

List of Tables, Figures and Maps

Tables

<u>Table</u>	<u>Page</u>
Table 1: Summary of 2008 Samples, Analyses and Results	9
Table 2: Cancer Incidence Rates near VYNPS, in Vermont and in U.S.	15
Table 3: Cancer Mortality Rates near VYNPS, in Vermont and in U.S.	19
Table 4: Mean Direct Gamma Radiation Background in 2008	33
Table 5a: VYNPS Site Boundary/Plant Area TLD Exposure Results, 2008	38
Table 5b: VYNPS Site Boundary/Plant Area Dose Equiv. Results, 2008	40
Table 6a: Net VYNPS Background TLD Exposure Results for 2008	45
Table 6b: Net VYNPS Background Dose Equivalent Results for 2008	47
Table 7: 2008 Air Sample Alpha Radioactivity Results	56
Table 8: 2008 Air Sample Beta Radioactivity Results	60
Table 9: 2008 Air Sample Radioactive Iodine-131 Results	64
Table 10: 2008 Air Sample Gamma Radioactivity Results	67
Table 11: 2008 Air Sample Quarterly Composite Results	70
Table 12: Common Natural Gamma Radiation Emitters	70
Table 13: Nuclear Facility Gamma Radiation Emitters	70
Table 14: 2008 Water Sample Alpha Radioactivity Results	85
Table 15: 2008 Water Sample Beta Radioactivity Results	88
Table 16: 2008 Water Sample Gamma Radioactivity Results	91
Table 17: 2008 Water Sample Tritium Results	94
Table 18: 2008 On-Site Groundwater Sample Results	97
Table 19: Gamma Spectroscopy Calculated Limits of Detection for Milk, Water, Vegetation and Fish Samples	103
Table 20: 2008 Milk Sample Iodine-131 Results	105
Table 21: 2008 Milk Sample Gamma Radioactivity Results	106

Tables (Continued)

<u>Table</u>	<u>Page</u>
Table 22: Calculated Limits of Detection for Soil and Sediment Samples	107
Table 23: 2008 Vegetation Gamma Radioactivity Results	108
Table 24: 2008 Soil Sample Gamma Radioactivity Results	112
Table 25: 2008 Sediment Sample Gamma Radioactivity Results	119
Table 26: 2008 Fish Sample Gamma Radioactivity Results	121

Figures

<u>Figure</u>	<u>Page</u>
Figure 1: 2008 Mean Alpha Radioactivity in Air Around VYNPS	59
Figure 2: 2008 Mean Beta Radioactivity in Air Around VYNPS	63
Figure 3: Water Sample Alpha Radioactivity Results	78
Figure 4: Water Sample Beta Radioactivity Results	79
Figure 5: Comparative Radium-226 in Water	80
Figure 6: Comparative Radium-228 in Water	81
Figure 7: Comparative Uranium in Water	82
Figure 8: Comparative Beryllium-7 in Vegetation	109
Figure 9: Comparative Potassium-40 in Vegetation	110
Figure 10: Comparative Cesium-137 in Soil Samples	113
Figure 11: Comparative Potassium-40 in Soil Samples	114
Figure 12: Sediment Sample Locations	116
Figure 13: Comparative Sediment Potassium-40 Results	117
Figure 14: Comparative Sediment Cesium-137 Results	118

Maps

<u>Map</u>	<u>Page</u>
Map 1: All Samples, All Locations	10
Map 2: All Sample Locations in Vernon, Vermont	11
Map 3: Site Boundary Dosimeter Locations	42
Map 4: Plant Area Dosimeter Locations	43
Map 5: Site Boundary and Plant Area Dosimeter Locations	44
Map 6: Background Dosimeter Locations	49
Map 7: Background Dosimeter Locations Near Vernon, Vermont	50
Map 8: Air Sample Locations	55
Map 9: Water Sample Locations	83
Map 10: Sample Locations Near Randolph, Vermont	84
Map 11: Milk Sample Locations	104
Map 12: Vegetation Sample Locations	111
Map 13: Soil Sample Locations	115