-7 (nat)	Beta	Cs-137	I-131
				NE - 15 miles … Blakely						
1	1947	8/16/1999	8/31/1999	EPD	2,397	<1		19		<1
1	1949	8/31/1999	9/14/1999	EPD	2,035	<1		21		<1
1	1957	7/2/1999	9/29/1999	EPD	13,957		48		<1	
1	1951	9/14/1999	9/29/1999	EPD	2,303	<1		16		<1
1	1953	9/29/1999	10/14/1999	EPD	2,323	<1		15		<1
1	1955	10/14/1999	10/28/1999	EPD	2,181	<1		26		<1
1	1959	10/28/1999	11/15/1999	EPD	2,751	<1		27		<1
1	1967	11/15/1999	11/29/1999	EPD	2,139	2		18		<1
1	1977	11/29/1999	12/14/1999	EPD	2,216	<1		21		<1
1	1987	9/29/1999	1/3/2000	EPD	14,629		56		<1	
1	1979	12/14/1999	1/3/2000	EPD	3,019	<1		22		<1
1	1981	1/3/2000	1/14/2000	EPD	1,664	<2		22		<1
1	1983	1/14/2000	1/31/2000	EPD	2,566	2		19		<1
1	1985	1/31/2000	2/15/2000	EPD	2,210	<1		28		<1
1	2001	2/15/2000	3/1/2000	EPD	2,224	<1		15		<1
1	2003	3/1/2000	3/15/2000	EPD	2,035	<1		19		<1
1	2019	1/3/2000	4/3/2000	EPD	13,536		64		<1	
1	2005	3/15/2000	4/3/2000	EPD	2,827	<1		13		<1
1	2007	4/3/2000	4/17/2000	EPD	2,116	<1		15		<1
1	2009	4/17/2000	5/1/2000	EPD	2,087	<1		16		<1
1	2017	5/1/2000	5/15/2000	EPD	2,092	<1		18		<1
1	2021	5/15/2000	5/31/2000	EPD	2,376	<1		18		<1
1	2023	5/31/2000	6/14/2000	EPD	2,081	<1		14		<1
1	2042	4/3/2000	6/29/2000	EPD	13,015		50		<1	
1	2025	6/14/2000	6/29/2000	EPD	2,263	<1		11		<1
1	2027	6/29/2000	7/17/2000	EPD	2,566	<1		23		<1
1	2038	7/17/2000	7/31/2000	EPD	2,086	<1		22		<1
1	2040	7/31/2000	8/15/2000	EPD	2,448	<1		13		<1
1	2044	8/15/2000	9/1/2000	EPD	2,025	2		24		<1
1	2046	9/1/2000	9/14/2000	EPD	1,928	<1		15		<1
1	2069	6/29/2000	10/2/2000	EPD	13,649		50		<1	
1	2053	9/14/2000	10/2/2000	EPD	2,596	<1		12		<1
1	2055	10/2/2000	10/16/2000	EPD	1,880	<1		18		<1
1	2057	10/16/2000	10/31/2000	EPD	2,126	<2		36		<3
1	2065	10/31/2000	11/15/2000	EPD	1,846	2		32		<1
1	2067	11/15/2000	11/29/2000	EPD	2,000	2		29		<1
1	2071	11/29/2000	12/15/2000	EPD	2,194	<1		26		<1
1	2092	10/2/2000	12/29/2000	EPD	11,988		47		<1	
1	2073	12/15/2000	12/29/2000	EPD	1,942	3		30		<1

Table F-2 Farley Air Sample Data (fCi/M3) … cont.

Sta	Samp	Begin	Collect	Agy	M3	Alpha	Be-7 (nat)	Beta	Cs-137	I-131
					NE - 15 miles … Blakely					
1	2075	12/29/2000	1/16/2001	EPD	2,459	<2		22		<1
1	2077	1/16/2001	1/31/2001	EPD	2,066	<2		23		<1
1	2090	1/31/2001	2/14/2001	EPD	1,911	<1		20		<1
1	2094	2/14/2001	2/28/2001	EPD	1,925	<2		19		<1
1	2104	2/28/2001	3/14/2001	EPD	1,929	<1		16		<1
1	2122	12/29/2000	4/2/2001	EPD	12,845		55		<1	
1	2106	3/14/2001	4/2/2001	EPD	2,567	<1		14		<1
1	2108	4/2/2001	4/13/2001	EPD	1,512	<2		19		<1
1	2110	4/13/2001	5/1/2001	EPD	2,403	<1		17		<1
1	2112	5/1/2001	5/15/2001	EPD	1,892	<1		18		<1
1	2120	5/15/2001	6/1/2001	EPD	2,309	<1		20		<1
1	2124	6/1/2001	6/14/2001	EPD	1,944	<2		12		<1
1	2145	4/2/2001	6/29/2001	EPD	12,070		71		<1	
1	2126	6/14/2001	6/29/2001	EPD	2,010	<1		18		<1
1	2128	6/29/2001	7/16/2001	EPD	2,274	<1		16		<1
1	2130	7/16/2001	7/31/2001	EPD	2,028	<1		11		<1
1	2143	7/31/2001	8/15/2001	EPD	2,019	<1		11		<1
1	2147	8/15/2001	8/31/2001	EPD	2,065	<2		21		<1
1	2149	8/31/2001	9/14/2001	EPD	1,895	<1		11		<1
1	2151	9/14/2001	9/27/2001	EPD	1,701	<1		24		<1
1	2157	6/29/2001	9/28/2001	EPD	11,982		49		<1	
1	2153	9/27/2001	10/15/2001	EPD	2,299	<1		17		<1
1	2155	10/15/2001	10/30/2001	EPD	1,940	<1		16		<1
1	2162	10/30/2001	11/14/2001	EPD	1,929	<1		28		<1
1	2164	11/14/2001	11/30/2001	EPD	2,059	2		24		<1
1	2172	11/30/2001	12/14/2001	EPD	1,839	<1		19		<1
1	2193	9/27/2001	12/31/2001	EPD	12,570		44		<1	
1	2174	12/14/2001	12/31/2001	EPD	2,504	<1		10		<1
1	2176	12/31/2001	1/15/2002	EPD	2,067	<2		22		<1

Table F-2 Farley Air Sample Data (fCi/M3) … cont.

Sta	Samp	Begin	Collect	Agy	M3	Alpha	Be-7	Beta	Cs-137	I-131
					NE - 15 miles … Blakely					
1	2178	1/15/2002	2/1/2002	EPD	2515	<1		12		<1
1	2191	2/1/2002	2/15/2002	EPD	1728	<1		16		<1
1	2195	2/15/2002	2/27/2002	EPD	1363	2		17		<1
1	2197	2/27/2002	3/15/2002	EPD	1902	<1		15		<1
1	2205	12/31/2001	3/29/2002	EPD	11835		38		<1	
1	2201	3/15/2002	3/29/2002	EPD	1797	<2		15		<1
1	2203	3/29/2002	4/12/2002	EPD	1868	<2		17		<1
1	2207	4/12/2002	4/30/2002	EPD	2582	2		17		<1
1	2215	4/30/2002	5/14/2002	EPD	1996	<1		10		<1
1	2220	5/14/2002	5/30/2002	EPD	2190	<1		15		<1
1	2221	5/30/2002	6/14/2002	EPD	2101	<1		15		<1
1	2227	3/29/2002	6/27/2002	EPD	12588		43		<1	
1	2223	6/14/2002	6/27/2002	EPD	1851	<1		13		<1
1	2225	6/22/2002	7/12/2002	EPD	2056	<1		14		<1
1	2229	7/12/2002	7/30/2002	EPD	2528	<1		14		<1
1	2231	7/30/2002	8/14/2002	EPD	1775	<2		17		<1
1	2251	6/27/2002	10/1/2002	EPD	10124		36		<1	
1	2238	8/29/2002	10/1/2002	EPD	4465	<1		9		<1
1	2240	10/1/2002	11/1/2002	EPD	5153	<1		16		<1
1	2253	11/1/2002	12/2/2002	EPD	4928	<1		16		<1
1	2259	10/1/2002	1/2/2003	EPD	14933		30		<1	
1	2255	12/2/2002	1/2/2003	EPD	4852	<1		9		<1

Table F-2 Farley Air Sample Data (fCi/M3) … cont.

Sta	Samp	Begin	Collect	Agy	M3	Alpha	Be-7 (nat)	Beta	Cs-137	I-131
				SSE - 3.5 miles … Georgia Pacific Plant						
12	1948	8/16/1999	8/31/1999	EPD	1,926	<1		19		<1
12	1950	8/31/1999	9/14/1999	EPD	1,760	2		25		<1
12	1958	7/2/1999	9/29/1999	EPD	11,049		52		<1	
12	1952	9/14/1999	9/29/1999	EPD	1,871	<1		19		<1
12	1954	9/29/1999	10/14/1999	EPD	1,888	<2		16		<1
12	1956	10/14/1999	10/28/1999	EPD	1,738	<2		27		<1
12	1960	10/28/1999	11/15/1999	EPD	2,154	<2		25		<1
12	1968	11/15/1999	11/29/1999	EPD	1,648	2		13		<1
12	1978	11/29/1999	12/14/1999	EPD	1,755	2		18		<1
12	1988	9/29/1999	1/3/2000	EPD	11,347		32		<1	
12	1980	12/14/1999	1/3/2000	EPD	2,164	<1		7		<1
12	1982	1/3/2000	1/14/2000	EPD	1,752	<2		20		<1
12	1984	1/14/2000	1/31/2000	EPD	2,683	<1		12		<1
12	1986	1/31/2000	2/15/2000	EPD	2,275	<1		20		<1
12	2002	2/15/2000	3/1/2000	EPD	2,361	<1		15		<1
12	2004	3/1/2000	3/15/2000	EPD	2,175	<1		16		<1
12	2006	3/15/2000	4/3/2000	EPD	3,004	<1		12		<1
12	2008	4/3/2000	4/17/2000	EPD	2,192	<2		9		<1
12	2010	4/17/2000	5/1/2000	EPD	2,174	<1		9		<1
12	2018	5/1/2000	5/15/2000	EPD	2,188	<1		16		<1
12	2020	5/1/2000	5/15/2000	EPD	14,250		45		<1	
12	2022	5/15/2000	5/31/2000	EPD	29	<7		29		<1
12	2024	5/31/2000	6/14/2000	EPD	2,165	<1		12		<1
12	2043	4/3/2000	6/29/2000	EPD	11,097		43		<1	
12	2026	6/14/2000	6/29/2000	EPD	2,349	<1		9		<1
12	2028	6/29/2000	7/17/2000	EPD	2,779	<1		19		<1
12	2039	7/17/2000	7/31/2000	EPD	2,144	<2		17		<1
12	2041	7/31/2000	8/15/2000	EPD	2,321	<1		13		<1
12	2045	8/15/2000	9/1/2000	EPD	2,605	<1		19		<1
12	2047	9/1/2000	9/14/2000	EPD	2,031	<1		13		<1
12	2070	6/29/2000	10/2/2000	EPD	14,611		42		<1	
12	2054	9/14/2000	10/2/2000	EPD	2,731	<1		13		<1
12	2056	10/2/2000	10/16/2000	EPD	2,101	<2		18		<1
12	2058	10/16/2000	10/31/2000	EPD	2,241	<2		32		<1
12	2066	10/31/2000	11/15/2000	EPD	2,188	2		30		<1
12	2068	11/15/2000	11/29/2000	EPD	2,160	2		29		<1
12	2072	11/29/2000	12/15/2000	EPD	2,276	<2		14		<1
12	2093	10/2/2000	12/29/2000	EPD	13,063		44		<1	
12	2074	12/15/2000	12/29/2000	EPD	2,097	3		28		<1

Table F-2 Farley Air Sample Data (fCi/M3) … cont.

Sta	Samp	Begin	Collect	Agy	M3	Alpha	Be-7 (nat)	Beta	Cs-137	I-131
				SSE - 3.5 miles … Georgia Pacific Plant						
12	2076	12/29/2000	1/16/2001	EPD	2,403	2		15		<1
12	2078	1/16/2001	1/31/2001	EPD	2,233	<1		21		<1
12	2091	1/31/2001	2/14/2001	EPD	1,421	2		19		<1
12	2095	2/14/2001	2/28/2001	EPD	2,059	<2		16		<1
12	2105	2/28/2001	3/14/2001	EPD	2,041	<2		13		<1
12	2123	12/29/2000	4/2/2001	EPD	12,915		39		<1	
12	2107	3/14/2001	4/2/2001	EPD	2,758	2		26		<1
12	2109	4/2/2001	4/13/2001	EPD	1,611	<1		13		<1
12	2111	4/13/2001	5/1/2001	EPD	2,576	<1		15		<1
12	2113	5/1/2001	5/15/2001	EPD	2,022	<2		16		<1
12	2121	5/15/2001	6/1/2001	EPD	2,399	<1		16		<1
12	2125	6/1/2001	6/14/2001	EPD	1,889	<2		12		<1
12	2146	4/2/2001	6/29/2001	EPD	12,658		52		<1	
12	2127	6/14/2001	6/29/2001	EPD	2,161	<1		16		<1
12	2129	6/29/2001	7/16/2001	EPD	2,443	<1		13		<1
12	2131	7/16/2001	7/31/2001	EPD	2,137	<1		13		<1
12	2144	7/31/2001	8/15/2001	EPD	2,103	<1		10		<1
12	2148	8/15/2001	8/31/2001	EPD	2,283	<1		19		<1
12	2150	8/31/2001	9/14/2001	EPD	2,030	<1		10		<1
12	2152	9/14/2001	9/27/2001	EPD	1,825	<1		24		<1
12	2158	6/29/2001	9/28/2001	EPD	12,821		47		<1	
12	2154	9/27/2001	10/15/2001	EPD	2,517	<1		13		<1
12	2156	10/15/2001	10/30/2001	EPD	2,121	<1		16		<1
12	2163	10/30/2001	11/14/2001	EPD	2,076	2		30		<1
12	2165	11/14/2001	11/30/2001	EPD	1,449	4		33		<1
12	2173	11/30/2001	12/14/2001	EPD	2,093	2		20		<1
12	2194	9/27/2001	12/31/2001	EPD	12,756		46		<1	
12	2175	12/14/2001	12/31/2001	EPD	2,500	2		22		<1
12	2177	12/31/2001	1/15/2002	EPD	2,223	<1		19		<1

Table F-2 Farley Air Sample Data (fCi/M3) … cont.

Sta	Samp	Begin	Collect	Agy	M3	Alpha	Be-7	Beta	Cs-137	I-131
					SSE - 3.5 miles … Georgia Pacific Plant					
12	2179	1/15/2002	2/1/2002	EPD	2504	<1		16		<1
12	2192	2/1/2002	2/15/2002		2034	<2		19		<1
12	2196	2/15/2002	2/27/2002	EPD	3212	<1		8		<1
12	2198	2/27/2002	3/15/2002	EPD	1926	<1		14		<1
12	2206	12/31/2001	3/29/2002	EPD	13019		38		<1	
12	2202	3/15/2002	3/29/2002	EPD	1118	3		17		<1
12	2204	3/29/2002	4/12/2002	EPD	1960	2		16		<1
12	2208	4/12/2002	4/30/2002	EPD	2612	<2		15		<1
12	2216	4/30/2002	5/14/2002	EPD	1942	2		10		<1
12	2218	5/14/2002	5/30/2002	EPD	2222	<1		6		<1
12	2222	5/30/2002	6/14/2002	EPD	2087	<1		6		<1
12	2228	3/29/2002	6/27/2002	EPD	12609		33		<1	
12	2224	6/14/2002	6/27/2002	EPD	1786	<1		3		<1
12	2226	6/27/2002	7/12/2002	EPD	2052	<1		15		<1
12	2230	7/12/2002	7/30/2002	EPD	2592	<1		13		<1
12	2232	7/30/2002	8/14/2002	EPD	2115	<1		14		<1
12	2237	8/14/2002	8/29/2002	EPD	2179	<1		9		<1
12	2252	6/27/2002	10/1/2002	EPD	13527		36		<1	
12	2239	8/29/2002	10/1/2002	EPD	4589	<1		11		<1
12	2241	10/1/2002	11/1/2002	EPD	4631	<1		3		<1
12	2254	11/1/2002	12/2/2002	EPD	4253	<1		19		<1
12	2260	10/1/2002	1/2/2003	EPD	12944		33		<1	
12	2256	12/2/2002	1/2/2003	EPD	4060	<1		18		<1

Table F-3 Farley Soil Sample Data (pCi/Kg dry)

Sta	Samp	Collect	Agy	DW	Cs-137	K-40 (nat)	Ra-226 (nat)	Ra-228 (nat)
NE - 15 miles … Blakely (Background Location)								
1	1997	2/17/2000	EPD	0.86	101	1200	800	1200
1	2079	2/07/2001	EPD	0.93	36	1300	1200	1700
1	2180	2/06/2002	EPD	0.83	<10	1000	1000	1700
SSE - 3.5 miles … Georgia Pacific Plant								
12	1998	2/16/2000	EPD	0.94	107	1200	700	900
12	2080	2/06/2001	EPD	0.96	17	1400	600	800
12	2181	2/05/2002	EPD	0.99	8	1600	300	400
E - 2.8 miles …								
16	1999	2/16/2000	EPD	0.92	37	900	600	800
16	2081	2/06/2001	EPD	0.96	7	300	300	400
16	2182	2/05/2002	EPD	0.96	13	900	400	600
N - 2.5 miles … Andrews Lock and Dam								
20	2000	2/16/2000	EPD	0.97	<5	4100	800	1400
20	2082	2/06/2001	EPD	0.85	<6	3600	800	1400
20	2183	2/05/2002	EPD	0.97	16	3900	800	1400

Table F-4 Farley Groundwater Sample Data (pCi/L)

Sta	Samp	Collect	Agy	Alpha	Beta	Cs-137	H-3
NE - 15 miles … Blakely							
1	1991	2/17/2000	EPD	3	4	<5	<200
1	2035	7/25/2000	EPD	<1	2	<5	<200
1	2085	2/07/2001	EPD	<1	3	<5	<200
1	2188	2/6/2002	EPD	<2	<2	<5	<200
SSE - 3.5 miles … Georgia Pacific Plant							
12	1992	2/16/2000	EPD	<2	3	<5	<200
12	2036	7/25/2000	EPD	<2	2	<5	<200
12	2086	2/06/2001	EPD	<2	4	<5	<200
12	2189	2/5/2002	EPD	<2	2	<5	<200
N - 2.5 miles … Andrews Lock and Dam							
20	1993	2/16/2000	EPD	2	2	<5	<200
20	2037	7/25/2000	EPD	<1	2	<5	<200
20	2087	2/06/2001	EPD	<2	<2	<5	<200
20	2190	2/5/2002	EPD	<1	2	<5	<200

Table F-5 Farley Vegetation Sample Data (pCi/Kg fresh)

Sta	Samp	Collect	Agy	DW	Cs-137	Be-7 (nat)	K-40 (nat)
			NE - 15 miles … Blakely				
1	1961	11/15/1999	EPD	0.27	<20	1,100	9,300
1	1994	02/17/2000	EPD	0.09	<10	500	5,700
1	2013	05/08/2000	EPD	0.20	<20	<200	6,500
1	2029	07/25/2000	EPD	0.21	<10	600	8,200
1	2059	11/15/2000	EPD	0.39	<20	2,000	4,700
1	2083	02/07/2001	EPD	0.10	<10	700	6,700
1	2114	05/16/2001	EPD	0.33	<20	900	8,500
1	2132	08/02/2001	EPD	0.10	<10	<200	7,200
1	2159	11/14/2001	EPD	0.17	<20	300	10,200
1	2184	02/06/2002	EPD	0.07	<7	400	5,500
1	2209	05/02/2002	EPD	0.21	<11	200	7,000
			SSE - 3.5 miles … Georgia Pacific Plant				
12	1962	11/15/1999	EPD	0.35	<10	1,100	5,900
12	2014	05/08/2000	EPD	0.44	<20	1,000	9,200
12	2030	07/25/2000	EPD	0.44	<10	1,200	7,000
12	2060	11/13/2000	EPD	0.41	<20	2,900	4,900
12	2115	05/14/2001	EPD	0.31	<10	900	6,200
12	2133	08/02/2001	EPD	0.39	<20	2,100	4,700
12	2210	05/01/2002	EPD	0.25	20	1,000	5,700
12	2242	11/06/2002	EPD	0.29	<12	2,100	4,900
			E - 2.8 miles				
16	1963	11/15/1999	EPD	0.56	**150**	3,400	4,100
16	1995	02/16/2000	EPD	0.19	<10	400	7,100
16	2015	05/08/2000	EPD	0.42	<20	800	6,300
16	2031	07/25/2000	EPD	0.39	43	1,600	4,000
16	2061	11/13/2000	EPD	0.51	<20	2,100	5,300
16	2116	05/14/2001	EPD	0.35	<20	2,000	5,300
16	2134	08/02/2001	EPD	0.37	<30	2,400	5,200
16	2211	05/01/2002	EPD	0.41	<16	500	8,200
16	2243	11/06/2002	EPD	0.36	<18	3,400	4,000
			N - 2.5 miles … Andrews Lock and Dam				
20	1964	11/15/1999	EPD	0.48	<20	2,400	4,900
20	1996	02/16/2000	EPD	0.13	<10	700	4,400
20	2016	05/08/2000	EPD	0.15	<10	1,400	4,600
20	2032	07/25/2000	EPD	0.25	<10	300	5,400
20	2062	11/13/2000	EPD	0.25	<10	1,300	4,700
20	2084	02/06/2001	EPD	0.14	<10	700	4,700
20	2117	05/14/2001	EPD	0.44	<10	400	5,300
20	2135	08/02/2001	EPD	0.16	<10	500	4,800
20	2185	02/05/2002	EPD	0.12	<8	300	3,800
20	2212	05/01/2002	EPD	0.28	<20	1,500	7,100
20	2244	11/06/2002	EPD	0.27	<16	2,300	3,800

Note: Highlighted Cs-137, which is most likely due to historical global fallout, appears to be slightly elevated for this group of samples.

Table F-6 Farley River Water Sample Data (pCi/L)

Sta	Samp	Collect	Agy	Alpha	Beta	Cs-137	H-3
Chattahoochee River - 2.5 miles upstream at Andrews Lock and Dam							
300	1965	11/15/1999	EPD	<1	2	<5	<200
300	2011	05/08/2000	EPD	<1	<2	<5	<200
300	2033	07/25/2000	EPD	<1	5	<5	<200
300	2063	11/13/2000	EPD	<1	4	<5	<200
300	2088	02/06/2001	EPD	<1	4	<5	<200
300	2118	05/14/2001	EPD	<1	2	<5	<200
300	2136	07/31/2001	EPD	<1	3	<5	<200
300	2160	11/13/2001	EPD	<1	4	<5	<200
300	2186	02/05/2002	EPD	<2	4	<5	<200
300	2213	05/02/2002	EPD	2	5	<5	<200
300	2245	11/06/2002	EPD	<2	2	<5	<200
300		Average		<2	3	<5	<200
Chattahoochee River - 2.5 miles downstream at Georgia Pacific Plant							
330	1966	11/15/1999	EPD	<1	3	<5	<200
330	1990	02/16/2000	EPD	2	4	<5	<200
330	2012	05/08/2000	EPD	<2	5	<5	200
330	2034	07/25/2000	EPD	<1	5	<5	**2,800**
330	2064	11/13/2000	EPD	<1	6	<5	<200
330	2089	02/06/2001	EPD	<1	3	<5	<200
330	2119	05/14/2001	EPD	<1	6	<5	<200
330	2137	07/31/2001	EPD	<1	2	<5	<200
330	2161	11/13/2001	EPD	<2	4	<5	<200
330	2187	02/05/2002	EPD	<1	2	<5	**500**
330	2214	05/02/2002	EPD	<1	4	<5	**4,700**
330	2246	11/06/2002	EPD	<2	4	<5	**3,100**
330		Average		<2	4	<5	**1,100**

Note: Highlighted H-3 results, which are slightly elevated, are likely due to Plant operations. H-3 is a non-filterable, water-borne byproduct formed in PWR reactors as a result of neutron interactions with boron. H-3 results averaged less than 6% of the Safe Drinking Water MCL based on the available data.

Table F-7 Farley River Sediment Data (pCi/Kg dry)

Sta	Samp	Collect	Agy	DW	Co-60	Cs-137	K-40 (nat)	Ra-226 (nat)	Ra-228 (nat)
		Chattahoochee River - 2.5 miles upstream at Andrews Lock and Dam							
300	2048	9/14/2000	EPD	0.78	<10	<10	3,300	800	1,400
300	2138	8/01/2001	EPD	0.77	<10	<10	4,800	800	1,100
300	2233	8/20/2002	EPD	0.69		<10	4,000	1,100	2,100
		Chattahoochee River - 0.1 miles downstream of Farley discharge							
310	2049	9/14/2000	EPD	0.70	<10	18	16,000	2,500	3,900
310	2139	8/01/2001	EPD	0.79	<10	<10	4,800	700	1,200
310	2234	8/20/2002	EPD	0.71		25	5,500	1,400	2,200
		Chattahoochee River - 0.5 miles downstream of Farley discharge							
320	2050	9/14/2000	EPD	0.58	**18**	33	14,000	2,000	2,400
320	2140	8/01/2001	EPD	0.74	<10	<10	4,800	1,500	2,500
320	2235	8/20/2002	EPD	0.69		<10	7,500	1,700	2,600
		Chattahoochee River - 2.5 miles downstream at Georgia Pacific Plant							
330	2051	9/14/2000	EPD	0.61	**19**	29	7,900	1,200	1,500
330	2141	8/01/2001	EPD	0.73	<10	28	5,700	1,100	1,500
330	2236	8/20/2002	EPD	0.70		<10	5,900	1,600	2,600
		Chattahoochee River - 15 miles downstream at Lake Seminole							
340	2052	9/14/2000	EPD	0.65	<10	60	13,000	2,500	3,300
340	2142	8/01/2001	EPD	0.65	<10	22	15,000	2,800	3,900

Note: Highlighted Co-60 results, which are slightly above the detection limit, are likely due to Plant operations.

Table F-8 Farley Fish Sample Data (pCi/Kg fresh)

Sta	Samp	Collect	Agy	DW	Species	Cs-137	K-40 (nat)
		Chattahoochee River - 2.5 miles upstream at Andrews Lock and Dam					
300	1973	11/08/1999	EPD	0.24	Largemouth Bass (filet)	16	3,600
300	2099	11/28/2000	EPD	0.27	Largemouth Bass (filet)	<4	3,800
300	2166	10/17/2001	EPD	0.21	Largemouth Bass (filet)	17	3,800
300	2249	09/17/2002	EPD	0.22	Largemouth Bass (filet)	24	3,500
300	1975	11/08/1999	EPD	0.20	Spotted Suckers (filet)	<7	3,600
300	2101	11/28/2000	EPD	0.21	Spotted Suckers (filet)	11	3,400
300	2167	10/17/2001	EPD	0.22	Spotted Suckers (filet)	7	3,500
300	2248	09/17/2002	EPD	0.27	Spotted Suckers (filet)	<6	3,300
		Chattahoochee River - 0.1 miles downstream of Farley discharge					
310	1971	11/08/1999	EPD	0.22	Largemouth Bass (filet)	19	3,500
310	2096	11/28/2000	EPD	0.26	Largemouth Bass (filet)	15	3,600
310	2168	10/17/2001	EPD	0.22	Largemouth Bass (filet)	<7	3,300
310	1974	11/08/1999	EPD	0.21	Spotted Suckers (filet)	20	3,800
310	2097	11/28/2000	EPD	0.22	Spotted Suckers (filet)	<8	3,900
310	2169	10/17/2001	EPD	0.24	Spotted Suckers (filet)	19	3,300
		Chattahoochee River - 2.5 miles downstream at Georgia Pacific Plant					
330	1976	11/08/1999	EPD	0.20	Channel Catfish (filet)	21	3,400
330	1969	11/08/1999	EPD	0.23	Largemouth Bass (filet)	14	3,400
330	2100	11/28/2000	EPD	0.23	Largemouth Bass (filet)	23	3,700
330	2199	10/17/2001	EPD	0.22	Largemouth Bass (filet)	26	3,500
330	2250	09/17/2002	EPD	0.23	Largemouth Bass (filet)	18	3,200
330	2103	11/28/2000	EPD	0.24	Spotted Suckers (filet)	7	3,600
330	2170	10/17/2001	EPD	0.21	Spotted Suckers (filet)	<5	3,500
330	2247	09/17/2002	EPD	0.21	Spotted Suckers (filet)	<9	3,200
		Chattahoochee River - 15 miles downstream at Lake Seminole					
340	1970	11/08/1999	EPD	0.21	Largemouth Bass (filet)	21	3,400
340	2102	11/28/2000	EPD	0.23	Largemouth Bass (filet)	48	3,600
340	2200	10/18/2001	EPD	0.22	Largemouth Bass (filet)	24	3,400
340	1972	11/08/1999	EPD	0.20	Spotted Suckers (filet)	<7	3,900
340	2098	11/28/2000	EPD	0.21	Spotted Suckers (filet)	<7	3,800
340	2171	10/17/2001	EPD	0.20	Spotted Suckers (filet)	13	3,900