Air Sampling Results

Using nine air sampling stations, the Vermont Department of Health assesses radioactivity in the air around Vermont Yankee. The locations of the air samplers are shown on Map 8 below. The ID numbers on the map may be matched with those on Tables 8, 9, 10 and 11. The sampling apparatus uses a mechanical pump to pull environmental air through sample media. Between the pump and sample media is positioned an in-line flow meter. The flow meter tracks the volume of air drawn through the sample media. The air samplers run continuously, and the air samples collected there are changed at least monthly.

The air samplers use two different sample media to capture airborne radioactivity. One is a glass fiber filter. This filter collects particulate material. The air filter is analyzed by the Vermont Department of Health Laboratory in Burlington, which reports the results as total alpha radioactivity and total beta radioactivity. Alpha radioactivity is a measure of radioactive materials that emit alpha radiation, while beta radioactivity is a measure of radioactive materials that emit beta radiation. The air filters are also counted for gamma radioactivity in what are called the quarterly composites. An example of a natural radioactive particulate is beryllium-7. A radioactive particulate only associated with human activity is cesium-137.

The second media is a charcoal cartridge treated with triethylenediamine (TEDA). This cartridge has an affinity for radioactive iodine. As air passes through the cartridge, radioactive iodine gets trapped in the charcoal cartridge. The radioactive iodine is measured at the Vermont Department of Health Laboratory. In addition, other radioactive gases and vapors may be trapped in the charcoal cartridge. These, too, are analyzed by the laboratory. A radioactive iodine of particular interest is iodine-131. The lab reports the iodine-131 radioactivity, and identifies any other radioactive gases or vapors that are collected on the cartridge after performing gamma spectroscopy.

Alpha and beta radioactivity on the glass fiber filters is measured using a gas flow proportional counter. The charcoal cartridges are analyzed for radioactive iodine and other radioactive materials with a gamma spectrometer system using a reverse electrode germanium detector. The instruments used at the Vermont Department of Health Laboratory are very sensitive and subject to significant quality controls. Still, each instrument has a limit of detection. When a sample is analyzed and no radioactivity is detected, the result is not recorded as zero, but it is recorded as less than the lower limit of detection. The lower limit of detection for iodine-131 is 0.02 pCi/m3

Total alpha, total beta, and iodine-131 radioactivity is reported in picocuries per cubic meter. A picocurie (pCi) is a measure of radioactivity. One pCi is one trillionth of a curie, and one curie is the amount of radioactivity in one gram of radium-226. A cubic meter (m3) is a measure of volume, so the number of pCi/m3 in these air samples is a measure of the airborne radioactivity concentration. Table 8 presents the total alpha radioactivity results from the 2006 air sample filters. Table 9 presents the total beta radioactivity from these filters. Table 10 presents the radioactive iodine-131 results following analysis of the charcoal cartridge samples, while Table 11 presents the gamma spectrometry results for the analysis of these charcoal cartridges.

Results for 2006 are that 1) alpha radioactivity is within the historical range of less than the lower limits of detection to 0.0071 pCi/m^3 at 0.000038 pCi/m^3 to 0.00516 pCi/m^3; 2) that beta radioactivity is very close to within the historical range of less than the lower limits of detection to 0.0251 pCi/m^3 at 0.000137 pCi/m^3 to 0.026 pCi/m^3; 3) that iodine-131 samples were all less than the limit of detection; and 4) that all gamma radioactivity detected was of natural origin.

Each calendar quarter, the air filter samples from all nine air sample locations are analyzed together in what is called a quarterly composite. The quarterly composite corrects for radioactive decay over the calendar quarter. The filters are analyzed with the

gamma spectrometer system used to evaluate the air cartridges for radioactive materials. Table 12 presents the quarterly composite results.

In the graph in Figure 1, the mean alpha radioactivity for each of the nine Vermont Department of Health air sample stations is plotted. The graph indicates that there is little difference between results at locations close to Vermont Yankee Nuclear Power Station, for example at the Vernon Elementary School, and at locations far from the plant.

As with alpha radioactivity, a look at the mean air sample total beta radioactivity indicates no significant difference between air sample results for locations near the plant as compared to locations further from the plant. These mean air sample results from the nine air sample stations are plotted in the graph in Figure 2.

Table 10 presents the monthly results of iodine-131 sample analysis. No iodine-131 above the lower limit of detection was identified at any of the nine air sampling stations. The lower limit of detection is 0.02 picocuries per cubic meter (pCi/m^3).

In Table 11 is presented the gamma spectroscopy results for air sample charcoal cartridges for the nine air samplers in the Vermont Yankee Nuclear Power Station area. All of the results indicate only naturally occurring radioactive materials were detected. Table 13 provides a list of some of the naturally occurring radioactive materials commonly found in gamma spectroscopy at the Vermont Department of Health Laboratory. Table 14 is a list of radioactive materials that may be identified through gamma spectroscopy that are predominantly associated with nuclear facilities.

Table 12 presents the quarterly air sample composite analysis. The quarterly composites are analyses of all air filters collected from the nine air sampling stations over the three-month calendar quarter. The 27 filters are analyzed by gamma spectroscopy, which can identify any radioactivity that emits gamma radiation. The analysis of these filters indicated only naturally occurring beryllium-7 present in excess of the lower limit of

detection. Beryllium-7 is a cosmogenic radioactive material. Cosmogenic radioactive materials are created by cosmic radiation interactions in the earth's atmosphere. The beryllium-7 accumulates on the surface of the earth when washed out of the atmosphere by precipitation.

Map 8

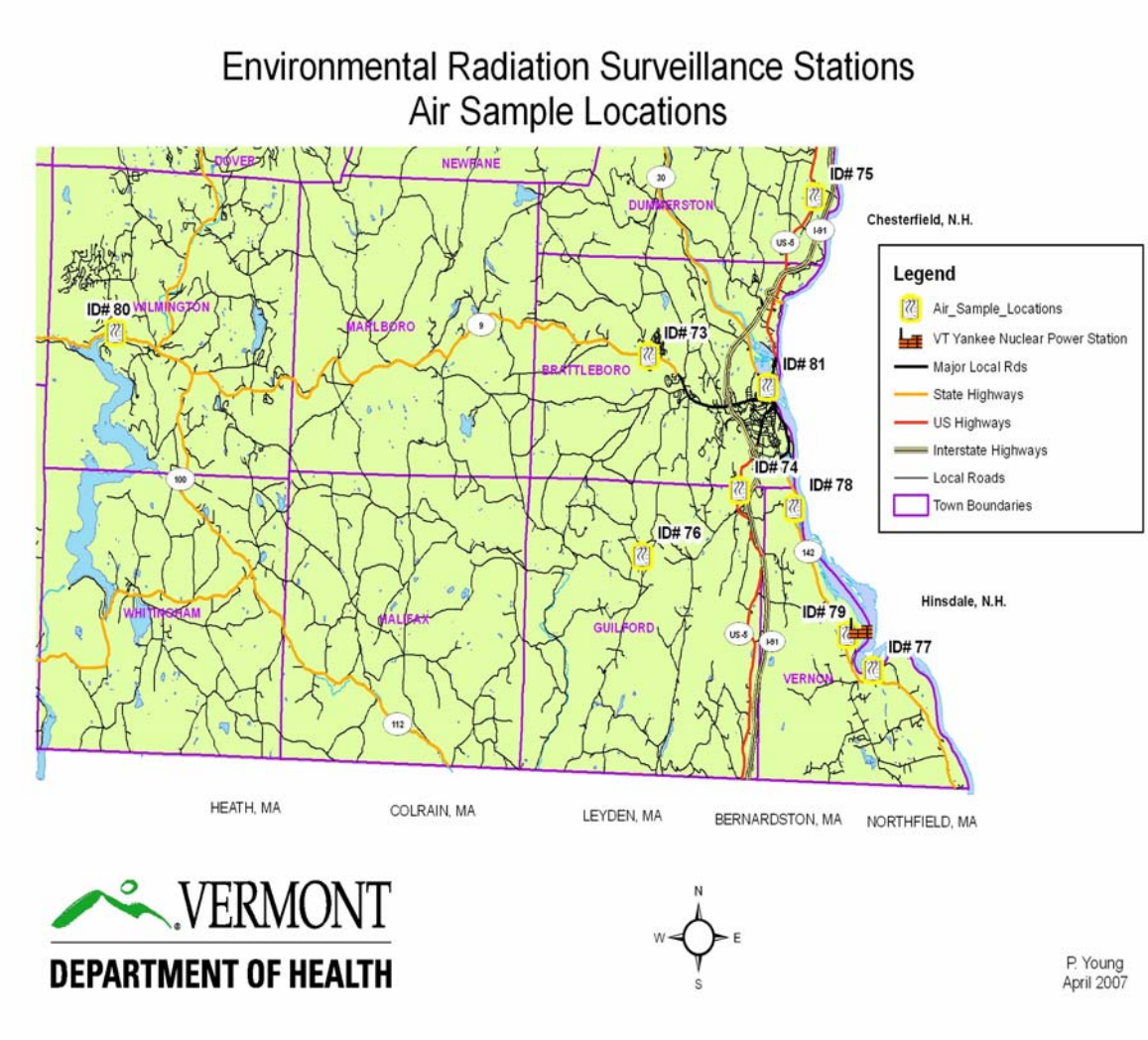


Table 8. 2006 Air Sample Alpha Radioactivity

Sample Date	Sample Location	Map ID No.	Results pCi/m^3	Error pCi/m^3	Sample Comment
1/23/2006	Brattleboro State Police	73	0.00366	0.0008	
1/23/2006	D&E Tree, Guilford	74	0.0025	0.00066	
1/23/2006	Dummerston State Garage	75	0.00351	0.00079	
1/23/2006	Guilford Town Garage	76	0.00516	0.00102	
1/23/2006	Power Line River Crossing	77	0.00382	0.00083	
1/23/2006	Renauld Brothers	78	0.00344	0.0008	
1/23/2006	Vernon Elementary School	79	0.00306	0.00074	
1/23/2006	Wilmington State Garage	80	0.00299	0.00071	
1/23/2006	Windham County Court	81	0.00311	0.00077	
2/21/2006	Brattleboro State Police	73	0.00311	0.00082	
2/21/2006	D&E Tree, Guilford	74	0.000358	0.000353	
2/21/2006	Dummerston State Garage	75	0.00294	0.0008	
2/21/2006	Guilford Town Garage	76	0.00379	0.00098	
2/21/2006	Power Line River Crossing	77	0.00293	0.0008	
2/21/2006	Renauld Brothers	78	0.0039	0.00093	
2/21/2006	Vernon Elementary School	79	0.00288	0.00079	
2/21/2006	Wilmington State Garage	80	0.00227	0.00069	
2/21/2006	Windham County Court	81	0.0025	0.00075	
3/24/2006	Brattleboro State Police	73	0.00269	0.00073	
3/24/2006	D&E Tree, Guilford	74	0.00316	0.00081	
3/24/2006	Dummerston State Garage	75	0.00263	0.00073	
3/24/2006	Guilford Town Garage	76	0.00336	0.00088	
3/24/2006	Power Line River Crossing	77	0.000648	0.000398	
3/24/2006	Renauld Brothers	78	0.00337	0.00083	
3/24/2006	Vernon Elementary School	79	0.00328	0.00081	
3/24/2006	Wilmington State Garage	80	0.00229	0.00066	
3/24/2006	Windham County Court	81	0.000585	0.000375	
4/18/2006	Brattleboro State Police	73	0.00275	0.00079	
4/18/2006	D&E Tree, Guilford	74	0.0026	0.00079	
4/18/2006	Dummerston State Garage	75	0.00397	0.00095	
4/18/2006	Guilford Town Garage	76	0.00297	0.00088	
4/18/2006	Power Line River Crossing	77	0.00272	0.0008	
4/18/2006	Renauld Brothers	78	0.00206	0.0007	
4/18/2006	Vernon Elementary School	79	0.00303	0.00083	
4/18/2006	Wilmington State Garage	80	0.002	0.00067	
4/18/2006	Windham County Court	81	0.00264	0.00079	

Table 8. 2006 Air Sample Alpha Radioactivity (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/m^3	Error pCi/m^3	Sample Comment
5/16/2006	Brattleboro State Police	73	0.00102	0.00065	
5/16/2006	D&E Tree, Guilford	74	0.000957	0.000669	
5/16/2006	Dummerston State Garage	75	0.00129	0.0007	
5/16/2006	Guilford Town Garage	76	0.00141	0.00077	
5/16/2006	Power Line River Crossing	77	0.00162	0.00076	
5/16/2006	Renauld Brothers	78	0.00176	0.00096	
5/16/2006	Vernon Elementary School	79	0.00159	0.00074	
5/16/2006	Wilmington State Garage	80	0.00204	0.00076	
5/16/2006	Windham County Court	81	0.00114	0.00068	
6/19/2006	Brattleboro State Police	73	0.0014	0.00058	
6/19/2006	D&E Tree, Guilford	74	0.0019	0.00067	
6/19/2006	Dummerston State Garage	75	0.00143	0.00059	
6/19/2006	Guilford Town Garage	76	0.00189	0.00068	
6/19/2006	Power Line River Crossing	77	0.000038	0.000326	
6/19/2006	Renauld Brothers	78	0.00138	0.00067	
6/19/2006	Vernon Elementary School	79	0.00193	0.00066	
6/19/2006	Wilmington State Garage	80	0.00155	0.00059	
6/19/2006	Windham County Court	81	0.000038	0.000322	
7/28/2006	Brattleboro State Police	73	0.00314	0.00077	
7/28/2006	D&E Tree, Guilford	74	0.00242	0.00069	
7/28/2006	Dummerston State Garage	75	0.00254	0.0007	
7/28/2006	Guilford Town Garage	76	0.000742	0.000478	
7/28/2006	Power Line River Crossing	77	0.00278	0.00073	
7/28/2006	Renauld Brothers	78	0.00211	0.00074	
7/28/2006	Vernon Elementary School	79	0.0016	0.00059	
7/28/2006	Wilmington State Garage	80	0.000143	0.000303	
7/28/2006	Windham County Court	81	0.00209	0.00065	
8/30/2006	Brattleboro State Police	73	N/A	N/A	Electrical Failure
8/30/2006	D&E Tree, Guilford	74	0.00281	0.00081	
8/30/2006	Dummerston State Garage	75	0.00199	0.0007	
8/30/2006	Guilford Town Garage	76	0.000721	0.00054	
8/30/2006	Power Line River Crossing	77	0.00256	0.00077	
8/30/2006	Renauld Brothers	78	0.000703	0.000527	
8/30/2006	Vernon Elementary School	79	0.0019	0.00069	
8/30/2006	Wilmington State Garage	80	0.00275	0.00075	
8/30/2006	Windham County Court	81	0.000177	0.000382	

Table 8. 2006 Air Sample Alpha Radioactivity (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/m^3	Error pCi/m^3	Sample Comment
9/27/2006	Brattleboro State Police	73	N/A	N/A	Electrical Failure
9/27/2006	D&E Tree, Guilford	74	0.00105	0.00057	
9/27/2006	Dummerston State Garage	75	0.00141	0.00063	
9/27/2006	Guilford Town Garage	76	0.00107	0.00062	
9/27/2006	Power Line River Crossing	77	0.00169	0.00068	
9/27/2006	Renauld Brothers	78	0.00111	0.00062	
9/27/2006	Vernon Elementary School	79	0.00109	0.00057	
9/27/2006	Wilmington State Garage	80	0.0013	0.00057	
9/27/2006	Windham County Court	81	0.0022	0.00074	
10/26/2006	Brattleboro State Police	73	0.0021	0.00073	
10/26/2006	D&E Tree, Guilford	74	0.00174	0.00069	
10/26/2006	Dummerston State Garage	75	0.00149	0.00066	
10/26/2006	Guilford Town Garage	76	0.000199	0.000515	
10/26/2006	Power Line River Crossing	77	0.000772	0.000535	
10/26/2006	Renauld Brothers	78	0.000066	0.000363	
10/26/2006	Vernon Elementary School	79	0.00173	0.00068	
10/26/2006	Wilmington State Garage	80	0.00181	0.00065	
10/26/2006	Windham County Court	81	0.000057	0.000312	
11/22/2006	Brattleboro State Police	73	0.00248	0.00078	
11/22/2006	D&E Tree, Guilford	74	0.0019	0.00071	
11/22/2006	Dummerston State Garage	75	0.00206	0.00073	
11/22/2006	Guilford Town Garage	76	0.0000968	0.000635	
11/22/2006	Power Line River Crossing	77	0.000666	0.000494	
11/22/2006	Renauld Brothers	78	0.00111	0.00061	
11/22/2006	Vernon Elementary School	79	0.00116	0.0006	
11/22/2006	Wilmington State Garage	80	0.00183	0.00065	
11/22/2006	Windham County Court	81	N/A	N/A	
12/21/2006	Brattleboro State Police	73	0.00372	0.00092	
12/21/2006	D&E Tree, Guilford	74	0.00215	0.00075	
12/21/2006	Dummerston State Garage	75	0.00186	0.00071	
12/21/2006	Guilford Town Garage	76	0.00492	0.00112	
12/21/2006	Power Line River Crossing	77	0.000943	0.000551	
12/21/2006	Renauld Brothers	78	0.00515	0.00118	
12/21/2006	Vernon Elementary School	79	0.00165	0.00066	
12/21/2006	Wilmington State Garage	80	0.00331	0.00083	
12/21/2006	Windham County Court	81	0.00249	0.00053	

Figure 1

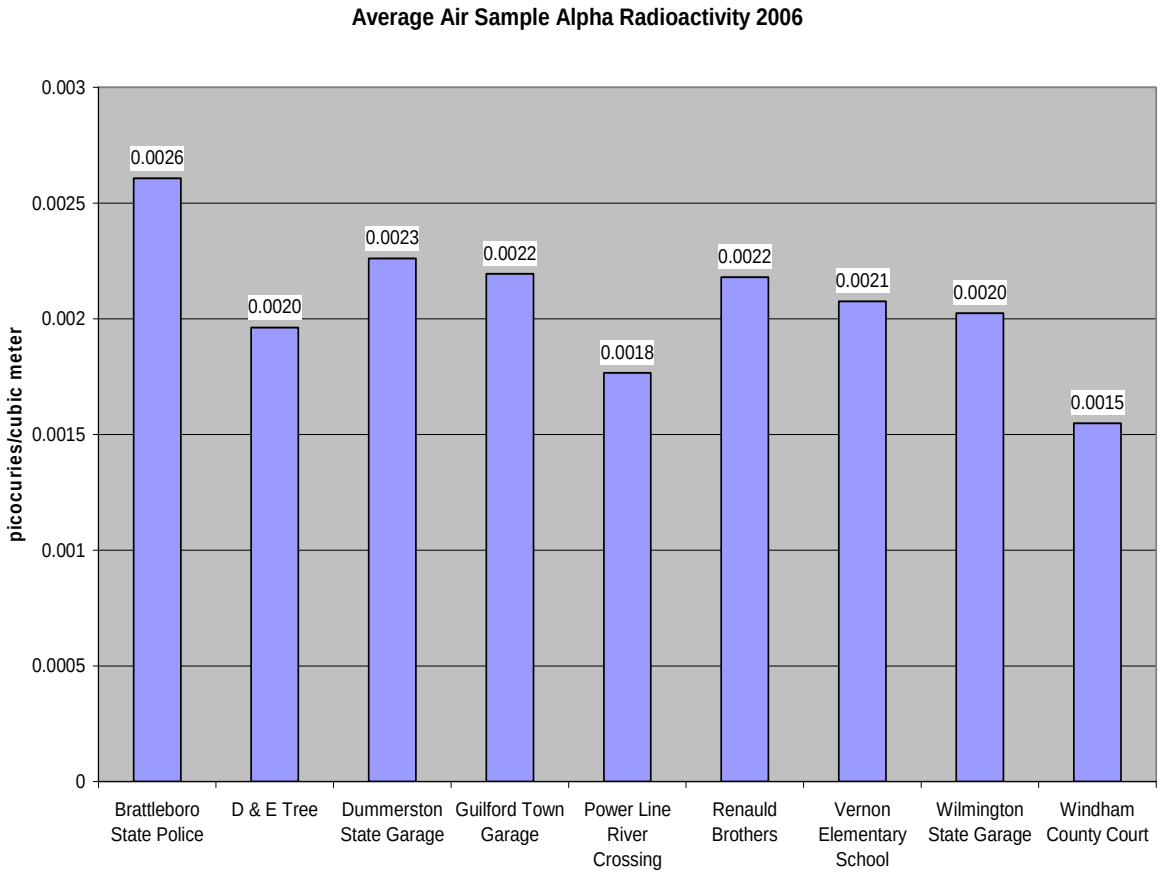

Average Air Sample Alpha Radioactivity 2006
picocuries/cubic meter
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
0.0026
0.0020
0.0023
0.0022
0.0018
0.0022
0.0021
0.0020
0.0015
Brattleboro State Police
D & E Tree
Dummerston State Garage
Guilford Town Garage
Power Line River Crossing
Renauld Brothers
Vernon Elementary School
Wilmington State Garage
Windham County Court

Table 9. 2006 Air Sample Beta Radioactivity Results

Sample Date	Sample Location	Map ID No.	Results pCi/m^3	Error pCi/m^3	Sample Comment
1/23/2006	Brattleboro State Police	73	0.0162	0.0013	
1/23/2006	D&E Tree, Guilford	74	0.0159	0.0013	
1/23/2006	Dummerston State Garage	75	0.018	0.0014	
1/23/2006	Guilford Town Garage	76	0.0222	0.0017	
1/23/2006	Power Line River Crossing	77	0.0179	0.0014	
1/23/2006	Renauld Brothers	78	0.0162	0.0014	
1/23/2006	Vernon Elementary School	79	0.0151	0.0013	
1/23/2006	Wilmington State Garage	80	0.0162	0.0013	
1/23/2006	Windham County Court	81	0.0181	0.0014	
2/21/2006	Brattleboro State Police	73	0.0129	0.0013	
2/21/2006	D&E Tree, Guilford	74	0.00243	0.00068	
2/21/2006	Dummerston State Garage	75	0.0138	0.0014	
2/21/2006	Guilford Town Garage	76	0.0186	0.0017	
2/21/2006	Power Line River Crossing	77	0.015	0.0014	
2/21/2006	Renauld Brothers	78	0.0139	0.0014	
2/21/2006	Vernon Elementary School	79	0.0152	0.0014	
2/21/2006	Wilmington State Garage	80	0.0127	0.0013	
2/21/2006	Windham County Court	81	0.0145	0.0014	
3/24/2006	Brattleboro State Police	73	0.013	0.0013	
3/24/2006	D&E Tree, Guilford	74	0.0133	0.0013	
3/24/2006	Dummerston State Garage	75	0.012	0.0012	
3/24/2006	Guilford Town Garage	76	0.0154	0.0015	
3/24/2006	Power Line River Crossing	77	0.00199	0.00064	
3/24/2006	Renauld Brothers	78	0.012	0.0012	
3/24/2006	Vernon Elementary School	79	0.0131	0.0013	
3/24/2006	Wilmington State Garage	80	0.0112	0.0012	
3/24/2006	Windham County Court	81	0.00141	0.00057	
4/18/2006	Brattleboro State Police	73	0.0132	0.0015	
4/18/2006	D&E Tree, Guilford	74	0.0118	0.0015	
4/18/2006	Dummerston State Garage	75	0.0135	0.0015	
4/18/2006	Guilford Town Garage	76	0.015	0.0017	
4/18/2006	Power Line River Crossing	77	0.013	0.0015	
4/18/2006	Renauld Brothers	78	0.0117	0.0014	
4/18/2006	Vernon Elementary School	79	0.0129	0.0015	
4/18/2006	Wilmington State Garage	80	0.011	0.0013	
4/18/2006	Windham County Court	81	0.0129	0.0015	

Table 9. 2006 Air Sample Beta Radioactivity Results (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/m^3	Error pCi/m^3	Sample Comment
5/16/2006	Brattleboro State Police	73	0.00807	0.0012	
5/16/2006	D&E Tree, Guilford	74	0.00784	0.00123	
5/16/2006	Dummerston State Garage	75	0.00763	0.00119	
5/16/2006	Guilford Town Garage	76	0.00891	0.00133	
5/16/2006	Power Line River Crossing	77	0.00808	0.00122	
5/16/2006	Renauld Brothers	78	0.011	0.0016	
5/16/2006	Vernon Elementary School	79	0.00831	0.00122	
5/16/2006	Wilmington State Garage	80	0.00801	0.00115	
5/16/2006	Windham County Court	81	0.00768	0.00119	
6/19/2006	Brattleboro State Police	73	0.00817	0.00104	
6/19/2006	D&E Tree, Guilford	74	0.00712	0.00101	
6/19/2006	Dummerston State Garage	75	0.008	0.00104	
6/19/2006	Guilford Town Garage	76	0.00757	0.00106	
6/19/2006	Power Line River Crossing	77	0.000457	0.000546	
6/19/2006	Renauld Brothers	78	0.00635	0.00109	
6/19/2006	Vernon Elementary School	79	0.0086	0.00107	
6/19/2006	Wilmington State Garage	80	0.00795	0.001	
6/19/2006	Windham County Court	81	0.000345	0.000529	
7/28/2006	Brattleboro State Police	73	0.00891	0.0001	
7/28/2006	D&E Tree, Guilford	74	0.012	0.0012	
7/28/2006	Dummerston State Garage	75	0.0103	0.0011	
7/28/2006	Guilford Town Garage	76	0.00198	0.000662	
7/28/2006	Power Line River Crossing	77	0.0117	0.0011	
7/28/2006	Renauld Brothers	78	0.00533	0.00097	
7/28/2006	Vernon Elementary School	79	0.00696	0.00093	
7/28/2006	Wilmington State Garage	80	0.000489	0.000453	
7/28/2006	Windham County Court	81	0.00883	0.00102	
8/30/2006	Brattleboro State Police	73	N/A	N/A	Electrical Failure
8/30/2006	D&E Tree, Guilford	74	0.0113	0.0013	
8/30/2006	Dummerston State Garage	75	0.00774	0.00108	
8/30/2006	Guilford Town Garage	76	0.00309	0.00086	
8/30/2006	Power Line River Crossing	77	0.0115	0.0013	
8/30/2006	Renauld Brothers	78	0.0035	0.00087	
8/30/2006	Vernon Elementary School	79	0.00823	0.0011	
8/30/2006	Wilmington State Garage	80	0.0108	0.0011	
8/30/2006	Windham County Court	81	0.000433	0.00058	

Table 9. 2006 Air Sample Beta Radioactivity Results (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/m^3	Error pCi/m^3	Sample Comment
9/27/2006	Brattleboro State Police	73	N/A	N/A	Electrical Failure
9/27/2006	D&E Tree, Guilford	74	0.00785	0.00112	
9/27/2006	Dummerston State Garage	75	0.00628	0.00103	
9/27/2006	Guilford Town Garage	76	0.00354	0.00092	
9/27/2006	Power Line River Crossing	77	0.00543	0.00098	
9/27/2006	Renauld Brothers	78	0.00202	0.00078	
9/27/2006	Vernon Elementary School	79	0.00603	0.00101	
9/27/2006	Wilmington State Garage	80	0.00815	0.00106	
9/27/2006	Windham County Court	81	0.011	0.0013	
10/26/2006	Brattleboro State Police	73	0.00881	0.00112	
10/26/2006	D&E Tree, Guilford	74	0.00818	0.00112	
10/26/2006	Dummerston State Garage	75	0.00682	0.00105	
10/26/2006	Guilford Town Garage	76	0.00399	0.00104	
10/26/2006	Power Line River Crossing	77	0.00387	0.00086	
10/26/2006	Renauld Brothers	78	0.000329	0.000597	
10/26/2006	Vernon Elementary School	79	0.00827	0.0011	
10/26/2006	Wilmington State Garage	80	0.0095	0.0011	
10/26/2006	Windham County Court	81	0.000532	0.000539	
11/22/2006	Brattleboro State Police	73	0.0115	0.0013	
11/22/2006	D&E Tree, Guilford	74	0.00866	0.00123	
11/22/2006	Dummerston State Garage	75	0.00862	0.00122	
11/22/2006	Guilford Town Garage	76	0.000137	0.001223	
11/22/2006	Power Line River Crossing	77	0.00336	0.00092	
11/22/2006	Renauld Brothers	78	0.00383	0.00099	
11/22/2006	Vernon Elementary School	79	0.00484	0.00102	
11/22/2006	Wilmington State Garage	80	0.0101	0.0012	
11/22/2006	Windham County Court	81	N/A	N/A	
12/21/2006	Brattleboro State Police	73	0.0168	0.0015	
12/21/2006	D&E Tree, Guilford	74	0.0123	0.0014	
12/21/2006	Dummerston State Garage	75	0.0107	0.0013	
12/21/2006	Guilford Town Garage	76	0.026	0.002	
12/21/2006	Power Line River Crossing	77	0.00555	0.001	
12/21/2006	Renauld Brothers	78	0.0226	0.0019	
12/21/2006	Vernon Elementary School	79	0.00957	0.00121	
12/21/2006	Wilmington State Garage	80	0.0189	0.0015	
12/21/2006	Windham County Court	81	0.0161	0.001	

Figure 2

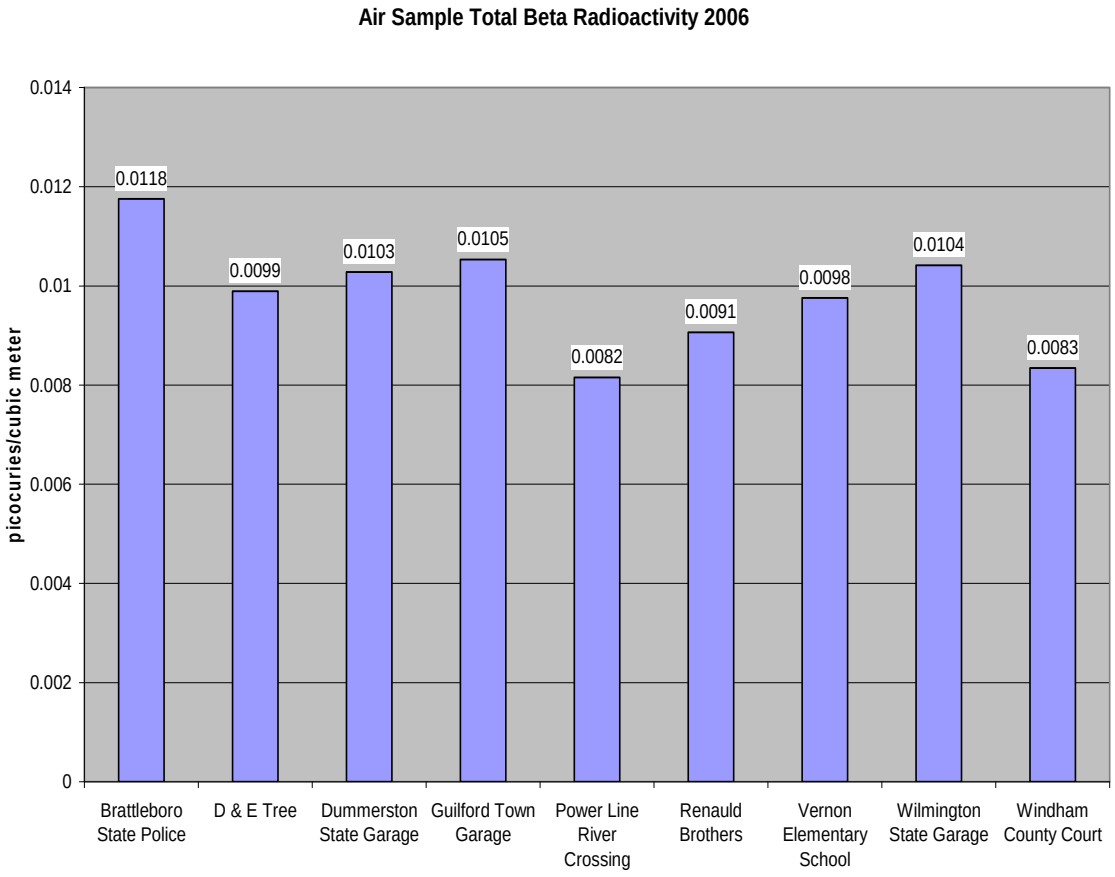

Air Sample Total Beta Radioactivity 2006
picocuries/cubic meter
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
0.0118
0.0099
0.0103
0.0105
0.0082
0.0091
0.0098
0.0104
0.0083
Brattleboro State Police
D & E Tree
Dummerston State Garage
Guilford Town Garage
Power Line River Crossing
Renauld Brothers
Vernon Elementary School
Wilmington State Garage
Windham County Court

Table 10. 2006 Air Sample Radioactive Iodine-131 Results

Sample Date	Sample Location	Map ID No.	Results pCi/m^3	Sample Comment
1/23/2006	Brattleboro State Police	73	<0.02	
1/23/2006	D&E Tree, Guilford	74	<0.02	
1/23/2006	Dummerston State Garage	75	<0.02	
1/23/2006	Guilford Town Garage	76	<0.02	
1/23/2006	Power Line River Crossing	77	<0.02	
1/23/2006	Renauld Brothers	78	<0.02	
1/23/2006	Vernon Elementary School	79	<0.02	
1/23/2006	Wilmington State Garage	80	<0.02	
1/23/2006	Windham County Court	81	<0.02	
2/21/2006	Brattleboro State Police	73	<0.02	
2/21/2006	D&E Tree, Guilford	74	<0.02	
2/21/2006	Dummerston State Garage	75	<0.02	
2/21/2006	Guilford Town Garage	76	<0.02	
2/21/2006	Power Line River Crossing	77	<0.02	
2/21/2006	Renauld Brothers	78	<0.02	
2/21/2006	Vernon Elementary School	79	<0.02	
2/21/2006	Wilmington State Garage	80	<0.02	
2/21/2006	Windham County Court	81	<0.02	
3/23/2006	Brattleboro State Police	73	<0.02	
3/23/2006	D&E Tree, Guilford	74	<0.02	
3/23/2006	Dummerston State Garage	75	<0.02	
3/23/2006	Guilford Town Garage	76	<0.02	
3/23/2006	Power Line River Crossing	77	<0.02	
3/23/2006	Renauld Brothers	78	<0.02	
3/23/2006	Vernon Elementary School	79	<0.02	
3/23/2006	Wilmington State Garage	80	<0.02	
3/23/2006	Windham County Court	81	<0.02	
4/18/2006	Brattleboro State Police	73	<0.02	
4/18/2006	D&E Tree, Guilford	74	<0.02	
4/18/2006	Dummerston State Garage	75	<0.02	
4/18/2006	Guilford Town Garage	76	<0.02	
4/18/2006	Power Line River Crossing	77	<0.02	
4/18/2006	Renauld Brothers	78	<0.02	
4/18/2006	Vernon Elementary School	79	<0.02	
4/18/2006	Wilmington State Garage	80	<0.02	
4/18/2006	Windham County Court	81	<0.02	

Table 10. 2006 Air Sample Radioactive Iodine-131 Results (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/m^3	Sample Comment
5/16/2006	Brattleboro State Police	73	<0.02	
5/16/2006	D&E Tree, Guilford	74	<0.02	
5/16/2006	Dummerston State Garage	75	<0.02	
5/16/2006	Guilford Town Garage	76	<0.02	
5/16/2006	Power Line River Crossing	77	<0.02	
5/16/2006	Renauld Brothers	78	<0.02	
5/16/2006	Vernon Elementary School	79	<0.02	
5/16/2006	Wilmington State Garage	80	<0.02	
5/16/2006	Windham County Court	81	<0.02	
6/19/2006	Brattleboro State Police	73	<0.02	
6/19/2006	D&E Tree, Guilford	74	<0.02	
6/19/2006	Dummerston State Garage	75	<0.02	
6/19/2006	Guilford Town Garage	76	<0.02	
6/19/2006	Power Line River Crossing	77	<0.02	
6/19/2006	Renauld Brothers	78	<0.02	
6/19/2006	Vernon Elementary School	79	<0.02	
6/19/2006	Wilmington State Garage	80	<0.02	
6/19/2006	Windham County Court	81	<0.02	
7/28/2006	Brattleboro State Police	73	<0.02	
7/28/2006	D&E Tree, Guilford	74	<0.02	
7/28/2006	Dummerston State Garage	75	<0.02	
7/28/2006	Guilford Town Garage	76	<0.02	
7/28/2006	Power Line River Crossing	77	<0.02	
7/28/2006	Renauld Brothers	78	<0.02	
7/28/2006	Vernon Elementary School	79	<0.02	
7/28/2006	Wilmington State Garage	80	<0.02	
7/28/2006	Windham County Court	81	<0.02	
8/30/2006	Brattleboro State Police	73	N/A	Electrical Failure
8/30/2006	D&E Tree, Guilford	74	<0.02	
8/30/2006	Dummerston State Garage	75	<0.02	
8/30/2006	Guilford Town Garage	76	<0.02	
8/30/2006	Power Line River Crossing	77	<0.02	
8/30/2006	Renauld Brothers	78	<0.02	
8/30/2006	Vernon Elementary School	79	<0.02	
8/30/2006	Wilmington State Garage	80	<0.02	
8/30/2006	Windham County Court	81	<0.02	

Table 10. 2006 Air Sample Radioactive Iodine-131 Results (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/m^3	Sample Comment
9/27/2006	Brattleboro State Police	73	N/A	Electrical Failure
9/27/2006	D&E Tree, Guilford	74	<0.02	
9/27/2006	Dummerston State Garage	75	<0.02	
9/27/2006	Guilford Town Garage	76	<0.02	
9/27/2006	Power Line River Crossing	77	<0.02	
9/27/2006	Renauld Brothers	78	<0.02	
9/27/2006	Vernon Elementary School	79	<0.02	
9/27/2006	Wilmington State Garage	80	<0.02	
9/27/2006	Windham County Court	81	<0.02	
10/26/2006	Brattleboro State Police	73	<0.02	
10/26/2006	D&E Tree, Guilford	74	<0.02	
10/26/2006	Dummerston State Garage	75	<0.02	
10/26/2006	Guilford Town Garage	76	<0.02	
10/26/2006	Power Line River Crossing	77	<0.02	
10/26/2006	Renauld Brothers	78	<0.02	
10/26/2006	Vernon Elementary School	79	<0.02	
10/26/2006	Wilmington State Garage	80	<0.02	
10/26/2006	Windham County Court	81	<0.02	
11/22/2006	Brattleboro State Police	73	<0.02	
11/22/2006	D&E Tree, Guilford	74	<0.02	
11/22/2006	Dummerston State Garage	75	<0.02	
11/22/2006	Guilford Town Garage	76	<0.02	
11/22/2006	Power Line River Crossing	77	<0.02	
11/22/2006	Renauld Brothers	78	<0.02	
11/22/2006	Vernon Elementary School	79	<0.02	
11/22/2006	Wilmington State Garage	80	<0.02	
11/22/2006	Windham County Court	81	<0.02	
12/21/2006	Brattleboro State Police	73	<0.02	
12/21/2006	D&E Tree, Guilford	74	<0.02	
12/21/2006	Dummerston State Garage	75	<0.02	
12/21/2006	Guilford Town Garage	76	<0.02	
12/21/2006	Power Line River Crossing	77	<0.02	
12/21/2006	Renauld Brothers	78	<0.02	
12/21/2006	Vernon Elementary School	79	<0.02	
12/21/2006	Wilmington State Garage	80	<0.02	
12/21/2006	Windham County Court	81	<0.02	

Table 11. 2006 Air Sample Gamma Radioactivity Results

Sample Date	Sample Location	Map ID No.	Results pCi/m^3	Sample Comment
1/23/2006	Brattleboro State Police	73	Natural	
1/23/2006	D&E Tree, Guilford	74	Natural	
1/23/2006	Dummerston State Garage	75	Natural	
1/23/2006	Guilford Town Garage	76	Natural	
1/23/2006	Power Line River Crossing	77	Natural	
1/23/2006	Renauld Brothers	78	Natural	
1/23/2006	Vernon Elementary School	79	Natural	
1/23/2006	Wilmington State Garage	80	Natural	
1/23/2006	Windham County Court	81	Natural	
2/21/2006	Brattleboro State Police	73	Natural	
2/21/2006	D&E Tree, Guilford	74	Natural	
2/21/2006	Dummerston State Garage	75	Natural	
2/21/2006	Guilford Town Garage	76	Natural	
2/21/2006	Power Line River Crossing	77	Natural	
2/21/2006	Renauld Brothers	78	Natural	
2/21/2006	Vernon Elementary School	79	Natural	
2/21/2006	Wilmington State Garage	80	Natural	
2/21/2006	Windham County Court	81	Natural	
3/23/2006	Brattleboro State Police	73	Natural	
3/23/2006	D&E Tree, Guilford	74	Natural	
3/23/2006	Dummerston State Garage	75	Natural	
3/23/2006	Guilford Town Garage	76	Natural	
3/23/2006	Power Line River Crossing	77	Natural	
3/23/2006	Renauld Brothers	78	Natural	
3/23/2006	Vernon Elementary School	79	Natural	
3/23/2006	Wilmington State Garage	80	Natural	
3/23/2006	Windham County Court	81	Natural	
4/18/2006	Brattleboro State Police	73	Natural	
4/18/2006	D&E Tree, Guilford	74	Natural	
4/18/2006	Dummerston State Garage	75	Natural	
4/18/2006	Guilford Town Garage	76	Natural	
4/18/2006	Power Line River Crossing	77	Natural	
4/18/2006	Renauld Brothers	78	Natural	
4/18/2006	Vernon Elementary School	79	Natural	
4/18/2006	Wilmington State Garage	80	Natural	
4/18/2006	Windham County Court	81	Natural	

Table 11. 2006 Air Sample Gamma Radioactivity Results (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/m^3	Sample Comment
5/16/2006	Brattleboro State Police	73	Natural	
5/16/2006	D&E Tree, Guilford	74	Natural	
5/16/2006	Dummerston State Garage	75	Natural	
5/16/2006	Guilford Town Garage	76	Natural	
5/16/2006	Power Line River Crossing	77	Natural	
5/16/2006	Renauld Brothers	78	Natural	
5/16/2006	Vernon Elementary School	79	Natural	
5/16/2006	Wilmington State Garage	80	Natural	
5/16/2006	Windham County Court	81	Natural	
6/19/2006	Brattleboro State Police	73	Natural	
6/19/2006	D&E Tree, Guilford	74	Natural	
6/19/2006	Dummerston State Garage	75	Natural	
6/19/2006	Guilford Town Garage	76	Natural	
6/19/2006	Power Line River Crossing	77	Natural	
6/19/2006	Renauld Brothers	78	Natural	
6/19/2006	Vernon Elementary School	79	Natural	
6/19/2006	Wilmington State Garage	80	Natural	
6/19/2006	Windham County Court	81	Natural	
7/28/2006	Brattleboro State Police	73	Natural	
7/28/2006	D&E Tree, Guilford	74	Natural	
7/28/2006	Dummerston State Garage	75	Natural	
7/28/2006	Guilford Town Garage	76	Natural	
7/28/2006	Power Line River Crossing	77	Natural	
7/28/2006	Renauld Brothers	78	Natural	
7/28/2006	Vernon Elementary School	79	Natural	
7/28/2006	Wilmington State Garage	80	Natural	
7/28/2006	Windham County Court	81	Natural	
8/30/2006	Brattleboro State Police	73	N/A	Electrical Failure
8/30/2006	D&E Tree, Guilford	74	Natural	
8/30/2006	Dummerston State Garage	75	Natural	
8/30/2006	Guilford Town Garage	76	Natural	
8/30/2006	Power Line River Crossing	77	Natural	
8/30/2006	Renauld Brothers	78	Natural	
8/30/2006	Vernon Elementary School	79	Natural	
8/30/2006	Wilmington State Garage	80	Natural	
8/30/2006	Windham County Court	81	Natural	

Table 11. 2006 Air Sample Gamma Radioactivity Results (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/m^3	Sample Comment
9/27/2006	Brattleboro State Police	73	N/A	Electrical Failure
9/27/2006	D&E Tree, Guilford	74	Natural	
9/27/2006	Dummerston State Garage	75	Natural	
9/27/2006	Guilford Town Garage	76	Natural	
9/27/2006	Power Line River Crossing	77	Natural	
9/27/2006	Renauld Brothers	78	Natural	
9/27/2006	Vernon Elementary School	79	Natural	
9/27/2006	Wilmington State Garage	80	Natural	
9/27/2006	Windham County Court	81	Natural	
10/26/2006	Brattleboro State Police	73	Natural	
10/26/2006	D&E Tree, Guilford	74	Natural	
10/26/2006	Dummerston State Garage	75	Natural	
10/26/2006	Guilford Town Garage	76	Natural	
10/26/2006	Power Line River Crossing	77	Natural	
10/26/2006	Renauld Brothers	78	Natural	
10/26/2006	Vernon Elementary School	79	Natural	
10/26/2006	Wilmington State Garage	80	Natural	
10/26/2006	Windham County Court	81	Natural	
11/22/2006	Brattleboro State Police	73	Natural	
11/22/2006	D&E Tree, Guilford	74	Natural	
11/22/2006	Dummerston State Garage	75	Natural	
11/22/2006	Guilford Town Garage	76	Natural	
11/22/2006	Power Line River Crossing	77	Natural	
11/22/2006	Renauld Brothers	78	Natural	
11/22/2006	Vernon Elementary School	79	Natural	
11/22/2006	Wilmington State Garage	80	Natural	
11/22/2006	Windham County Court	81	Natural	
12/21/2006	Brattleboro State Police	73	Natural	
12/21/2006	D&E Tree, Guilford	74	Natural	
12/21/2006	Dummerston State Garage	75	Natural	
12/21/2006	Guilford Town Garage	76	Natural	
12/21/2006	Power Line River Crossing	77	Natural	
12/21/2006	Renauld Brothers	78	Natural	
12/21/2006	Vernon Elementary School	79	Natural	
12/21/2006	Wilmington State Garage	80	Natural	
12/21/2006	Windham County Court	81	Natural	

Table 12. 2006 Air Sample Quarterly Composite Results

Sample Date	Sample Location	Results pCi/m^3	Error pCi/m^3	Sample Comment
3/31/2006	All 9 Vermont Yankee Filters for Quarter 1	4520	400	Be-7
6/30/2006	All 1 Vermont Yankee Filters for Quarter 2	268	81	Be-7
6/30/2006	All 8 Vermont Yankee Filters for Quarter 2	5050	430	Be-7
10/31/2006	All 9 Vermont Yankee Filters for Quarter 3	4270	770	Be-7
12/31/2006	All 9 Vermont Yankee Filters for Quarter 4	3220	310	Be-7

Table 13. Common Natural Gamma Radiation Emitters

actinium-228	beryllium-7	bismuth-212
bismuth-214	lead-210	lead-212
lead-214	potassium-40	protactinium-234m
thallium-208	thorium-231	thorium-234
uranium-235.		

Table 14. Nuclear Facility Gamma Radiation Emitters

Antimony-124	Antimony-126	
barium-140/lanthanum-140	cerium-139	Cerium-140
Cerium-144/promethium-144	Cobalt-56	Cobalt-60
Chromium-51	Cesium-134	Cesium-136
Cesium-137	Iodine-131	Iodine-132
Iodine-133	Iodine-135	Krypton-85
Krypton-88	Manganese-54	Plutonium-239
Plutonium-240	Ruthenium-103	Ruthenium-106
Strontium-85	Strontium-89	Strontium-90
Tellurium-132	Xenon-133	Xenon-133m
Xenon-135	Zinc-65	Zirconium-95/niobium-95

Water Sampling Results

Water is sampled each month at 10 locations. Six are samples from the Connecticut River. Two samples are taken monthly in locations in the pool where the plant discharges cooling water. Two samples are taken from the river upstream of the station in Brattleboro, and two more are taken monthly downstream of the station in the pool just below the Vernon dam. The last four samples include one from the Brattleboro municipal water supply, and one each from groundwater wells that serve the Miller Farm, the Blodgett Farm and the Vernon Elementary School. Results are in Tables 15 - 18.

Each of the water samples undergoes four different analyses. The first three analyses are like those for the air samples. One is for alpha radioactivity; a second analysis is for beta radioactivity, and the last is an analysis for all radionuclides by gamma spectroscopy. The fourth analysis is unique to the water samples. It is an analysis for tritium, the common name for hydrogen-3.

Tritium is a concern because water that passes through the reactor core at Vermont Yankee Nuclear Power Station can become tritiated as the hydrogen atoms in water molecules are activated by neutron radiation in the reactor core. Tritiated water may leave the plant site any way non-radioactive water leaves the plant - in the air, in groundwater and through discharges into surface waters like the Connecticut River. Unmonitored tritium releases from nuclear facilities have been a source of concern. Tritium monitoring by the Vermont Department of Health may help identify releases if they develop.

A map showing the water samples, Map 9, is below. Tables 15, 16, 17 and 18 present the water sample results. The tables list the map identification numbers so the locations can be seen on Map 9. Sample locations 84A and 86 are in the Connecticut River downstream. These are labeled in Tables 15 to 18 as Connecticut River, Station 3-3 and Connecticut River Downstream. Sample locations 84B and 84D are in the basin where Vermont Yankee Nuclear Power Station discharges water from the plant into the

Connecticut River. The tables identify them as Connecticut River, Station 3-4 and Discharge Forebay. Samples 84C and 87 are in the Connecticut River upstream of the plant. They are identified as Connecticut River, Station 3-8 and Connecticut River Upstream in Table 15, 16, 17 and 18.

In addition to showing the individual analysis results over the course of 2006, we have taken the mean results of each of the samples at the 10 water sample locations. Figures 3 and 4 allow comparison to the mean alpha and mean beta radioactivity results for the 10 locations.

Alpha Radioactivity Analyses

In the graph in Figure 3, it can be seen clearly that much less alpha radioactivity is found in river water as compared to groundwater. The Miller Farm, Blodgett Farm and Vernon Elementary School water is supplied by groundwater wells, and the mean alpha radioactivity results, particularly for the Blodgett Farm and Vernon Elementary School, seem to show the results of geologic contamination of the water from uranium, radium and other naturally occurring alpha radiation-emitting radioactive materials. Vermont Department of Health Laboratory analyses also indicate this is the case. The Brattleboro Fire Department water sample may be indicative of the effects of filtration and other water treatment processes on these naturally occurring alpha radiation-emitting materials.

The Connecticut River upstream sample results of 0.358 to 0.543 pCi per liter (pCi/l) may be useful as a sort of background relative to water samples taken near the Vermont Yankee Nuclear Power Station discharge area and downstream in the Connecticut River. The upstream samples are taken near Brattleboro. The samples more likely to be affected by Vermont Yankee Nuclear Power Station operations, near the discharge and downstream of the plant discharge are in the range of 0.232 to 0.800 pCi/l. Considering the results with their uncertainty at the 95 percent confidence level, there is little statistical difference between water samples in the discharge basin and downstream of

Vermont Yankee Nuclear Power Station as compared to water samples upstream of Vermont Yankee Nuclear Power Station.

Beta Radioactivity Analysis

In the graph in Figure 4, the characteristic results observed in the alpha radioactivity analyses are also seen with beta radioactivity. Specifically, the river water samples contain significantly less radioactivity as compared to the groundwater samples. Also like the alpha radioactivity sample results, the samples from the Connecticut River near the Vermont Yankee Nuclear Power Station discharge area and downstream of the plant, ranging from 0.549 pCi/l to 1.098 pCi/l, are not significantly different from the samples from the Connecticut River upstream of the station where the sample averages ranged between 0.938 and 1.202 pCi/l.

The well water samples, Blodgett and Miller Farm and Vernon Elementary School, also show the apparent effects of natural uranium and radium contamination of groundwater. In 2007, the Vermont Department of Health will analyze these water sources for uranium and radium routinely.

Gamma Spectroscopy

Gamma spectroscopy is a technique that allows for the identification and quantification of any radioactive material that emits gamma radiation. Most of the water samples, 84 of them, were found to be less than the lower limit of detection. Gamma radiation-emitting radioactive materials were identified in the remaining 34 samples, but all were naturally occurring radioactive materials. The gamma spectroscopy results for the water samples are found in Table 17. The lower limits of detection for water samples are listed in Table 19 below. The commonly identified natural radioactive materials may be found in Table 13 above.

Tritium Measurement Results

No tritium above the laboratory instrumentation lower limit of detection, 300 pCi/l, was identified in any of the groundwater, surface water or municipal water samples obtained by the Vermont Department of Health in 2006. The tritium analysis results are presented in Table 18.

Figure 3

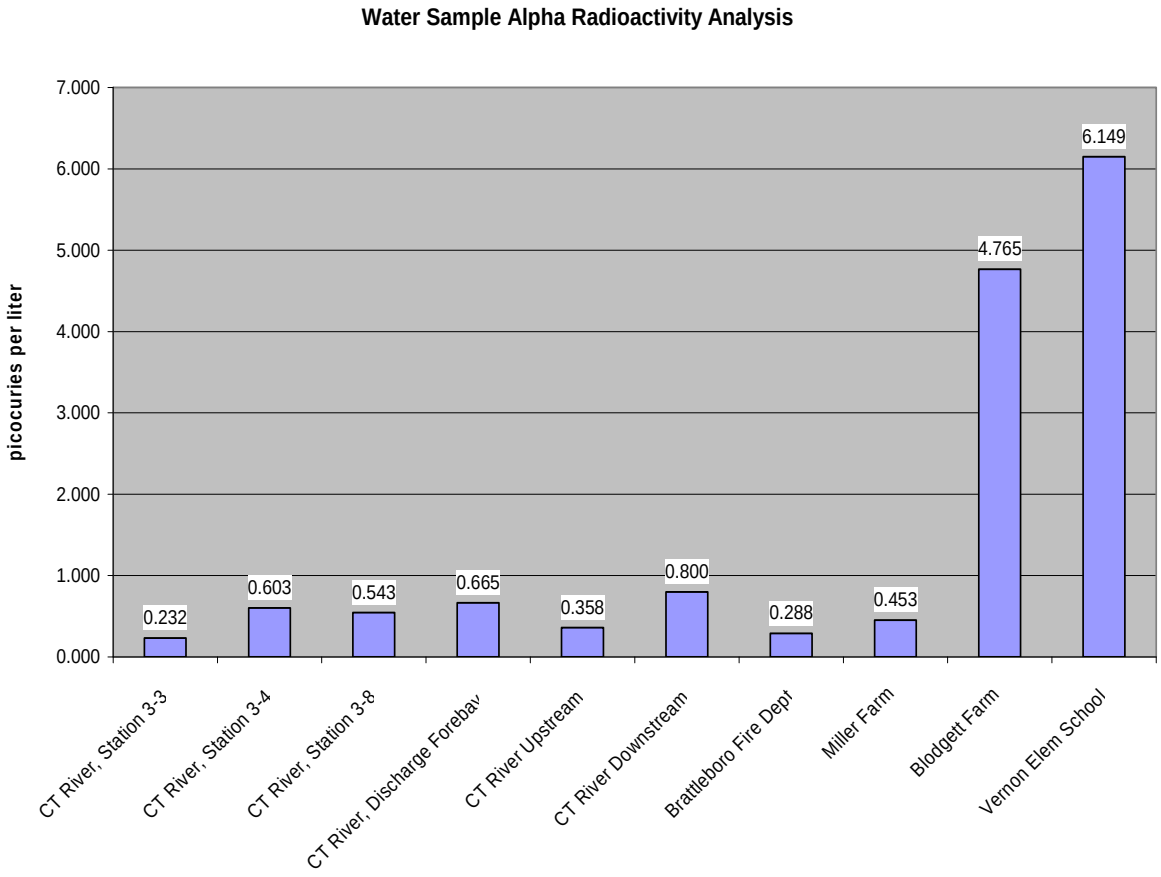
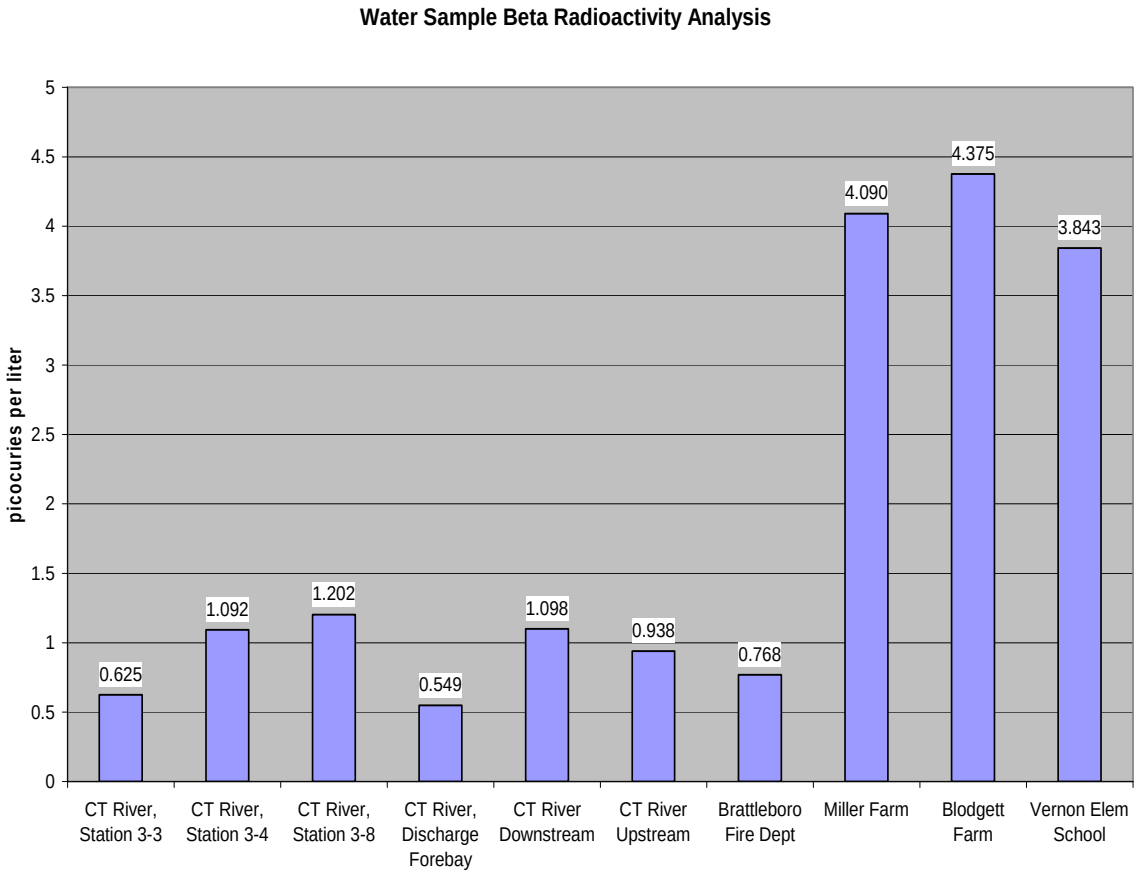

Water Sample Alpha Radioactivity Analysis
picocuries per liter
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
0.232
0.603
0.543
0.665
0.358
0.800
0.288
0.453
4.765
6.149
CT River, Station 3-3
CT River, Station 3-4
CT River, Station 3-8
CT River, Discharge Forebay
CT River Upstream
CT River Downstream
Brattleboro Fire Dept
Miller Farm
Blodgett Farm
Vernon Elem School

Figure 4


Water Sample Beta Radioactivity Analysis
picocuries per liter
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
0.625
1.092
1.202
0.549
1.098
0.938
0.768
4.090
4.375
3.843
CT River, Station 3-3
CT River, Station 3-4
CT River, Station 3-8
CT River, Discharge Forebay
CT River Downstream
CT River Upstream
Brattleboro Fire Dept
Miller Farm
Blodgett Farm
Vernon Elem School

Map 9

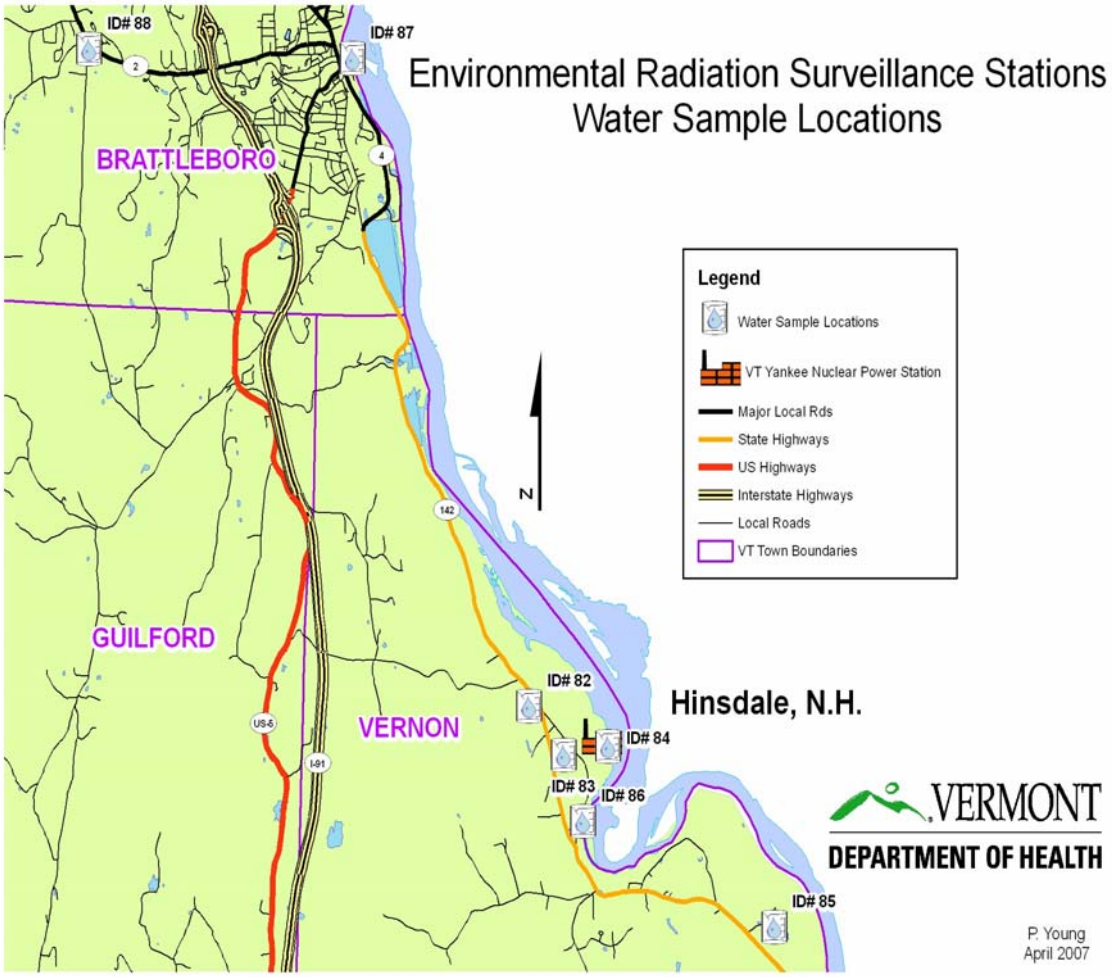

Environmental Radiation Surveillance Stations
Water Sample Locations
ID# 88
ID# 87
BRATTLEBORO
GUILFORD
VERNON
ID# 82
ID# 84
ID# 83
ID# 86
ID# 85
Hinsdale, N.H.
N
Legend
Water Sample Locations
VT Yankee Nuclear Power Station
Major Local Rds
State Highways
US Highways
Interstate Highways
Local Roads
VT Town Boundaries
VERMONT
DEPARTMENT OF HEALTH
P. Young
April 2007

Table 15. 2006 Water Sample Alpha Radioactivity Results

Sample Date	Sample Location	Map ID No.	Results pCi/l	Error pCi/l	Analysis Method
1/13/2006	CT River, Station 3-3	84A	1.14	1.55	EPA 900
1/13/2006	CT River, Station 3-4	84B	0	1.45	EPA 900
1/13/2006	CT River, Station 3-8	84C	1.65	1.52	EPA 900
1/13/2006	Discharge Forebay	84D	0.56	1.49	EPA 900
1/23/2006	Brattleboro Fire Dept	88	0.16	0.84	EPA 900
1/23/2006	CT River Downstream	86	2.76	1	EPA 900
1/23/2006	CT River Upstream	87	0.93	0.86	EPA 900
1/23/2006	Vernon Elem School	83	5.88	1.13	EERF 00-02
2/15/2006	CT River, Station 3-3	84A	0	0.78	EPA 900
2/15/2006	CT River, Station 3-4	84B	1.62	1.49	EPA 900
2/15/2006	CT River, Station 3-8	84C	0.27	1.41	EPA 900
2/15/2006	Discharge Forebay	84D	0.54	1.43	EPA 900
2/21/2006	Blodgett Farm	85	4.58	1.06	EERF 00-02
2/21/2006	Brattleboro Fire Dept	88	0.31	0.83	EPA 900
2/21/2006	CT River Downstream	86	0.82	1.46	EPA 900
2/21/2006	CT River Upstream	87	0.27	1.42	EPA 900
2/21/2006	Miller Farm	82	0.14	0.72	EERF 00-02
2/21/2006	Vernon Elem School	83	5.4	1.11	EERF 00-02
3/14/2006	CT River, Station 3-3	84A	1.7	1.39	EPA 900
3/14/2006	CT River, Station 3-4	84B	0.55	1.27	EPA 900
3/14/2006	CT River, Station 3-8	84C	1.94	1.38	EPA 900
3/14/2006	Discharge Forebay	84D	1.13	1.34	EPA 900
3/23/2006	Blodgett Farm	85	4.89	1.08	EERF 00-02
3/23/2006	Brattleboro Fire Dept	88	1.34	1.29	EPA 900
3/23/2006	CT River Downstream	86	1.61	1.31	EPA 900
3/23/2006	CT River Upstream	87	1.39	1.34	EPA 900
3/23/2006	Miller Farm	82	0	0.71	EERF 00-02
3/23/2006	Vernon Elem School	83	6.52	1.18	EERF 00-02
4/14/2006	CT River, Station 3-3	84A	0.52	1.13	EPA 900
4/14/2006	CT River, Station 3-4	84B	2.62	1.28	EPA 900
4/14/2006	CT River, Station 3-8	84C	0.67	0.45	EPA 900
4/14/2006	Discharge Forebay	84D	1.57	1.21	EPA 900
4/18/2006	Blodgett Farm	85	3.97	1.05	EERF 00-02
4/18/2006	Brattleboro Fire Dept	88	0.94	0.73	EPA 900
4/18/2006	CT River Downstream	86	1.67	1.28	EPA 900
4/18/2006	CT River Upstream	87	1.39	1.26	EPA 900
4/18/2006	Miller Farm	82	0.48	0.79	EERF 00-02
4/18/2006	Vernon Elem School	83	4.86	1.11	EERF 00-02

Table 15. 2006 Water Sample Alpha Radioactivity Results (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/l	Error pCi/l	Analysis Method
5/15/2006	CT River, Station 3-3	84A	1.04	1.44	EPA 900
5/15/2006	CT River, Station 3-4	84B	1.77	0.9	EPA 900
5/15/2006	CT River, Station 3-8	84C	2.3	0.96	EPA 900
5/15/2006	Discharge Forebay	84D	2.91	1	EPA 900
5/16/2006	Blodgett Farm	85	4.95	1.04	EERF 00-02
5/16/2006	Brattleboro Fire Dept	88	1.3	0.87	EPA 900
5/16/2006	CT River Downstream	86	1.1	0.9	EPA 900
5/16/2006	CT River Upstream	87	1.26	0.91	EPA 900
5/16/2006	Miller Farm	82	0.76	0.71	EERF 00-02
5/16/2006	Vernon Elem School	83	6.12	1.11	EERF 00-02
6/16/2006	CT River, Station 3-3	84A	0.31	0.84	EPA 900
6/16/2006	CT River, Station 3-4	84B	0	0.8	EPA 900
6/16/2006	CT River, Station 3-8	84C	-0.3	0.77	EPA 900
6/16/2006	Discharge Forebay	84D	0.3	0.81	EPA 900
6/19/2006	Blodgett Farm	85	5.61	1.1	EERF 00-02
6/19/2006	Brattleboro Fire Dept	88	0.56	1.52	EPA 900
6/19/2006	CT River Downstream	86	1.12	1.55	EPA 900
6/19/2006	CT River Upstream	87	-0.27	1.44	EPA 900
6/19/2006	Miller Farm	82	0.28	0.69	EERF 00-02
6/19/2006	Vernon Elem School	83	5.69	1.06	EERF 00-02
7/14/2006	CT River, Station 3-3	84A	0.28	1.46	EPA 900
7/14/2006	CT River, Station 3-4	84B	0.83	1.48	EPA 900
7/14/2006	CT River, Station 3-8	84C	0.84	1.49	EPA 900
7/14/2006	Discharge Forebay	84D	0.28	1.45	EPA 900
7/28/2006	Blodgett Farm	85	5.24	1.07	EERF 00-02
7/28/2006	Brattleboro Fire Dept	88	-0.29	1.46	EPA 900
7/28/2006	CT River Downstream	86	0	1.41	EPA 900
7/28/2006	CT River Upstream	87	0.84	1.49	EPA 900
7/28/2006	Miller Farm	82	0.07	0.65	EERF 00-02
7/28/2006	Vernon Elem School	83	4.26	1	EERF 00-02
8/15/2006	CT River, Station 3-3	84A	-0.82	1.4	EPA 900
8/15/2006	CT River, Station 3-4	84B	-0.28	1.45	EPA 900
8/15/2006	CT River, Station 3-8	84C	-1.11	1.4	EPA 900
8/15/2006	Discharge Forebay	84D	-0.28	1.44	EPA 900
8/30/2006	Blodgett Farm	85	5.96	1.12	EERF 00-02
8/30/2006	Brattleboro Fire Dept	88	0.29	1.54	EPA 900
8/30/2006	CT River Downstream	86	0.59	1.58	EPA 900
8/30/2006	CT River Upstream	87	0.57	1.55	EPA 900
8/30/2006	Miller Farm	82	0.35	0.69	EERF 00-02
8/30/2006	Vernon Elem School	83	5.52	1.12	EERF 00-02

Table 15. 2006 Water Sample Alpha Radioactivity Results (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/l	Error pCi/l	Analysis Method
9/15/2006	CT River, Station 3-3	84A	-0.87	1.4	EPA 900
9/15/2006	CT River, Station 3-4	84B	-0.85	1.37	EPA 900
9/15/2006	CT River, Station 3-8	84C	0	1.43	EPA 900
9/15/2006	Discharge Forebay	84D	-1.13	1.35	EPA 900
9/27/2006	Blodgett Farm	85	4.9	1.02	EERF 00-02
9/27/2006	Brattleboro Fire Dept	88	-0.34	0.84	EPA 900
9/27/2006	CT River Downstream	86	-0.31	1.51	EPA 900
9/27/2006	CT River Upstream	87	-1.5	1.41	EPA 900
9/27/2006	Miller Farm	82	0.92	0.69	EERF 00-02
9/27/2006	Vernon Elem School	83	7.89	1.21	EERF 00-02
10/13/2006	CT River, Station 3-3	84A	0	1.49	EPA 900
10/13/2006	CT River, Station 3-4	84B	0	1.47	EPA 900
10/13/2006	CT River, Station 3-8	84C	-1.17	1.47	EPA 900
10/13/2006	Discharge Forebay	84D	1.72	1.62	EPA 900
10/27/2006	Blodgett Farm	85	3.82	1	EERF 00-02
10/27/2006	Brattleboro Fire Dept	88	-0.27	1.39	EPA 900
10/27/2006	CT River Downstream	86	0	0.79	EPA 900
10/27/2006	CT River Upstream	87	-0.31	0.8	EPA 900
10/27/2006	Miller Farm	82	1.71	0.85	EERF 00-02
10/27/2006	Vernon Elem School	83	8.94	1.14	EERF 00-02
11/15/2006	CT River, Station 3-3	84A	0	0.8	EPA 900
11/15/2006	CT River, Station 3-4	84B	0.44	0.77	EPA 900
11/15/2006	CT River, Station 3-8	84C	0.9	0.81	EPA 900
11/15/2006	Discharge Forebay	84D	-0.15	0.73	EPA 900
11/22/2006	Blodgett Farm	85	4.6	1.08	EERF 00-02
11/22/2006	Brattleboro Fire Dept	88	-0.55	1.34	EPA 900
11/22/2006	CT River Downstream	86	-0.56	1.37	EPA 900
11/22/2006	CT River Upstream	87	-0.54	1.33	EPA 900
11/22/2006	Miller Farm	82	0	0.72	EERF 00-02
11/22/2006	Vernon Elem School	83	N/A		
12/15/2006	CT River, Station 3-3	84A	-0.52	1.25	EPA 900
12/15/2006	CT River, Station 3-4	84B	0.53	1.34	EPA 900
12/15/2006	CT River, Station 3-8	84C	0.53	1.34	EPA 900
12/15/2006	Discharge Forebay	84D	0.53	1.33	EPA 900
12/21/2006	Blodgett Farm	85	3.89	0.98	EERF 00-02
12/21/2006	Brattleboro Fire Dept	88	0	1.34	EPA 900
12/21/2006	CT River Downstream	86	0.8	1.37	EPA 900
12/21/2006	CT River Upstream	87	0.26	1.31	EPA 900
12/21/2006	Miller Farm	82	0.27	0.68	EERF 00-02
12/21/2006	Vernon Elem School	83	6.56	1.15	EERF 00-02

Table 16. 2006 Water Sample Beta Radioactivity Results

Sample Date	Sample Location	Map ID No.	Results pCi/l	Error pCi/l	Analysis Method
1/13/2006	CT River, Station 3-3	84A	0	1.78	EPA 900
1/13/2006	CT River, Station 3-4	84B	0.91	1.81	EPA 900
1/13/2006	CT River, Station 3-8	84C	0.76	1.8	EPA 900
1/13/2006	Discharge Forebay	84D	-0.46	1.77	EPA 900
1/23/2006	Brattleboro Fire Dept	88	0.91	0.92	EPA 900
1/23/2006	CT River Downstream	86	2.05	0.94	EPA 900
1/23/2006	CT River Upstream	87	0.53	0.9	EPA 900
1/23/2006	Vernon Elem School	83	2.89	1.86	EPA 900
2/15/2006	CT River, Station 3-3	84A	0.7	0.92	EPA 900
2/15/2006	CT River, Station 3-4	84B	1.86	1.86	EPA 900
2/15/2006	CT River, Station 3-8	84C	1.09	1.84	EPA 900
2/15/2006	Discharge Forebay	84D	-0.31	1.8	EPA 900
2/21/2006	Blodgett Farm	85	3.28	1.9	EPA 900
2/21/2006	Brattleboro Fire Dept	88	0.47	0.92	EPA 900
2/21/2006	CT River Downstream	86	-0.47	1.8	EPA 900
2/21/2006	CT River Upstream	87	-0.16	1.81	EPA 900
2/21/2006	Miller Farm	82	6.7	1.97	EPA 900
2/21/2006	Vernon Elem School	83	4.68	1.93	EPA 900
3/14/2006	CT River, Station 3-3	84A	0.8	1.87	EPA 900
3/14/2006	CT River, Station 3-4	84B	1.91	1.9	EPA 900
3/14/2006	CT River, Station 3-8	84C	1.91	1.9	EPA 900
3/14/2006	Discharge Forebay	84D	2.23	1.9	EPA 900
3/23/2006	Blodgett Farm	85	7.05	2.03	EPA 900
3/23/2006	Brattleboro Fire Dept	88	0.16	1.85	EPA 900
3/23/2006	CT River Downstream	86	1.11	1.88	EPA 900
3/23/2006	CT River Upstream	87	0.8	1.87	EPA 900
3/23/2006	Miller Farm	82	5.59	1.99	EPA 900
3/23/2006	Vernon Elem School	83	4.16	1.96	EPA 900
4/14/2006	CT River, Station 3-3	84A	0.15	1.73	EPA 900
4/14/2006	CT River, Station 3-4	84B	-0.15	1.73	EPA 900
4/14/2006	CT River, Station 3-8	84C	0.54	0.59	EPA 900
4/14/2006	Discharge Forebay	84D	0.29	1.74	EPA 900
4/18/2006	Blodgett Farm	85	3.54	1.82	EPA 900
4/18/2006	Brattleboro Fire Dept	88	1.47	0.9	EPA 900
4/18/2006	CT River Downstream	86	0.73	1.75	EPA 900
4/18/2006	CT River Upstream	87	0.88	1.75	EPA 900
4/18/2006	Miller Farm	82	3.97	1.83	EPA 900
4/18/2006	Vernon Elem School	83	1.62	1.78	EPA 900

Table 16. 2006 Water Sample Beta Radioactivity Results (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/l	Error pCi/l	Analysis Method
5/15/2006	CT River, Station 3-3	84A	0.62	1.8	EPA 900
5/15/2006	CT River, Station 3-4	84B	1.01	0.92	EPA 900
5/15/2006	CT River, Station 3-8	84C	2.73	0.96	EPA 900
5/15/2006	Discharge Forebay	84D	0.86	0.92	EPA 900
5/16/2006	Blodgett Farm	85	3.61	1.89	EPA 900
5/16/2006	Brattleboro Fire Dept	88	0.78	0.92	EPA 900
5/16/2006	CT River Downstream	86	1.48	0.93	EPA 900
5/16/2006	CT River Upstream	87	1.25	0.93	EPA 900
5/16/2006	Miller Farm	82	4.22	1.9	EPA 900
5/16/2006	Vernon Elem School	83	4.54	1.91	EPA 900
6/16/2006	CT River, Station 3-3	84A	1.17	0.91	EPA 900
6/16/2006	CT River, Station 3-4	84B	1.25	0.91	EPA 900
6/16/2006	CT River, Station 3-8	84C	0.93	0.9	EPA 900
6/16/2006	Discharge Forebay	84D	1.32	0.91	EPA 900
6/19/2006	Blodgett Farm	85	5.47	1.9	EPA 900
6/19/2006	Brattleboro Fire Dept	88	1.09	1.79	EPA 900
6/19/2006	CT River Downstream	86	0.78	1.78	EPA 900
6/19/2006	CT River Upstream	87	1.09	1.79	EPA 900
6/19/2006	Miller Farm	82	5.25	1.92	EPA 900
6/19/2006	Vernon Elem School	83	6.1	1.92	EPA 900
7/14/2006	CT River, Station 3-3	84A	0.47	1.83	EPA 900
7/14/2006	CT River, Station 3-4	84B	1.73	1.86	EPA 900
7/14/2006	CT River, Station 3-8	84C	0.94	1.84	EPA 900
7/14/2006	Discharge Forebay	84D	0.31	1.82	EPA 900
7/28/2006	Blodgett Farm	85	4.1	1.92	EPA 900
7/28/2006	Brattleboro Fire Dept	88	-0.47	1.8	EPA 900
7/28/2006	CT River Downstream	86	0.31	1.82	EPA 900
7/28/2006	CT River Upstream	87	0.63	1.83	EPA 900
7/28/2006	Miller Farm	82	3.15	1.89	EPA 900
7/28/2006	Vernon Elem School	83	2.53	1.89	EPA 900
8/15/2006	CT River, Station 3-3	84A	1.07	1.74	EPA 900
8/15/2006	CT River, Station 3-4	84B	0.31	1.72	EPA 900
8/15/2006	CT River, Station 3-8	84C	1.38	1.74	EPA 900
8/15/2006	Discharge Forebay	84D	1.07	1.74	EPA 900
8/30/2006	Blodgett Farm	85	3.4	1.81	EPA 900
8/30/2006	Brattleboro Fire Dept	88	1.53	1.75	EPA 900
8/30/2006	CT River Downstream	86	3.22	1.79	EPA 900
8/30/2006	CT River Upstream	87	2.3	1.77	EPA 900
8/30/2006	Miller Farm	82	4.91	1.83	EPA 900
8/30/2006	Vernon Elem School	83	4.17	1.83	EPA 900

Table 16. 2006 Water Sample Beta Radioactivity Results (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/l	Error pCi/l	Analysis Method
9/15/2006	CT River, Station 3-3	84A	0.15	1.81	EPA 900
9/15/2006	CT River, Station 3-4	84B	1.51	1.84	EPA 900
9/15/2006	CT River, Station 3-8	84C	-1.06	1.78	EPA 900
9/15/2006	Discharge Forebay	84D	-0.61	1.79	EPA 900
9/27/2006	Blodgett Farm	85	2.44	1.88	EPA 900
9/27/2006	Brattleboro Fire Dept	88	0.76	0.93	EPA 900
9/27/2006	CT River Downstream	86	1.21	1.84	EPA 900
9/27/2006	CT River Upstream	87	0.15	1.81	EPA 900
9/27/2006	Miller Farm	82	0.76	1.83	EPA 900
9/27/2006	Vernon Elem School	83	3.35	1.9	EPA 900
10/13/2006	CT River, Station 3-3	84A	1.1	1.87	EPA 900
10/13/2006	CT River, Station 3-4	84B	1.1	1.87	EPA 900
10/13/2006	CT River, Station 3-8	84C	3.15	1.92	EPA 900
10/13/2006	Discharge Forebay	84D	1.73	1.89	EPA 900
10/27/2006	Blodgett Farm	85	3.33	1.94	EPA 900
10/27/2006	Brattleboro Fire Dept	88	1.73	1.88	EPA 900
10/27/2006	CT River Downstream	86	1.97	0.97	EPA 900
10/27/2006	CT River Upstream	87	2.21	0.98	EPA 900
10/27/2006	Miller Farm	82	3.63	1.93	EPA 900
10/27/2006	Vernon Elem School	83	3.79	1.94	EPA 900
11/15/2006	CT River, Station 3-3	84A	0.95	0.95	EPA 900
11/15/2006	CT River, Station 3-4	84B	0.87	0.95	EPA 900
11/15/2006	CT River, Station 3-8	84C	0.63	0.95	EPA 900
11/15/2006	Discharge Forebay	84D	0.79	0.95	EPA 900
11/22/2006	Blodgett Farm	85	5.56	2	EPA 900
11/22/2006	Brattleboro Fire Dept	88	0.63	1.87	EPA 900
11/22/2006	CT River Downstream	86	1.26	1.89	EPA 900
11/22/2006	CT River Upstream	87	0.95	1.88	EPA 900
11/22/2006	Miller Farm	82	3.01	1.93	EPA 900
11/22/2006	Vernon Elem School	83	N/A		
12/15/2006	CT River, Station 3-3	84A	0.32	1.86	EPA 900
12/15/2006	CT River, Station 3-4	84B	0.79	1.87	EPA 900
12/15/2006	CT River, Station 3-8	84C	1.42	1.88	EPA 900
12/15/2006	Discharge Forebay	84D	-0.63	1.83	EPA 900
12/21/2006	Blodgett Farm	85	6.35	2.01	EPA 900
12/21/2006	Brattleboro Fire Dept	88	0.16	1.85	EPA 900
12/21/2006	CT River Downstream	86	-0.47	1.84	EPA 900
12/21/2006	CT River Upstream	87	0.63	1.87	EPA 900
12/21/2006	Miller Farm	82	3.8	1.94	EPA 900
12/21/2006	Vernon Elem School	83	4.44	1.96	EPA 900

Table 17. 2006 Water Sample Gamma Radioactivity Results

Sample Date	Sample Location	Map ID No.	Results pCi/l
1/13/2006	CT River, Station 3-3	84A	< LLD
1/13/2006	CT River, Station 3-4	84B	< LLD
1/13/2006	CT River, Station 3-8	84C	< LLD
1/13/2006	Discharge Forebay	84D	< LLD
1/23/2006	Brattleboro Fire Dept	86	< LLD
1/23/2006	CT River Downstream	87	< LLD
1/23/2006	CT River Upstream	82	< LLD
1/23/2006	Vernon Elem School	83	Natural
2/15/2006	CT River, Station 3-3	84A	< LLD
2/15/2006	CT River, Station 3-4	84B	< LLD
2/15/2006	CT River, Station 3-8	84C	< LLD
2/15/2006	Discharge Forebay	84D	< LLD
2/21/2006	Blodgett Farm	85	Natural
2/21/2006	Brattleboro Fire Dept	88	< LLD
2/21/2006	CT River Downstream	86	< LLD
2/21/2006	CT River Upstream	87	< LLD
2/21/2006	Miller Farm	82	Natural
2/21/2006	Vernon Elem School	83	Natural
3/14/2006	CT River, Station 3-3	84A	< LLD
3/14/2006	CT River, Station 3-4	84B	< LLD
3/14/2006	CT River, Station 3-8	84C	< LLD
3/14/2006	Discharge Forebay	84D	< LLD
3/23/2006	Blodgett Farm	85	Natural
3/23/2006	Brattleboro Fire Dept	88	< LLD
3/23/2006	CT River Downstream	86	< LLD
3/23/2006	CT River Upstream	87	< LLD
3/23/2006	Miller Farm	82	Natural
3/23/2006	Vernon Elem School	83	Natural
4/14/2006	CT River, Station 3-3	84A	< LLD
4/14/2006	CT River, Station 3-4	84B	< LLD
4/14/2006	CT River, Station 3-8	84C	< LLD
4/14/2006	Discharge Forebay	84D	< LLD
4/18/2006	Blodgett Farm	85	Natural
4/18/2006	Brattleboro Fire Dept	88	< LLD
4/18/2006	CT River Downstream	86	< LLD
4/18/2006	CT River Upstream	87	< LLD
4/18/2006	Miller Farm	82	Natural
4/18/2006	Vernon Elem School	83	Natural

LLD: Lower limits of detection

Table 17. 2006 Water Sample Gamma Radioactivity Results (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/l
5/15/2006	CT River, Station 3-3	84A	< LLD
5/15/2006	CT River, Station 3-4	84B	< LLD
5/15/2006	CT River, Station 3-8	84C	< LLD
5/15/2006	Discharge Forebay	84D	< LLD
5/16/2006	Blodgett Farm	85	Natural
5/16/2006	Brattleboro Fire Dept	88	< LLD
5/16/2006	CT River Downstream	86	< LLD
5/16/2006	CT River Upstream	87	< LLD
5/16/2006	Miller Farm	82	Natural
5/16/2006	Vernon Elem School	83	Natural
6/16/2006	CT River, Station 3-3	84A	< LLD
6/16/2006	CT River, Station 3-4	84B	< LLD
6/16/2006	CT River, Station 3-8	84C	< LLD
6/16/2006	Discharge Forebay	84D	< LLD
6/19/2006	Blodgett Farm	85	Natural
6/19/2006	Brattleboro Fire Dept	88	< LLD
6/19/2006	CT River Downstream	86	< LLD
6/19/2006	CT River Upstream	87	< LLD
6/19/2006	Miller Farm	82	Natural
6/19/2006	Vernon Elem School	83	Natural
7/14/2006	CT River, Station 3-3	84A	< LLD
7/14/2006	CT River, Station 3-4	84B	< LLD
7/14/2006	CT River, Station 3-8	84C	< LLD
7/14/2006	Discharge Forebay	84D	< LLD
7/28/2006	Blodgett Farm	85	Natural
7/28/2006	Brattleboro Fire Dept	88	< LLD
7/28/2006	CT River Downstream	86	< LLD
7/28/2006	CT River Upstream	87	< LLD
7/28/2006	Miller Farm	82	Natural
7/28/2006	Vernon Elem School	83	Natural
8/15/2006	CT River, Station 3-3	84A	< LLD
8/15/2006	CT River, Station 3-4	84B	< LLD
8/15/2006	CT River, Station 3-8	84C	< LLD
8/15/2006	Discharge Forebay	84D	< LLD
8/30/2006	Blodgett Farm	85	Natural
8/30/2006	Brattleboro Fire Dept	88	< LLD
8/30/2006	CT River Downstream	86	< LLD
8/30/2006	CT River Upstream	87	< LLD
8/30/2006	Miller Farm	82	Natural
8/30/2006	Vernon Elem School	83	Natural

LLD: Lower limits of detection

Table 17. 2006 Water Sample Gamma Radioactivity Results (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/l
9/15/2006	CT River, Station 3-3	84A	< LLD
9/15/2006	CT River, Station 3-4	84B	< LLD
9/15/2006	CT River, Station 3-8	84C	< LLD
9/15/2006	Discharge Forebay	84D	< LLD
9/27/2006	Blodgett Farm	85	Natural
9/27/2006	Brattleboro Fire Dept	88	< LLD
9/27/2006	CT River Downstream	86	< LLD
9/27/2006	CT River Upstream	87	< LLD
9/27/2006	Miller Farm	82	Natural
9/27/2006	Vernon Elem School	83	Natural
10/13/2006	CT River, Station 3-3	84A	< LLD
10/13/2006	CT River, Station 3-4	84B	< LLD
10/13/2006	CT River, Station 3-8	84C	< LLD
10/13/2006	Discharge Forebay	84D	< LLD
10/27/2006	Blodgett Farm	85	Natural
10/27/2006	Brattleboro Fire Dept	88	< LLD
10/27/2006	CT River Downstream	86	< LLD
10/27/2006	CT River Upstream	87	< LLD
10/27/2006	Miller Farm	82	Natural
10/27/2006	Vernon Elem School	83	Natural
11/15/2006	CT River, Station 3-3	84A	< LLD
11/15/2006	CT River, Station 3-4	84B	< LLD
11/15/2006	CT River, Station 3-8	84C	< LLD
11/15/2006	Discharge Forebay	84D	< LLD
11/22/2006	Blodgett Farm	85	Natural
11/22/2006	Brattleboro Fire Dept	88	< LLD
11/22/2006	CT River Downstream	86	< LLD
11/22/2006	CT River Upstream	87	< LLD
11/22/2006	Miller Farm	82	Natural
11/22/2006	Vernon Elem School	83	Natural
12/15/2006	CT River, Station 3-3	84A	< LLD
12/15/2006	CT River, Station 3-4	84B	< LLD
12/15/2006	CT River, Station 3-8	84C	< LLD
12/15/2006	Discharge Forebay	84D	< LLD
12/21/2006	Blodgett Farm	85	Natural
12/21/2006	Brattleboro Fire Dept	88	< LLD
12/21/2006	CT River Downstream	86	< LLD
12/21/2006	CT River Upstream	87	< LLD
12/21/2006	Miller Farm	82	Natural
12/21/2006	Vernon Elem School	83	Natural

LLD: Lower limits of detection

Table 18. 2006 Water Sample Tritium Results

Sample Date	Sample Location	Map ID No.	Results pCi/l
1/13/2006	CT River, Station 3-3	84A	< 300
1/13/2006	CT River, Station 3-4	84B	< 300
1/13/2006	CT River, Station 3-8	84C	< 300
1/13/2006	Discharge Forebay	84D	< 300
1/23/2006	Brattleboro Fire Dept	86	< 300
1/23/2006	CT River Downstream	87	< 300
1/23/2006	CT River Upstream	82	< 300
1/23/2006	Vernon Elem School	83	< 300
2/15/2006	CT River, Station 3-3	84A	< 300
2/15/2006	CT River, Station 3-4	84B	< 300
2/15/2006	CT River, Station 3-8	84C	< 300
2/15/2006	Discharge Forebay	84D	< 300
2/21/2006	Blodgett Farm	85	< 300
2/21/2006	Brattleboro Fire Dept	88	< 300
2/21/2006	CT River Downstream	86	< 300
2/21/2006	CT River Upstream	87	< 300
2/21/2006	Miller Farm	82	< 300
2/21/2006	Vernon Elem School	83	< 300
3/14/2006	CT River, Station 3-3	84A	< 300
3/14/2006	CT River, Station 3-4	84B	< 300
3/14/2006	CT River, Station 3-8	84C	< 300
3/14/2006	Discharge Forebay	84D	< 300
3/23/2006	Blodgett Farm	85	< 300
3/23/2006	Brattleboro Fire Dept	88	< 300
3/23/2006	CT River Downstream	86	< 300
3/23/2006	CT River Upstream	87	< 300
3/23/2006	Miller Farm	82	< 300
3/23/2006	Vernon Elem School	83	< 300
4/14/2006	CT River, Station 3-3	84A	< 300
4/14/2006	CT River, Station 3-4	84B	< 300
4/14/2006	CT River, Station 3-8	84C	< 300
4/14/2006	Discharge Forebay	84D	< 300
4/18/2006	Blodgett Farm	85	< 300
4/18/2006	Brattleboro Fire Dept	88	< 300
4/18/2006	CT River Downstream	86	< 300
4/18/2006	CT River Upstream	87	< 300
4/18/2006	Miller Farm	82	< 300
4/18/2006	Vernon Elem School	83	< 300

Table 18. 2006 Water Sample Tritium Results (continued

Sample Date	Sample Location	Map ID No.	Results pCi/l
5/15/2006	CT River, Station 3-3	84A	< 300
5/15/2006	CT River, Station 3-4	84B	< 300
5/15/2006	CT River, Station 3-8	84C	< 300
5/15/2006	Discharge Forebay	84D	< 300
5/16/2006	Blodgett Farm	85	< 300
5/16/2006	Brattleboro Fire Dept	88	< 300
5/16/2006	CT River Downstream	86	< 300
5/16/2006	CT River Upstream	87	< 300
5/16/2006	Miller Farm	82	< 300
5/16/2006	Vernon Elem School	83	< 300
6/16/2006	CT River, Station 3-3	84A	< 300
6/16/2006	CT River, Station 3-4	84B	< 300
6/16/2006	CT River, Station 3-8	84C	< 300
6/16/2006	Discharge Forebay	84D	< 300
6/19/2006	Blodgett Farm	85	< 300
6/19/2006	Brattleboro Fire Dept	88	< 300
6/19/2006	CT River Downstream	86	< 300
6/19/2006	CT River Upstream	87	< 300
6/19/2006	Miller Farm	82	< 300
6/19/2006	Vernon Elem School	83	< 300
7/14/2006	CT River, Station 3-3	84A	< 300
7/14/2006	CT River, Station 3-4	84B	< 300
7/14/2006	CT River, Station 3-8	84C	< 300
7/14/2006	Discharge Forebay	84D	< 300
7/28/2006	Blodgett Farm	85	< 300
7/28/2006	Brattleboro Fire Dept	88	< 300
7/28/2006	CT River Downstream	86	< 300
7/28/2006	CT River Upstream	87	< 300
7/28/2006	Miller Farm	82	< 300
7/28/2006	Vernon Elem School	83	< 300
8/15/2006	CT River, Station 3-3	84A	< 300
8/15/2006	CT River, Station 3-4	84B	< 300
8/15/2006	CT River, Station 3-8	84C	< 300
8/15/2006	Discharge Forebay	84D	< 300
8/30/2006	Blodgett Farm	85	< 300
8/30/2006	Brattleboro Fire Dept	88	< 300
8/30/2006	CT River Downstream	86	< 300
8/30/2006	CT River Upstream	87	< 300
8/30/2006	Miller Farm	82	< 300
8/30/2006	Vernon Elem School	83	< 300

Table 18. 2006 Water Sample Tritium Results (continued)

Sample Date	Sample Location	Map ID No.	Results pCi/l
9/15/2006	CT River, Station 3-3	84A	< 300
9/15/2006	CT River, Station 3-4	84B	< 300
9/15/2006	CT River, Station 3-8	84C	< 300
9/15/2006	Discharge Forebay	84D	< 300
9/27/2006	Blodgett Farm	85	< 300
9/27/2006	Brattleboro Fire Dept	88	< 300
9/27/2006	CT River Downstream	86	< 300
9/27/2006	CT River Upstream	87	< 300
9/27/2006	Miller Farm	82	< 300
9/27/2006	Vernon Elem School	83	< 300
10/13/2006	CT River, Station 3-3	84A	< 300
10/13/2006	CT River, Station 3-4	84B	< 300
10/13/2006	CT River, Station 3-8	84C	< 300
10/13/2006	Discharge Forebay	84D	< 300
10/27/2006	Blodgett Farm	85	< 300
10/27/2006	Brattleboro Fire Dept	88	< 300
10/27/2006	CT River Downstream	86	< 300
10/27/2006	CT River Upstream	87	< 300
10/27/2006	Miller Farm	82	< 300
10/27/2006	Vernon Elem School	83	< 300
11/15/2006	CT River, Station 3-3	84A	< 300
11/15/2006	CT River, Station 3-4	84B	< 300
11/15/2006	CT River, Station 3-8	84C	< 300
11/15/2006	Discharge Forebay	84D	< 300
11/22/2006	Blodgett Farm	85	< 300
11/22/2006	Brattleboro Fire Dept	88	< 300
11/22/2006	CT River Downstream	86	< 300
11/22/2006	CT River Upstream	87	< 300
11/22/2006	Miller Farm	82	< 300
11/22/2006	Vernon Elem School	83	< 300
12/15/2006	CT River, Station 3-3	84A	< 300
12/15/2006	CT River, Station 3-4	84B	< 300
12/15/2006	CT River, Station 3-8	84C	< 300
12/15/2006	Discharge Forebay	84D	< 300
12/21/2006	Blodgett Farm	85	< 300
12/21/2006	Brattleboro Fire Dept	88	< 300
12/21/2006	CT River Downstream	86	< 300
12/21/2006	CT River Upstream	87	< 300
12/21/2006	Miller Farm	82	< 300
12/21/2006	Vernon Elem School	83	< 300

Food Chain Sampling Results

Monitoring of the food chain involves direct monitoring of some foods such as milk, cultivated vegetation and fish. It also involves monitoring of the soil and sediment that support land and aquatic species, and natural vegetation like grass, ferns, and fungi that serves as feed to land animals.

Milk Sample Results for 2006

Cow's raw milk is sampled monthly from two farms in Vernon. One farm is about one-half mile north of Vermont Yankee Nuclear Power Station and the other is about three miles south of the plant. Map 10 shows the location of these two dairy farms.

Milk is analyzed for all gamma radiation-emitting radioactive materials, and a separate assessment for iodine-131 is conducted. Table 20 shows the iodine-131 results. The analysis found no iodine-131 greater than the lower limit of detection, which is 2.26 picocuries per liter (pCi/l).

As recorded in Table 21, the gamma spectroscopy of milk also revealed no nuclear facility-generated radioactive materials in excess of the counting system's lower limits of detection. The lower limits of detection for the radioactive materials are in Table 22.

The one radioactive material that was detected above its lower limit of detection was potassium-40, a primordial radioactive material. Primordial radioactive materials are those created with the formation of the earth and other cosmic features. Potassium-40 has a half-life of 1,280,000,000 years. The gamma spectroscopy results are presented in Table 21. The potassium-40 results for all milk samples, ranging from 1380 to 1670 pCi/l, fall within the historical range for potassium-40 of 1,200 to 2,000 pCi/l.

Vegetation Sample Results for 2006

A variety of natural and cultivated plants are sampled to verify that no Vermont Yankee Nuclear Power Station radioactive materials are accumulating in the human and animal food chains. In the spring of 2006, various grasses and ferns were sampled, while in the fall of 2006, corn was sampled from a farm in Vernon and fungi were sampled from Vernon Elementary School and Indian Point Park in Vernon. These locations are shown on Map 11.

The results of gamma spectroscopy are shown in Table 23. With the exception of the fungi samples, only natural beryllium-7 and potassium-40 were identified in excess of the counting system lower limit of detection. As described previously for the quarterly composite air filter gamma spectroscopy samples, beryllium-7 is a natural, cosmogenic radioactive material and, as described for the milk samples above, potassium-40 is a naturally-occurring, primordial radioactive material.

The fungi samples continue to indicate the environmental accumulation of cesium-137 from above-ground nuclear tests and the releases from Chernobyl after the reactor accident there in 1986. This conclusion that the cesium-137 is from those sources and not from Vermont Yankee Nuclear Power Station is drawn from the fact that the historical range of 30 year half-life cesium -137 in fungi has ranged from 50 to 9,000 picocuries per kilogram. The sample results for 2006 were 1390 picocuries per kilogram (pCi/kg), and this is closer to the lower end of the historical value range for cesium-137.

Soil Sample Results for 2006

Soil samples were also collected in the spring and fall of 2006. The locations for these samples, all in Vernon, are shown in Map 12. The samples were subjected to gamma spectroscopy like the air, water, milk, vegetation, sediment and fish samples. The results are presented in Table 24. Like the other samples, results greater than the lower limits of detection were primarily naturally-occurring beryllium-7 and potassium-40.

Five samples in the spring of 2006 also indicated cesium-137. The cesium-137 is near the historical range for cesium-137 in soil. Over the 35 years of soil sampling in the vicinity of Vermont Yankee Nuclear Power Station, the Vermont Department of Health has measured cesium-137 up to 1780 picocuries per kilogram (pCi/kg). The 2006 samples were between 52.5 and 548 pCi/kg. The Vermont Department of Health believes these cesium-137 radioactive materials are likely the result of human activities other than the operations at Vermont Yankee Nuclear Power Station. These activities include atmospheric nuclear weapons testing and the release following the accident in Chernobyl in 1986. The lower limits of detection for soil samples are Table 22 below.

Sediment Sample Results for 2006

Sediment samples are taken from the bottom of the Connecticut River by an environmental contractor. The samples in this report are analyzed by the Vermont Department of Health Laboratory. The sediment samples are taken from four areas of the Connecticut River. The first is near what is called the North Storm Drain. It is an area where radioactive sedimentary contaminants from Vermont Yankee Nuclear Power Station were discovered prior to 1998, and it is an area just east of the plant stack. Sample locations S-1, S-2, T-1, T-2, T-3, U-1, U-2, U-3, U-4, V-1, V-2, V-3, V-4, V-5, W-4, W-5 and X-5 are from this North Storm Drain area.

The second location is in the pool upstream of the Vernon Dam, near the primary plant discharge at the south end of the plant property near the cooling towers. In Table 25, the samples for location 3-4 are from this part of the Connecticut River. The third location, 3-3, is south of the Vernon Dam in the pool created downstream of the hydroelectric facility there, while the final sample location, 3-8, is well upstream of the plant where the Route 9 highway bridge crosses the Connecticut River north of Brattleboro.

Two sets of samples are obtained, one set in the spring and one set in the fall. A sediment sample is taken with a mass ranging from 0.75 to 1.25 kilograms. At the Vermont Department of Health Laboratory, the sample is dried, weighed on a top-loaded balance

and placed in a 500 milliliter high density polyethylene bottle. The sample is counted on the gamma spectrometer system using a reverse germanium detector. A normal spectrum will include naturally occurring, primordial radioactive materials such as potassium-40, cosmogenic, naturally occurring radioactive materials such as beryllium-7, and archival cesium-137 from past atmospheric nuclear weapons testing and the releases from Chernobyl. North Storm Drain samples in the past included trace amounts of cobalt-60.

For 2006, cosmogenic beryllium-7 is within the historical range of the lower limit of detection to 3,000 picocuries per kilogram (pCi/kg) at 513 – 863 pCi/kg, Primordial potassium-40 is within the historical range of 6,000 – 26,000 pCi/kg at 8,840 – 24,500 pCi/kg. The archival cesium-137 is within the historical range of the lower limit of detection to 500 pCi/kg at 65 – 230 pCi/kg. There were no other radioactive materials in excess of the counting system's lower limits of detection. The lower limits of detection for sediment are the same as those for soil, and shown in Table 22.

Fish Sample Results for 2006

Table 26 presents the results of gamma spectroscopy of fish samples. The fish were obtained from the Connecticut River by an environmental contractor. The fish samples were analyzed by the Vermont Department of Health Laboratory. Table 25 shows that the only results in excess of the counting system's lower limits of detection were for naturally occurring, cosmogenic potassium-40. Potassium-40 in 2006, ranging from 2,920 to 3,440 pCi/kg falls within the historical range for these samples: 1,000 – 5,000 pCi/kg.

Location 3-4 in the table above corresponds with the Vernon Pond, the basin formed by the Vernon Dam on the Connecticut River just downstream from Vermont Yankee Nuclear Power Station. Location 3-8 is near the Route 9 highway bridge north of Brattleboro. Fish are captured via an electroshock method. The fish are frozen whole, weighed and chopped or blended for loading into a reentrant beaker. The sample of about

one kilogram is then analyzed with a gamma spectrometer system using a reverse electrode germanium detector.

Table 19. Gamma Spectroscopy Lower Limits of Detection for Milk, Water, Vegetation and Fish Samples

Radioactive material	Lower Limit of Detection
Cerium-144	2.16 pCi/l
Cerium-141	2.21 pCi/l
Cerium-139	2.24 pCi/l
Chromium-51	2.31 pCi/l
Barium-133	2.31 pCi/l
Iodine-131	2.26 pCi/l
Antimony-126	2.14 pCi/l
Ruthenium-103	2.59 pCi/l
Strontium-85	3.59 pCi/l
Antimony-124	2.56 pCi/l
Cesium-134	2.61 pCi/l
Ruthenium-106	2.44 pCi/l
Cesium-137	2.49 pCi/l
Cesium-134	2.76 pCi/l
Cesium-136	2.78 pCi/l
Manganese-54	2.50 pCi/l
Cobalt-56	2.80 pCi/l
Yttrium-88	2.81 pCi/l
Zinc-65	3.31 pCi/l
Cobalt-60	3.04 pCi/l
Potassium-40	4.26 pCi/l

Map 10

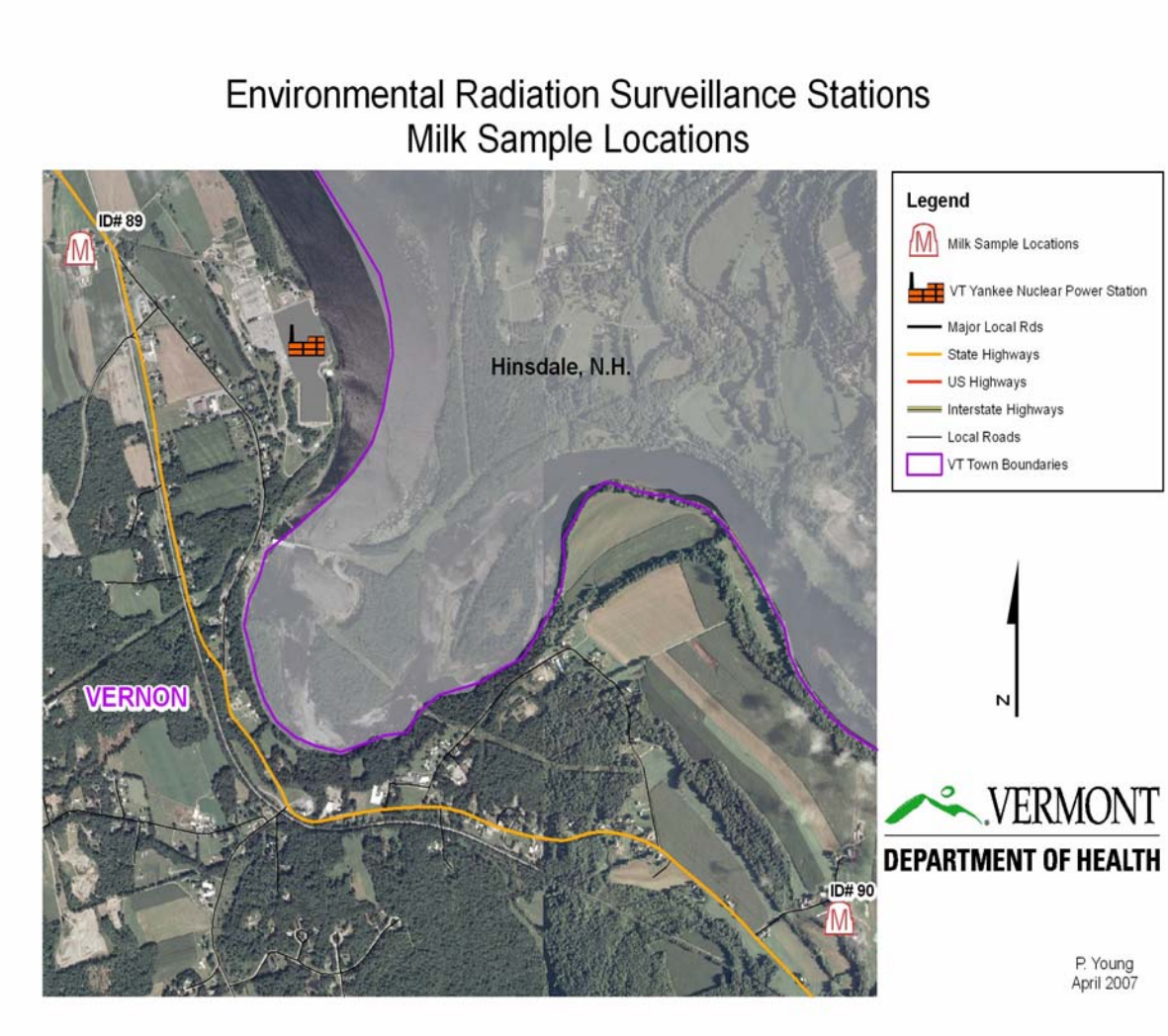

Environmental Radiation Surveillance Stations
Milk Sample Locations
ID# 89
Hinsdale, N.H.
VERNON
ID# 90
Legend
Milk Sample Locations
VT Yankee Nuclear Power Station
Major Local Rds
State Highways
US Highways
Interstate Highways
Local Roads
VT Town Boundaries
N
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Table 20. 2006 Milk Sample Iodine-131 Results

Sample Date	Sample Location	Map ID No.	Results Nuclides	Results pCi/l	Error pCi/l
1/23/2006	Blodgett Farm	90	I-131	< 2.26	N/A
1/23/2006	Miller Farm	89	I-131	< 2.26	N/A
2/21/2006	Blodgett Farm	90	I-131	< 2.26	N/A
2/21/2006	Miller Farm	89	I-131	< 2.26	N/A
3/23/2006	Blodgett Farm	90	I-131	< 2.26	N/A
3/23/2006	Miller Farm	89	I-131	< 2.26	N/A
4/18/2006	Blodgett Farm	90	I-131	< 2.26	N/A
4/18/2006	Miller Farm	89	I-131	< 2.26	N/A
5/16/2006	Blodgett Farm	90	I-131	< 2.26	N/A
5/16/2006	Miller Farm	89	I-131	< 2.26	N/A
6/19/2006	Blodgett Farm	90	I-131	< 2.26	N/A
6/19/2006	Miller Farm	89	I-131	< 2.26	N/A
7/28/2006	Blodgett Farm	90	I-131	< 2.26	N/A
7/28/2006	Miller Farm	89	I-131	< 2.26	N/A
8/30/2006	Blodgett Farm	90	I-131	< 2.26	N/A
8/30/2006	Miller Farm	89	I-131	< 2.26	N/A
9/27/2006	Blodgett Farm	90	I-131	< 2.26	N/A
9/27/2006	Miller Farm	89	I-131	< 2.26	N/A
10/26/2006	Blodgett Farm	90	I-131	< 2.26	N/A
10/26/2006	Miller Farm	89	I-131	< 2.26	N/A
11/22/2006	Blodgett Farm	90	I-131	< 2.26	N/A
11/22/2006	Miller Farm	89	I-131	< 2.26	N/A
12/21/2006	Blodgett Farm	90	I-131	< 2.26	N/A
12/21/2006	Miller Farm	89	I-131	< 2.26	N/A

Table 21. 2006 Milk Sample Gamma Radioactivity Results

Sample Date	Sample Location	Map ID No.	Results Nuclides	Results pCi/l	Error pCi/l
1/23/2006	Blodgett Farm	90	K-40	1540	120
1/23/2006	Miller Farm	89	K-40	1490	100
2/21/2006	Blodgett Farm	90	K-40	1480	100
2/21/2006	Miller Farm	89	K-40	1560	120
3/23/2006	Blodgett Farm	90	K-40	1380	90
3/23/2006	Miller Farm	89	K-40	1490	120
4/18/2006	Blodgett Farm	90	K-40	1440	100
4/18/2006	Miller Farm	89	K-40	1450	100
5/16/2006	Blodgett Farm	90	K-40	1650	120
5/16/2006	Miller Farm	89	K-40	1410	100
6/19/2006	Blodgett Farm	90	K-40	1430	100
6/19/2006	Miller Farm	89	K-40	1590	100
7/28/2006	Blodgett Farm	90	K-40	1540	100
7/28/2006	Miller Farm	89	K-40	1530	110
8/30/2006	Blodgett Farm	90	K-40	1450	100
8/30/2006	Miller Farm	89	K-40	1450	100
9/27/2006	Blodgett Farm	90	K-40	1570	100
9/27/2006	Miller Farm	89	K-40	1480	100
10/26/2006	Blodgett Farm	90	K-40	1640	130
10/26/2006	Miller Farm	89	K-40	1660	110
11/22/2006	Blodgett Farm	90	K-40	1670	130
11/22/2006	Miller Farm	89	K-40	1380	100
12/21/2006	Blodgett Farm	90	K-40	1600	130
12/21/2006	Miller Farm	89	K-40	1420	100

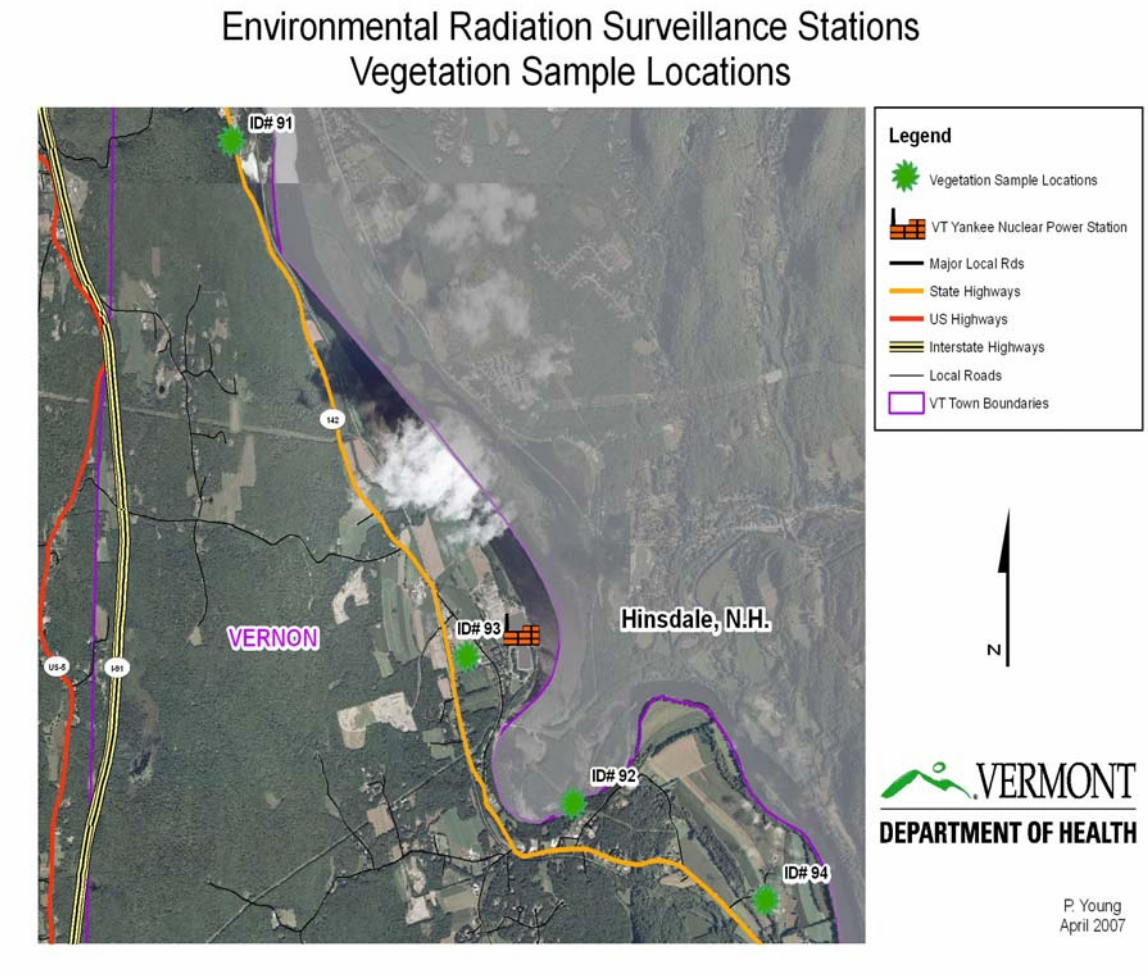
Table 22. Lower Limits of Detection for Soil and Sediment Samples

Radioactive material	Lower Limit of Detection
Beryllium-7	11.2 pCi/kg
Cesium-134	12.3 pCi/kg
Silver-110m	13.7 pCi/kg
Cesium-137	14.3 pCi/kg
Manganese-54	15.4 pCi/kg
Cobalt-60	19.3 pCi/kg
Potassium-40	11.3 pCi/kg

Table 23. 2006 Vegetation Gamma Radioactivity Results

Sample Date	Sample Location	Map ID No.	Results pCi/kg	Error pCi/kg	Results Nuclides	Comment
5/16/2006	Blodgett Farm	94	1850	340	Be-7	Grass
5/16/2006	Blodgett Farm	94	4330	550	K-40	Grass
5/16/2006	Power Line River Crossing	92	2530	290	K-40	Fern
5/16/2006	Vernon Elementary School	93	1950	260	Be-7	Grass
5/16/2006	Vernon Elementary School	93	4270	450	K-40	Grass
9/27/2006	Power Line River Crossing	92	4880	260	K-40	Grass
9/27/2006	Power Line River Crossing	92	1860	260	Be-7	Grass
9/27/2006	Blodgett Farm	94	3410	270	K-40	Corn
9/27/2006	Blodgett Farm	94	386	88	Be-7	Corn
9/27/2006	Vernon Indian Point Park	91	5700	480	K-40	Fungi
9/27/2006	Vernon Indian Point Park	91	1390	90	Cs-137	Fungi
9/27/2006	Vernon Elementary School	93	3350	430	K-40	Fungi
9/27/2006	Vernon Elementary School	93	480	174	Be-7	Fungi

Map 11


Environmental Radiation Surveillance Stations
Vegetation Sample Locations
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VERNON
ID# 93
Hinsdale, N.H.
ID# 92
ID# 94
Legend
Vegetation Sample Locations
VT Yankee Nuclear Power Station
Major Local Rds
State Highways
US Highways
Interstate Highways
Local Roads
VT Town Boundaries
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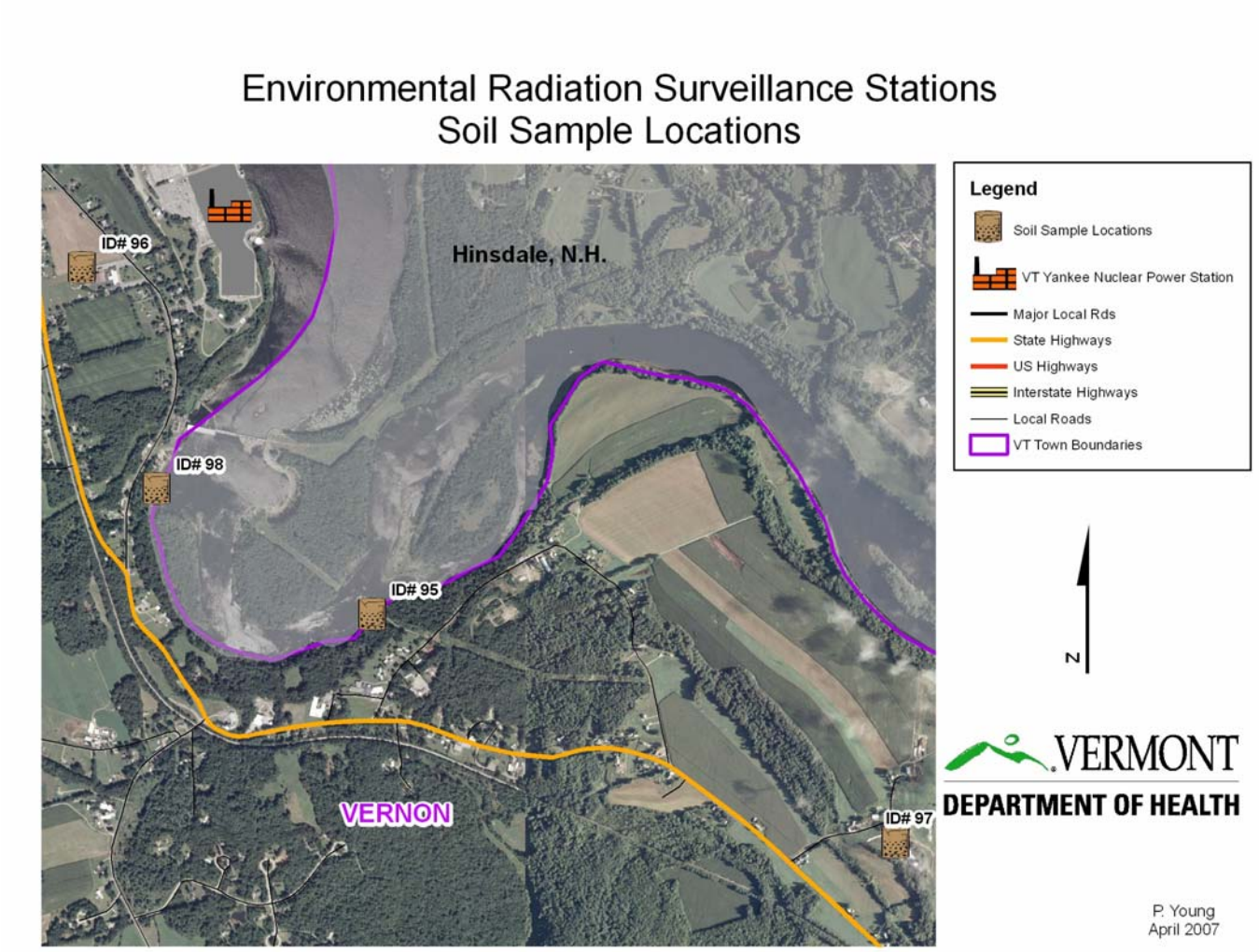
Table 24. 2006 Soil Sample Gamma Radioactivity Results

Sample Date	Sample Location	Map ID No.	Results pCi/kg	Error pCi/kg	Results Nuclides
5/16/2006	Power Line River Crossing	95	12700	800	K-40
5/16/2006	Power Line River Crossing	95	281	223	Be-7
5/16/2006	Power Line River Crossing	95	52.5	28.8	Cs-137
5/16/2006	Blodgett Farm	97	84.7	26.8	Cs-137
5/16/2006	Blodgett Farm	97	11500	700	K-40
5/16/2006	Blodgett Farm	97	345	144	Be-7
5/16/2006	Vernon Elementary School	96	11400	700	K-40
5/16/2006	Vernon Elementary School	96	74.7	19	Cs-137
9/27/2006	Power Line River Crossing	95	4880	260	K-40
9/27/2006	Power Line River Crossing	95	1830	360	Be-7
9/27/2006	CT River Downstream	98	13100	900	K-40
9/27/2006	CT River Downstream	98	352	46	Cs-137
9/27/2006	Vernon Indian Point Park	91	12100	1000	K-40
9/27/2006	Vernon Indian Point Park	91	548	54	Cs-137
9/27/2006	Vernon Elementary School	96	12100	700	K-40
9/27/2006	Vernon Elementary School	96	62.9	18.2	Be-7

Map 12


Environmental Radiation Surveillance Stations
Soil Sample Locations
ID# 96
Hinsdale, N.H.
ID# 98
ID# 95
VERNON
ID# 97
Legend
Soil Sample Locations
VT Yankee Nuclear Power Station
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US Highways
Interstate Highways
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Table 25. 2006 Sediment Sample Gamma Radioactivity Results

Sample Date	Sample Location	Results Nuclides	Results pCi/kg	Error pCi/kg	Comment
5/5/2006	T-1	K-40	12400	700	Natural
5/5/2006	**T-1**	Cs-137	106	27	
5/5/2006	T-2	K-40	11400	700	Natural
5/5/2006	T-2	Cs-137	66.7	21.5	
5/5/2006	T-3	K-40	16900	1000	Natural
5/5/2006	T-3	Cs-137	203	44	
5/5/2006	U-2	K-40	19400	1200	Natural
5/5/2006	U-2	Cs-137	138	32	
5/5/2006	U-3	K-40	21000	1300	Natural
5/5/2006	U-3	Cs-137	119	34	
5/5/2006	U-4	K-40	16400	1000	Natural
5/5/2006	U-4	Cs-137	94.5	33.9	
5/5/2006	V-3	K-40	20500	1200	Natural
5/5/2006	V-3	Cs-137	171	43	
5/5/2006	V-4	K-40	17700	1100	Natural
5/5/2006	V-4	Cs-137	121	43	
5/5/2006	V-5	K-40	16500	1000	Natural
5/5/2006	V-5	Cs-137	134	30	
5/5/2006	W-4	K-40	17700	1200	Natural
5/5/2006	W-4	Cs-137	112	43	
5/5/2006	V-1	K-40	12800	800	
5/5/2006	W-5	K-40	17200	1000	Natural
5/5/2006	W-5	Cs-137	161	44	
5/5/2006	X-5	K-40	17800	1100	Natural
5/5/2006	X-5	Cs-137	99.9	34.6	
5/5/2006	3-3	K-40	12600	800	Natural
5/5/2006	3-3	Be-7	513	268	
5/5/2006	3-4	K-40	14200	900	Natural
5/5/2006	3-4	Cs-137	78.7	25.5	
5/5/2006	S-1	K-40	24500	1600	Natural
5/5/2006	S-1	Cs-137	230	62	
5/5/2006	S-2	K-40	21600	1300	Natural
5/5/2006	S-2	Cs-137	159	41	
5/5/2006	3-8	K-40	11200	700	Natural

Table 25. 2006 Sediment Sample Gamma Radioactivity Results (continued)

Sample Date	Sample Location	Results Nuclides	Results pCi/kg	Error pCi/kg	Comment
10/19/2006	X-5	K-40	19100	1300	Natural
10/19/2006	X-5	Cs-137	164	45	
10/19/2006	U-2	K-40	19900	1200	Natural
10/19/2006	U-2	Cs-137	127	35	
10/19/2006	3-4	K-40	13600	1000	Natural
10/19/2006	3-4	Cs-137	68.5	24.8	
10/19/2006	S-1	K-40	20300	1200	Natural
10/19/2006	S-1	Cs-137	137	44	
10/19/2006	U-3	K-40	19400	1300	Natural
10/19/2006	U-3	Cs-137	178	44	
10/19/2006	S-2	K-40	12500	800	Natural
10/19/2006	S-2	Cs-137	59.5	25.9	
10/19/2006	U-4	K-40	19100	1300	Natural
10/19/2006	U-4	Cs-137	132	41	
10/19/2006	T-1	K-40	10900	700	Natural
10/19/2006	T-1	Cs-137	65.5	21.5	
10/19/2006	V-3	K-40	22200	1500	Natural
10/19/2006	V-3	Cs-137	143	37	
10/19/2006	T-2	K-40	17100	1100	Natural
10/19/2006	T-2	Cs-137	162	39	
10/19/2006	T-2	Be-7	862	437	
10/19/2006	V-4	K-40	22400	1500	Natural
10/19/2006	V-4	Cs-137	137	41	
10/19/2006	T-3	K-40	20500	1200	Natural
10/19/2006	T-3	Cs-137	158	41	
10/19/2006	V-5	K-40	19400	1400	Natural
10/19/2006	V-5	Cs-137	98	33.7	
10/19/2006	U-1	K-40	14400	1000	Natural
10/19/2006	U-1	Cs-137	98.5	27.5	
10/19/2006	W-4	K-40	20100	1400	Natural
10/19/2006	W-4	Cs-137	159	37	
10/19/2006	3-8	K-40	17300	1000	Natural
10/19/2006	3-8	Cs-137	68.5	29.7	
10/19/2006	W-5	K-40	19100	1200	Natural
10/19/2006	W-5	Cs-137	88.1	36.3	
10/19/2006	3-3	K-40	8840	610	Natural

Table 26. 2006 Fish Sample Gamma Radioactivity Results

Sample Date	Sample Location	Results pCi/kg	Error pCi/kg	Results Nuclides
5/4/2006	3-8	3440	310	K-40
5/22/2006	3-4	3100	240	K-40
11/9/2006	3-8	2920	220	K-40
10/18/2006	3-4	3040	280	K-40