

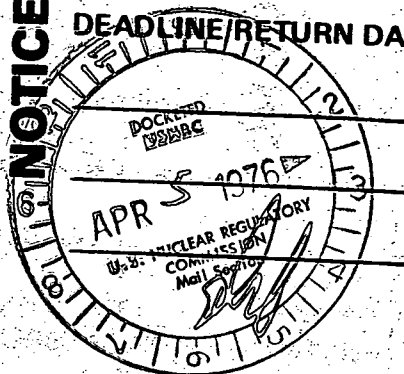
INDIAN POINT NUCLEAR GENERATING STATION
UNITS NOS. 1 & 2

ANNUAL ENVIRONMENTAL OPERATING REPORT

PART B

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NOTICE

MARY JINKS, CHIEF
CENTRAL RECORDS STATION

3899

January 1, 1975 - December 31, 1975

Environmental Radioactivity

This report gives the results of the radiological environmental monitoring program conducted at Indian Point Station for the reporting period January 1, 1975 through December 31, 1975. Results of the monitoring program are presented by calendar quarter in compliance with and in the format required by Technical Specifications for the site as contained in Appendix B to the Unit Nos. 1 and 2 Operating Licenses.

A two phase environmental surveillance program was in effect at Indian Point Station during the report year. The phase of the program being conducted at any given time depends on the level of liquid and gaseous releases from the site. For the period in question, the level of liquid and gaseous was so low that initiation of Phase II was not required. However, Technical Specifications require that irrespective of release levels, Phase II shall be conducted once each year for a three month consecutive period. Therefore, in accordance with this requirement, Phase II was conducted during the months of March, April, and May of 1975.

The frequencies shown in the following tables reflect the requirements of Phase I. However, during Phase II, samples were collected and analyzed according to Phase II requirements although they are not shown in the table. The numbers in the remarks column reflect the number of samples out of the total which had positive values. In addition, the Verplanck well sample became unavailable after June of 1975 due to the death of the owner and the inability to locate another location.

TABLE 1.0

1st QUARTER - 1975

MEDIUM	NO. OF SAMPLE LOCATIONS	TOTAL NO. OF SAMPLE	NO. OF LOCATIONS WHERE LEVEL SIGNIF. ABOVE BACKGROUND*	METHOD OF MEASUREMENT
1. External Radiation	20	60	None	TLD
2. Air Particulate	14	174	None	Gross Beta gas flow proportional counter; Ge(Li) system; NaI system; Sr 89, 90 Radio-chemical analysis
3. Water			None	Same as #2; Tritium liquid scintillation counter
a. Drinking Water	2	8	None	
b. Surface Water	3	12	None	
c. Well Water	3	12	None	
d. Hudson River	2	122	None	
4. Fallout	6	18	None	Same as #3
5. Milk	3	12	None	Same as #2; Tritium-gas counting; I-131 Radio-chemical Analysis
6. Fish	1	8	None	Same as #2
7. Other				
a. Soil	5	5	None	Same as #2

* As required by section 5.6.E.2.e

Table 1.1

External Radiation (mR)
Period 1/1/75 - 3/31/75

<u>Location</u>	<u>Type</u>	<u>Frequency</u>	<u>Quarterly Results</u>
Environmental Laboratory Onsite-SSE	Continuous	Monthly	11.4+7.9
Dock Onsite-West	Continuous	Monthly	10.5+6.8
Algonquin 0.25 miles-South	Continuous	Monthly	10.9+4.0
Onsite Pole South	Continuous	Monthly	9.5+3.0
Service Building Onsite SSE	Continuous	Monthly	14.2+9.9
Water Meter House Onsite East	Continuous	Monthly	10.1+3.1
NYU Tower 1 mile SSE	Continuous	Monthly	11.4+3.7
Standard Brands 0.75 mile NNE	Continuous	Monthly	11.9+3.5
Factory St. Substation 1 mile ESE	Continuous	Monthly	10.5+3.3
Hamilton St Substation 3 miles NNE	Continuous	Monthly	11.2+6.5
Southeast Corner Onsite - SE	Continuous	Monthly	11.4+3.9
Bleakley & Broadway Onsite East	Continuous	Monthly	10.4+5.6
Old Dump 0.5 mile ENE	Continuous	Monthly	8.8+4.2
Verplanck 1 mile South	Continuous	Monthly	11.1+3.8
Montrose Marina 1.5 mile South	Continuous	Monthly	9.1+2.5
Furnace Dock Substation 3.5 miles SE	Continuous	Monthly	10.7+7.8
Grassy Point 3 miles South	Continuous	Monthly	9.0+3.6
Croton Point 7.5 miles SSE	Continuous	Monthly	8.6+2.1
Roseton 20 miles North	Continuous	Monthly	15.0+3.6

TABLE 1.2

Air Particulate and Radiiodine (uci/cc x 10⁻¹⁴)

PERIOD: 1/1/75 - 3/31/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS												REMARKS
			Gross Beta	H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ta-228	Ra-226	Be-7	Mn-54	
Environmental Laboratory onsite SSE	Continuous	Weekly	12.9		ND	ND			*1.10		ND			*20.5		* 3 of 16 ** 11 of 16
NYU 1 mile -SSE	Continuous	Weekly	12.3		ND	ND			*1.87		ND			*29.3	*1.08	* 2 of 17 ** 10 of 17 *** 1 of 17
Service Building onsite-SSE	Continuous	Weekly	13.7		ND	ND					ND			*20.3		* 12 of 16
Algonquin 0.25 mile-South	Continuous	Weekly	11.7		ND	ND					ND			*14.1		* 9 of 16
Standard Brands 0.75 mile-NNE	Continuous	Weekly	13.7		ND	*.20			**38		ND			15.5		* 2 of 3 ** 1 of 3
Furnace Dock Substation 3.5 miles SE	Continuous	Weekly	12.6		ND	ND			1.8*		ND			*23.8		* 3 of 17 ** 9 of 17
Factory St. Substation 1 miles ESE	Continuous	Weekly	12.2		ND	*.21			**36		ND			13.0		* 2 of 3 ** 1 of 3
Croton Point 7.5 miles-SSE	Continuous	Weekly	12.4		ND	*.21					ND			16.6		* 2 of 3
Grassy Point 3 miles-South	Continuous	Weekly	12.2		ND	**19			*.66		ND			21.7		* 1 of 3 ** 2 of 3
Oregon Rd. Substation 3.5 mile NNE	Continuous	Weekly	11.1		*1.00	*.84			*.53		ND			17.6		
Hamilton St. Substation 3 mile NNE	Continuous	Weekly	9.7		ND	*.12			**37		ND			*14.6		* 1 of 3 ** 2 of 3
Crugers Substation 1.5 miles SE	Continuous	Weekly	13.9		ND	.26		*0.4			ND			14.8		* 1 of 2
Crossing Tower 1 mile SSE	Continuous	Weekly	16.6		ND	.14					ND			10.6		
Roseton 20 miles-North	Continuous	Weekly	10.5		ND	*.44			.45*		ND			16.2		* 2 of 3

TABLE 1.3

Milk ($\times 10^{-9}$ uCi/cc)

PERIOD: 1/1/75-3/31/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS $\times 10^{-9}$ uCi/cc										REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226	
			Gross Beta											
Crowley's Mile 20 miles North	Grab	Monthly	Not Required	150	ND	7.5	1300		12.0		<.5			
Guard Hill Farm 10 miles ESE	Grab	Monthly		340	ND	7.6	940		8.6		<.5			
Strawtown Dairy 7 miles SSW	Grab	Monthly		540	ND	2.7	1200				<.5			

TABLE 1.4

Water ($\times 10^{-9}$ uCi/cc)

PERIOD: 1/1/75-3/31/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ta-228	Ra-226		
			Gross Beta												
<u>SURFACE WATER</u>															
Indian Point Lake onsite East	Grab	Monthly	4.0	420	ND	ND									
Lake Meahagh 1 mile SSE	Grab	Monthly	6.1	640	ND	ND									
Trap Rock 0.75 mile SSE	Grab	Monthly	12.0	760	ND	1.3									
<u>DRINKING WATER</u>															
Camp Field Reservoir 3.5 mile NE	Grab	Monthly	4.5	240	ND	ND									
New Croton Reservoir 7 miles SSE	Grab	Monthly	2.8	350	ND	ND									
<u>WELL WATER</u>															
Indian Point Well onsite East	Grab	Monthly	5.3	330	ND	ND									
Verplanck Well 1 mile south	Grab	Monthly	9.9	270	ND	ND									
Camp Smith Well 2.5 mile NNE	Grab	Monthly	2.6	370	ND	ND									
<u>HUDSON RIVER</u>															
Inlet NNE	Continuous	Weekly	10.8	300	ND	ND									
Outlet SW	Continuous	Weekly	8.8	760	ND	ND									

TABLE 1.5

Fallout

PERIOD: 1/1/75-3/31/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS *	ANALYSIS RESULTS $\times 10^{-9}$ uCi/cc											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ta-228	Ra-226		
			Gross Beta												** 1 of 3
Indian Point onsite SSE	Contin.	Monthly	9.3×10^{-3} uCi/m ²	360	ND	1.7			*12.2						
Eastview 15 miles SE	Contin.	Monthly	4.2×10^{-3} uCi/m ²	210	ND	1.5									
Furnace Dock Substation 3.5 miles SE	Contin.	Monthly	5.8×10^{-3} uCi/m ²	330	ND										
Croton Point 7.5 miles SSE	Contin.	Monthly	7.2×10^{-3} uCi/m ²	360	ND										
Grassy Point 3 miles south	Contin.	Monthly	7.1×10^{-3} uCi/m ²	460	ND										
Roseton 20 miles North	Contin.	Monthly	6.4×10^{-3} uCi/m ²	600	ND										
			* Beta Activity is sum of 3 monthly samples												

TABLE 1.6FishPERIOD: 1/1/75-3/31/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS $\times 10^{-8}$ uCi/gm (Wet)										REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ta-228	Ra-226	
Hudson River	Grab	Monthly	Gross Beta											
			2.88×10^{-6} uCi/Dry gm		ND	5.5	176							

TABLE 1.7SoilPERIOD: 1/1/75-3/31/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS x 10 ⁻⁶ uCi/gm										REMARKS	
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ta-228	Ra-226		
			Gross Beta												
Indian Point onsite SE	Grab	Spring	2.50 uCi/m ²		ND	0.2	10.9		0.4			0.8	0.3		
Camp Smith 2.5 miles NNE	Grab	Spring	2.54 uCi/m ²		ND	0.3	11.8		1.1			1.0	0.2		
St. Mary's Cemetery 0.75 miles SSE	Grab	Spring	2.92 uCi/m ²		ND	0.2	19.5		0.6			1.0	1.4		
Montrose Marina 1.5 miles South	Grab	Spring	2.80 uCi/m ²		ND	0.2	16.9		0.8			0.9	1.2		
George's Island 2.5 miles SSE	Grab	Spring	2.28 uCi/m ²		ND	0.6	14.1		1.4			1.0	1.6		

TABLE 2.0
2nd QUARTER - 1975

MEDIUM	NO. OF SAMPLE LOCATIONS	TOTAL NO. OF SAMPLE	NO. OF LOCATIONS WHERE LEVEL SIGNIF. ABOVE BACKGROUND*	METHOD OF MEASUREMENT
1. External Radiation	20	60	None	TLD
2. Air Particulate & Radioiodine	14	218	None	Gross Beta gas flow proportion- al counter; Ge(Li) system NaI sys- tem, Sr 89,90- Radiochemical analysis
3. Water				Same as #2, Tritium-liquid scintillation counter
a. Drinking Water	2	10	None	
b. Surface Water	3	15	None	
c. Well Water	3	14	None	
d. Hudson River	2	130	None	
4. Fallout	6	18	None	Same as #3
5. Milk	3	15	None	Same as #2; Tritium-gas count- ing; I-131- Radiochemical Analysis
6. Fish	1	6	None	Same as #2
7. Other				
a. Soil	5	10	None	Same as #2
b. Terrestrial Vegetation	5	5	None	Same as #2
c. Sediment	6	6	None	Same as #2
d. River Aquatic Vegetation	3	3	None	Same as #2
e. Lake Aquatic Vegetation	3	3	None	Same as #2

* As required by section 5.6.E.2.e

TABLE 2.1

External Radiation (mR)Period 4/1/75 - 6/30/75

<u>Location</u>	<u>Type</u>	<u>Frequency</u>	<u>Quarterly Results</u>
Environmental Laboratory Onsite-SSE	Continuous	Monthly	20.3+13.2
Dock - Onsite - West	Continuous	Monthly	10.0+14.2
Algonquin - 0.25 mile - South	Continuous	Monthly	19.0+19.1
Onsite Pole - South	Continuous	Monthly	15.1+9.3
Service Bldg. - Onsite - SSE	Continuous	Monthly	18.1+9.4
Water Meter House Onsite East	Continuous	Monthly	18.9+15.7
NYU Tower 1 mile SSE	Continuous	Monthly	16.3+10.1
Standard Brands 0.75 mile NNE	Continuous	Monthly	15.8+8.0
Factory St. Substation 1 mile ESE	Continuous	Monthly	16.7+17.7
Hamilton St. Substation 3 miles NNE	Continuous	Monthly	16.5+9.3
Southeast Corner Onsite SE	Continuous	Monthly	17.1+9.8
Bleakley & Broadway Onsite East	Continuous	Monthly	15.0+16.4
Old Dump 0.5 mile ENE	Continuous	Monthly	16.8+10.6
Northeast Corner Onsite NE	Continuous	Monthly	17.4+8.4
Verplanck 1 mile South	Continuous	Monthly	25.3+7.3
Montrose Marina 1.5 mile South	Continuous	Monthly	15.4+8.6
Furnace Dock Substation 3.5 mile SE	Continuous	Monthly	15.5+7.5
Grassy Point 3 miles South	Continuous	Monthly	16.0+9.7
Croton Point 7.5 miles SSE	Continuous	Monthly	12.3+11.9
Roseton 20 miles North	Continuous	Monthly	20.0+13.7

TABLE 2.2

Air Particulate and Radiiodine ($\times 10^{-14}$ uCi/cc)

PERIOD: 4/1/75-6/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226		
			Gross Beta												
Onsite-SSE Environmental Laboratory	Contin.	Weekly	14.6		ND	ND					ND				
NYU 1 mile-SSE	Contin.	Weekly	12.7		ND	ND					ND				
Service Building Onsite-SSE	Contin.	Weekly	13.1		ND	ND					ND				
Algonquin 0.25 mile-South	Contin.	Weekly	13.0		ND	*					ND				* 1 of 21
Standard Brands 0.75 mile NNE	Contin.	Weekly	12.0		ND	**					ND				* 2 of 3
Furnace Dock Substation 3.5 miles SE	Contin.	Weekly	13.2		.19	**					ND				* 1 of 22 **2 of 22
Factory St Substation 1 mile ESE	Contin.	Weekly	11.9		ND	*					ND				
Croton Point 7.5 miles SSE	Contin.	Weekly	12.8		ND	.30					ND				* 2 of 3
Grassy Point 3 miles South	Contin.	Weekly	11.2		ND	*					ND				* 2 of 3
Oregon Road Substation 3.5 miles NNE	Contin.	Weekly	13.1		ND	*					ND				* 1 of 3
Hamilton St. Substation 3 miles NNE	Contin.	Weekly	11.5		ND	*.11					ND				* 1 of 3
Crugers Substation 1.5 miles SE	Contin.	Weekly	11.7		ND	*.15					ND				* 1 of 3
Crossing Tower 1 mile SSE	Contin.	Weekly	12.1		ND	ND									
Roseton 20 miles North	Contin.	Weekly	11.5		ND	*.20					ND				* 2 of 3

TABLE 2.3

Milk ($\times 10^{-9}$ uCi/cc)

PERIOD: 4/1/75-6/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ta-228	Ra-226		
			Gross Beta												
			Not Required												
Crowley's Milk 20 miles - North	Grab	Monthly		220	ND	7.2	1400		7.3		< 5				
Guard Hill Farm 10 miles ESE	Grab	Monthly		290	ND	12.0	800				< 5				
Strawtown Dairy 7 miles SSW	Grab	Monthly		300	ND	3.3	990		1.2		< 5				

TABLE 2.4

Water ($\times 10^{-9}$ uCi/cc)

PERIOD: 4/1/75-6/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS												REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tl-228	Ra-226			
<u>SURFACE WATER</u>			Gross Beta													
Indian Point Lake onsite - East	Grab	Monthly	6.1×10^{-9} uCi/cc	360	ND	ND										
Lake Meahagh 1 mile SSE	Grab	Monthly	8.5	280	ND	ND										
Trap Rock 0.75 mile SSE	Grab	Monthly	14.0	270	ND	ND										
<u>DRINKING WATER</u>																
Camp Field Reservoir 3.5 miles NE	Grab	Monthly	2.7	170	ND	ND										
New Croton Reservoir 7 mile SSE	Grab	Monthly	3.0	250	ND	ND										
<u>WELL WATER</u>																
Indian Point Well onsite East	Grab	Monthly	4.3	260	ND	ND										
Verplanck Well 1 mile south	Grab	Monthly	12.6	160	ND	ND										
Camp Smith Well 2.5 mile NNE	Grab	Monthly	2.2	240	ND	ND										
<u>HUDSON RIVER</u>																
Inlet	Contin.	Weekly	5.2	524	ND	ND										
Outlet SW	Contin.	Weekly	5.6	562	ND	ND										

TABLE 2.5FalloutPERIOD: 4/1/75-6/30/76

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS *	ANALYSIS RESULTS $\times 10^{-9}$ uCi/cc										REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226	
			Gross Beta											
Indian Point onsite SSE	Contin.	Monthly	4.2×10^{-3} uCi/m ²	300	ND	ND								
Eastview 15 miles SE	Contin.	Monthly	11.0×10^{-3} uCi/m ²	280	ND	ND								
Furnace Dock Substation 3.5 miles SE	Contin.	Monthly	6.3×10^{-3} uCi/m ²	510										
Croton Point 7.5 miles SSE	Contin.	Monthly	5.7×10^{-3} uCi/m ²	550										
Grassy Point 3 miles - South	Contin.	Monthly	8.6×10^{-3} uCi/m ²	520										
Roseton 20 miles North	Contin.	Monthly	4.7×10^{-3} uCi/m ²	510										
			* Beta Activity is the sum of 3 monthly samples											

TABLE 2.6FishPERIOD: 4/1/75_6/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS x10 ⁻⁹ uCi/gm (Wet)										REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226	
Hudson River	Grab	Monthly	Gross Beta Not Available*		ND	6.4	2870							* Insufficient quantity to perform Beta and Strontium analysis. Strontium analysis considered more significant.

TABLE 2.7SoilPERIOD: 4/1/75-6/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS $\times 10^{-6} \text{ uCi/gm}$											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226		
			Gross Beta												
Indian Point onsite SE	Grab	Spring	1.53 uCi/m ²		ND	0.1	14.5		0.4						
Camp Smith 2.5 miles NNE	Grab	Spring	2.87 uCi/m ²		ND	0.2	14.7		1.0						
St. Mary's Cemetery 0.75 miles SSE	Grab	Spring	1.43 uCi/m ²		ND	0.1	12.9		0.3						
Montrose Marina 1.5 mile south	Grab	Spring	1.13 uCi/m ²		ND	0.2	12.5		1.2						
George's Island 2.5 mile SSE	Grab	Spring	1.35 uCi/m ²		ND	0.1	17.8		0.7						

TABLE 2.8

Terrestrial Vegetation

PERIOD: 4/1/75 - 6/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS x 10 ⁻⁶ uCi/gm											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226		
			Gross Beta												
Indian Point onsite SE	Grab	Spring	2.09x10 ⁻⁵ uCi/gm	ND	1.0	42.1			0.2						
Camp Smith 2.5 mile NNE			0.86x10 ⁻⁵ uCi/gm	ND	1.7	21.0			0.1	0.3					
St. Mary's Cemetery 0.75 mile SSE	Grab	Spring	1.33x10 ⁻⁵ uCi/gm	ND	2.1	28.0			0.2						
Montrose Marina 1.5 mile South	Grab	Spring	0.74x10 ⁻⁵ uCi/gm	ND	0.4				0.1						
George's Island 2.5 mile SSE	Grab	Spring	2.04x10 ⁻⁵ uCi/gm	ND	0.2	42.0									

TABLE 2.9

Lake Aquatic Vegetation

PERIOD: 4/1/75-6/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS $\times 10^{-6}$ uCi/dry gm										REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ta-228	Ra-226	
			Gross Beta											
Indian Point Lake on-site East	Grab	Spring	1.86×10^{-5} uCi/dry gm		ND	7.8								
Trap Rock Lake 0.75 mile SSE	Grab	Spring	5.01×10^{-5} uCi/dry gm		ND	15.0	55.9		1.4					
Lake Meahagh 1 mile SSE	Grab	Spring	2.70×10^{-5} uCi/dry gm		ND	0.3	76.9		1.9					

TABLE 2.10

HR Aquatic Vegetation

PERIOD: 4/1/75-6/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS $\times 10^{-6}$ uCi/dry gm											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ta-228	Ra-226		
			Gross Beta												
Discharge Canal 0.25 mile SW	Grab #1	Spring	3.45×10^{-5} uCi/dry gm		ND	1.2	36.0		1.5						
	Grab #2	Spring	3.29×10^{-5} uCi/dry gm		ND	1.4	126.0		1.6						
Lent's Cove 0.5 mile NE	Grab #3	Spring	2.23×10^{-5} uCi/dry gm		ND	1.2	35.3		0.4						
	Grab #1	Spring	3.60×10^{-5} uCi/dry gm		ND	0.8	49.0		1.4	2.00					
Lovette 1.5 mile WSW	Grab #3	Spring	3.15×10^{-5} uCi/dry gm		ND	1.3	73.0								
	Grab #1	Spring	2.17×10^{-5} uCi/dry gm		ND	0.7	59.2		0.6						
	Grab #2	Spring	3.81×10^{-5} uCi/dry gm		ND	2.4	92.8								
Tompkin's Cove 1.5 mile WSW	Grab #3	Spring	2.83×10^{-5} uCi/dry gm		ND	0.4	31.5								
Verplanck 1 mile SSW	Grab #3	Spring	3.67×10^{-5} uCi/dry gm		ND	0.8	49.3								
Peekskill Bay 1.5 mile NE	Grab #3	Spring	3.12×10^{-5} uCi/dry gm		ND	1.0	38.7	0.2							

Note: Type 1 = Myriophyllum
Verticillatum
Type 2 = Potamogeton
Crispus
Type 3 = Potamogeton
Perfoliatus

TABLE 2.11

Sediment

PERIOD: 4/1/75_6/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS $\times 10^{-7}$ uCi/gm											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ta-228	Ra-226		
			Gross Beta												
Discharge Canal 0.25 mile SW	Grab	Spring	3.43×10^{-5} uCi/gm	ND	0.8	82.8	5.9	40.6	3.4						
ovette 1.5 mile WSW	Grab	Spring	3.06×10^{-5} uCi/gm	ND	1.3	76.1	0.9	22.4							
ent's Cove 0.5 mile NE			2.87×10^{-5} uCi/gm	ND	2.2	89.5	2.7	20.7	4.3						
ompkin's Cove 1.5 mile WSW	Grab	Spring	4.01×10^{-5} uCi/gm	ND	1.0	21.8	1.3	8.7	1.3						
erplanck 1 mile SSW	Grab	Spring	5.50×10^{-5} uCi/gm	ND	1.0	64.3	1.9	7.6	2.9						
Weekskill Bay 1.5 mile NE	Grab	Spring	2.55×10^{-5} uCi/gm	ND	1.4	11.6		17.7	1.7						

TABLE 3.0

3rd QUARTER - 1975

MEDIUM	NO. OF SAMPLE LOCATIONS	TOTAL NO. OF SAMPLE	NO. OF LOCATIONS WHERE LEVEL SIGNIF. ABOVE BACKGROUND *	METHOD OF MEASUREMENT
1. External Radiation	21	63	None	TLD
2. Air Particulate & Radioiodine	14	185	None	Gross-Beta-gas flow proportional counter; Ge (Li) system; NaI system; Sr 89,90 - Radiochemical analy- sis
	14	185	3	
3. Water				Same as #2, Tritium
a. Drinking Water	2	6	None	Liquid scintillation counter
b. Surface Water	3	9	None	
c. Well Water	2	6	None	
d. Hudson River	2		None	
4. Fallout	6	18	None	Same as #3
5. Milk	3	9	None	Same as #2; Tritium gas counting; I-131 Radiochemical Analy- sis.
6. Fish	1	1 composite	None	Same as #2
7. Other				
a. Soil	5	5	None	Same as #2
b. Terrestrial Vegetation	5	5	None	Same as #2
c. Sediment	6	6	None	Same as #2
d. River Aquatic Vegetation	6	7	None	Same as #2
e. Lake Aquatic Vegetation	3	3	None	Same as #2
f. Food Crops	6	11	None	Same as #2

* Ad required by section 5.6.E.2.e

Table 3.1

External Radiation (mR)
Period 7/1/75 - 9/30/75

<u>Location</u>	<u>Type</u>	<u>Frequency</u>	<u>Quarterly Results</u>
Environmental Laboratory onsite SSE	Continuous	Monthly	19.6 $\pm$ 0.8
Dock - onsite West	Continuous	Monthly	13.7 $\pm$ 0.7
Algonquin-0.25 mile-South	Continuous	Monthly	19.5 $\pm$ 0.7
On-Site Pole - South	Continuous	Monthly	14.6 $\pm$ 0.5
Service Building Onsite SSE	Continuous	Monthly	14.7 $\pm$ 0.5
Water Meter House Onsite East	Continuous	Monthly	17.2 $\pm$ 0.8
NYU Tower 1 mile SSE	Continuous	Monthly	16.5 $\pm$ 0.6
Standard Brands 0.75 mile-NNE	Continuous	Monthly	16.2 $\pm$ 1.0
Factory St. Substation 1 mile ESE	Continuous	Monthly	14.9 $\pm$ 0.9
Hamilton St. Substation 3 miles NNE	Continuous	Monthly	16.4 $\pm$ 0.9
S.E. Corner Onsite SE	Continuous	Monthly	17.0 $\pm$ 0.8
Broadway & Bleakley Onsite East	Continuous	Monthly	16.6 $\pm$ 0.9
Old Dump 0.5 mile ENE	Continuous	Monthly	14.4 $\pm$ 0.9
Lent Cove 0.5 mile NE	Continuous	Monthly	19.4 $\pm$ 0.6
NE Corner Onsite NE	Continuous	Monthly	17.3 $\pm$ 0.6
Verplanck 1 mile-South	Continuous	Monthly	16.1 $\pm$ 0.6
Montrose Marina 1.5 mile South	Continuous	Monthly	12.1 $\pm$ 0.6
Furnace Dock Substation 3.5 mile SE	Continuous	Monthly	16.0 $\pm$ 0.7
Grassy Point 3 miles South	Continuous	Monthly	14.7 $\pm$ 0.5
Croton Point 7.5 miles SSE	Continuous	Monthly	14.5 $\pm$ 0.6
Roseton 20 miles - North	Continuous	Monthly	20.0 $\pm$ 0.8

TABLE 3.2

Air Particulate and Radioiodine ($\times 10^{-14}$ uCi/cc)

PERIOD: 7/1/75 - 9/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226		
			Gross Beta												
Environmental Laboratory onsite SSE	Continuous	Weekly	5.1		ND	*0.07					** 23				* 1 of 4 ** 4 of 12
NYU 1 mile SSE	Continuous	Weekly	3.4*		ND	*0.1					** 4.67				* 11 of 13 ** 3 of 4 *** 2 of 13
Service Building onsite SSE	Continuous	Weekly	4.0*		**0.8	*0.1					**** 14.2				* 12 of 13 **** 5 of 14 ** 1 of 4 *** 2 of 4
Algonquin 0.25 mile-South	Continuous	Weekly	3.3		ND	* 0.2					* 8.6				* 1 of 8 ** 1 of 18
Standard Brands 0.75 miles NNE	Continuous	Weekly	4.1		* 1.0	0.11					** ND				* 1 of 3
Furnace Dock Substation 3.5 mile SE	Continuous	Weekly	4.4		ND	*1.4					ND				* 3 of 10
Factory St. Substation 1 mile ESE	Continuous	Weekly	5.3		ND	*0.13					** ND				* 2 of 3
Croton Point 7.5 miles SSE	Continuous	Weekly	4.6*		ND	0.11					ND				* 12 of 13
Crossing Towers 1 mile SSE	Continuous	Weekly	4.0		ND	*0.16					ND				* 2 of 3
Crugers Substation 1.5 mile SE	Continuous	Weekly	4.5		ND	*0.13					ND				* 1 of 3
Hamilton St. Substation 3 miles NNE	Continuous	Weekly	4.6		ND	*0.12					ND				* 1 of 3
Oregon Road Substation 3.5 miles NNE	Continuous	Weekly	3.9		ND	*0.11					ND				* 2 of 3
Grassy Point 3 miles South	Continuous	Weekly	4.7		* 1.0	*0.1					ND				* 1 of 3 ** 2 of 3
Roseton 20 miles - North	Continuous	Weekly	4.0		ND	*0.1									* 1 of 3

TABLE 1.3

Milk ($\times 10^{-9}$ uCi/cc)

PERIOD: 7/1/75-9/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS										REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ta-228	Ra-226	
			Gross Beta											
Crowley's - 20 Miles North	Grab	Monthly		300	ND	4.7					<.5			
Guard Hill-10 miles ESE	Grab	Monthly		170	ND	11.0					<.5			
Strawtown 7 miles SSW	Grab	Monthly		330	ND	2.3					<.5			

TABLE 3.4

Waters ($\times 10^{-9}$ uCi/cc)

PERIOD: 7/1/75 - 9/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226		
			Gross Beta												
<u>WELL WATER</u>															
Indian Point onsite-East	Grab	Monthly	8.23	ND											
Camp Smith 3.5 miles NNE	Grab	Monthly	4.78	ND					1.82*						* 1 of 3
<u>SURFACE WATER</u>															
Indian Point Lake onsite East	Grab	Monthly	5.07	292*											* 1 of 3
Trap Rock 0.75 mile SSE	Grab	Monthly	12.2	455*											* 2 of 3
Lake Meahagh 1 mile SSE	Grab	Monthly	6.07	272*											* 1 of 3
<u>DRINKING WATER</u>															
New Croton Reservoir 7 miles SSE	Grab	Monthly	4.86	486*											2 of 3
Camp Field Reservoir 3.5 mile NE	Grab	Monthly	4.04	404											
<u>HUDSON RIVER</u>															
Inlet NNE	Contin.	Weekly	20.8*	404*											* 56 of 63 **2 of 3
Outlet SW	Contin.	Weekly	30.1*	729											* 54 of 63

TABLE 3.5FalloutPERIOD: 7/1/75-9/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS *	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226		
			Gross Beta												
Indian Point onsite SSE	Contin.	Monthly	$2.50 \times 10^{-3} \text{ uCi/m}^2$	*365											* 2 of 3
Eastview 15 miles SE	Contin.	Monthly	$3.09 \times 10^{-3} \text{ uCi/m}^2$	*370											* 1 of 3
Furnace Dock Substation 3.5 miles SE	Contin.	Monthly	$1.51 \times 10^{-3} \text{ uCi/c}^2$	*367											* 1 of 3
Croton Point 7.5 miles SSE	Contin.	Monthly	$2.08 \times 10^{-3} \text{ uCi/m}^2$	*219											* 1 of 3
Grassy Point 3 miles South	Contin.	Monthly	$3.36 \times 10^{-3} \text{ uCi/m}^2$	*481											* 1 of 3
Roseton 20 miles North	Contin.	Monthly	$4.23 \times 10^{-3} \text{ uCi/m}^2$	*383											* 1 of 3
			* Gross Beta is the sum of 3 monthly samples												

TABLE 3.6

Fish* ($\times 10^{-6}$ uCi/gm wet)

PERIOD: 7/1/75-9/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS										REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226	
Hudson River	Grab	Monthly	Gross Beta											* Crabs
			2.56		ND	1.7								

TABLE 3.7

Soil

PERIOD: 7/1/75-9/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS $\times 10^{-7}$ uCi/gm											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ti-228	Ra-226		
			Gross Beta												
Camp Smith 2.5 miles NNE	Grab	Summer	1.13 uCi/m ²		ND	3.8									
St. Mary's Cemetery 0.75 miles SSE	Grab	Summer	1.30 uCi/m ²		ND	0.8									
Indian Point onsite SE	Grab	Summer	1.49 uCi/m ²		ND	1.2									
Montrose Marina 1.5 miles South	Grab	Summer	1.53 uCi/m ²		ND	2.1									
George's Island 2.5 mile SSE	Grab	Summer	1.78 uCi/m ²		ND	2.5									

TABLE 3.8

Terrestrial Vegetation ($\times 10^{-5}$ uCi/dry gm)

PERIOD: 7/1/75-9/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226		
			Gross Beta												
Camp Smith 2.5 mile NNE	Grab	Summer	1.92		ND	0.03									
St. Mary's Cemetery 0.75 mile SSE	Grab	Summer	2.15		ND	0.30									
Indian Point onsite SE	Grab	Summer	1.46		ND	0.25									
Montrose Marina 1.5 mile South	Grab	Summer	1.89		ND	0.33									
George's Island 2.5 mile SSE	Grab	Summer	2.09		ND	0.12									

TABLE 3.9

Lake Aquatic Vegetation ($\times 10^{-5}$ uCi/dry gm)

PERIOD: 7/1/75-9/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226		
			Gross Beta												
Indian Point Lake onsite East	Grab #1	Summer	0.38		ND	.08									
Trap Rock Lake 0.75 mile SSE	Grab #2	Summer	5.91		ND	0.31									
Lake Meahagh 1 mile SSE	Grab #2	Summer	1.69		ND	0.44									
NOTE: Type 1 Muskweed Type 2 Potamogeton Crispus															

TABLE 3.10

Hudson River Aquatic Vegetation ($\times 10^{-5}$ uCi/dry gm)

PERIOD: 7/1/75-9/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Ca-134	Ca-137	Co-60	I-131	Tn-228	Ra-226	Mn-54	
			Gross Beta												
Discharge Canal 0.25 mile SW	Grab #1	Summer	ND		ND	.05									
	Grab #2	Summer	2.17		ND	ND	13.1	5.36	8.06	.77				2.33	
Lents Cove 0.5 mile NE	Grab #2	Summer	2.26		ND	.08	1.23	0.16	0.15						
Lovett 1.5 mile WSW	Grab #2	Summer	1.18		ND	.05	8.91	0.22	0.57					0.12	
Tompkins Cove 1.5 mile WSW	Grab #2	Summer	2.85		ND	.07	8.69	0.09	0.31						
Verplanck 1 mile SSW	Grab #1	Summer	1.94		ND	.02	10.3	2.24	3.47					0.39	
Peekskill Bay 1.5 mile NE	Grab #2	Summer	1.91		ND	.57	8.80	0.24	0.22	0.22					
Note: Type 1: Potamogeton Perfoliatus Type 2: Myriophyllum Verticillatum															

TABLE 3.11Hudson River Sediment ($\times 10^{-5}$ uCi/gm)PERIOD: 7/1/75 - 9/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ta-228	Ra-226	Mn-54	
			Gross Beta												
Lovett 1.5 miles WSW	Grab	Summer	3.79		ND	ND	3.0	0.02	0.30					0.01	
Lents Cove 0.5 mile NE	Grab	Summer	2.52		ND	0.006	1.58	0.43	0.09	0.04					
Discharge Canal 0.25 mile SW	Grab	Summer	3.86		ND	0.005	2.15	0.15	1.55	0.19				0.02	
Tompkins Cove 1.5 mile WSW	Grab	Summer	3.18		ND	0.006	2.79	0.10	0.34	0.03					
Verplanck 1 mile SSW	Grab	Summer	2.91		ND	0.005	2.46	0.05	0.38	0.07					
Peekskill Bay 1.5 mile NE	Grab	Summer	2.54		ND	0.004	2.42	0.07	0.33	0.09					

TABLE 3.12

Food Crops ($\times 10^{-8}$ $\mu\text{Ci}/\text{m}$)

PERIOD: 7/1/75 - 9/30/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226		
Pataklies Farm 3 mile NE	Corn	Annual			<2	0.46	449								
	Tomatoes	Annual			<.8	0.81	390								
Dr. Davies Farm 9 miles south	Peaches	Annual			<.9	0.29	697								
	Tomatoes	Annual			<.7	0.41	624								
	Peppers	Annual			<.7	0.42	465								
	Squash	Annual			<1	0.34	200								
Pine Lane Farm 3 miles SSW	Corn	Annual			<2	<.2	399								
Stuarts Farm 3 mile ENE	Tomatoes	Annual			<.7	0.45	515								
Joe's Fruit Stand 2 miles SSE	Pears	Annual			<2	0.73	350								
Philipstown Farm 7 1/2 mile-North	Apples	Annual			<1	0.25	588								
	Squash	Annual			<.7	0.73	737								

Table 4.0

4th QUARTER - 1975

MEDIUM		NO. OF SAMPLE LOCATIONS	TOTAL NO. OF SAMPLE	NO. OF LOCATIONS WHERE LEVEL SIGNIF ABOVE BACKGROUND *	METHOD OF MEASUREMENT
1.	External Radiation	21	59	None	TLD
2.	Air Particulate & Radioiodine	14	203	None	Gross Beta-gas flow proportional coun- ter; Ge(Li) system; NaI system; Sr 89, 90-Radiochemical Analysis
3.	Water			None	Same as #2, Tritium liquid
	a. Drinking Water	2	6		Scintillation count ing
	b. Surface Water	3	9		
	c. Hudson River	2	119		
4.	Fallcut	6	18	None	Same as #3
5.	Milk	3	9		Same as #2; Tritium gas counting; I-131 Radiochemical Analy sis
6.	Fish	1	8	None	Same as #2
7.	Other				
	a. Soil	5	5	None	Same as #2
	b. Terrestrial Vegetation	5	5	None	Same as #2
	c. Sediment	6	6	None	Same as #2
	d. River Aquatic Vegetation	6	2	None	Same as #2

* As required by Section 5.6.E.2.e

Table 4.1

External Radiation (mR)
Period 10/1/75 - 12/31/75

<u>Location</u>	<u>Type</u>	<u>Frequency</u>	<u>Quarterly Results</u>
Environmental Laboratory-Onsite SSE	Continuous	Monthly	18.6 $\pm$ 0.9
Dock - Onsite - West	Continuous	Monthly	12.8 $\pm$ 0.4
Algonquin-0.25 mile - South	Continuous	Monthly	19.5 $\pm$ 1.1
On Site Pole - South	Continuous	Monthly	13.8 $\pm$ 0.6
Service Building Onsite-SSE	Continuous	Monthly	14.8 $\pm$ 0.9
Water Meter House-Onsite East	Continuous	Monthly	17.1 $\pm$ 0.9
NYU - 1 mile - SSE	Continuous	Monthly	15.8 $\pm$ 0.7
Standard Brands-0.75 mile-NNE	Continuous	Monthly	15.8 $\pm$ 0.8
Factory St. Substation-1 mile-ESE	Continuous	Monthly	16.0 $\pm$ 0.7
Hamilton St. Substation-3 miles-NNE	Continuous	Monthly	16.9 $\pm$ 1.1
S.E. Corner - Onsite - SE	Continuous	Monthly	17.8 $\pm$ 1.3
Broadway & Bleakley-Onsite-East	Continuous	Monthly	18.6 $\pm$ 1.2
Old Dump 0.5 mile ENE	Continuous	Monthly	14.0 $\pm$ 1.0
Lents Cove 0.5 mile NNE	Continuous	Monthly	17.1 $\pm$ 1.0
N.E. Corner-Onsite NE	Continuous	Monthly	16.9 $\pm$ 0.8
Verplanck 1 mile South	Continuous	Monthly	12.9 $\pm$ 1.2
Montrose Marina 1.5 mile South	Continuous	Monthly	13.7 $\pm$ 1.2
Furnace Dock Substation 3.5 mile SE	Continuous	Monthly	15.5 $\pm$ 0.7
Grassy Point 3 miles South	Continuous	Monthly	14.4 $\pm$ 1.3
Croton Point 7.5 miles SSE	Continuous	Monthly	15.1 $\pm$ 1.4
Roseton 20 miles North	Continuous	Monthly	17.8 $\pm$ 0.9

TABLE 4.2

Air Particulate Radioiodine ($\times 10^{-14}$ uCi/cc)

PERIOD: 10/1/75-12/31/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ta-228	Ra-226		
Environmental Building onsite SSE	Continuous	Weekly	Gross Beta 3.75*		ND	ND					ND	** 6.37	*** 17.51		* 12 of 13 *** 4 of 11 **** 5 of 11
NYU 1 mile SSE	Continuous	Weekly	2.96		ND	ND					1.26*	** 6.60	*** 8.92		* 1 of 13 ** 5 of 12 *** 3 of 12
Service Building onsite SSE	Continuous	Weekly	3.19		ND						ND	7.17*	8.43*		* 5 of 12
Algonquin 0.25 mile-South	Continuous		3.10		ND	ND					ND	6.01*	** 9.61		* 5 of 12 ** 4 of 12
Standard Brands 0.75 mile NNE	Continuous	Weekly	3.23								.93				* 1 of 13
Furnace Dock Substation 3.5 mile SE	Continuous	Weekly	3.29								ND	6.45*	5.74**		** 4 of 12
Factory St. Substation 1 mile ESE	Continuous	Weekly	3.72		ND	ND					ND		1.79		
Croton Point 7.5 mile SSE	Continuous	Weekly	2.55								ND	0.46*	2.48**		** 2 of 3
Crossing Tower 1 mile SSE	Continuous	Weekly	2.79		ND	ND					ND				
Cruzers Substation 1.5 mile SE	Continuous	Weekly	3.48		ND	ND					1.29*	** 0.52			* 1 of 12 ** 1 of 3
Hamilton St. Substation 3 miles NNE	Continuous	Weekly	3.25*		ND	ND					ND	*** 7.43	** 2.53*		* 11 of 12 *** 1 of 3
Oregon Road Substation 3.5 mile NNE	Continuous	Weekly	3.16		ND	ND					ND				
Grassy Point 3 miles South	Continuous	Weekly	3.08								ND		**1.70		** 2 of 3
Roseton 20 miles North	Continuous	Weekly	3.26*								ND		1.45**		* 13 of 14

TABLE 4.3

Milk ($\times 10^{-9}$ uCi/cc)

PERIOD: 10/1/75 - 12/31/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226		
			Gross Beta												
Crowley's 20 miles North	Grab	Monthly		293	ND	1.86	1920*		** 8.06		<.5				** 1 of 3
Guard Hill Farm 10 miles ESE	Grab	Monthly		307	ND	5.33	756*		6.44*		<.5				* 1 of 3
Strawtown Dairy 7 miles SSW	Grab	Monthly		340	ND	4.50	1590*		4.83*		<.5				* 1 of 3

TABLE 4.4

Waters ($\times 10^{-9}$ Ci/cc)

PERIOD: 10/1/75 - 12/31/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS												REMARKS	
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ti-228	Ra-226				
			Gross Beta														
<u>WELL WATER</u>																	
Indian Point onsite East	Grab	Monthly	8.00	352					2.15*			2.27*	225**			* **	1 of 3 2 of 3
Camp Smith 2.5 miles NNE	Grab	Monthly	5.92	291								109*	443*			*	2 of 3
<u>DRINKING WATER</u>																	
New Croton Reservoir 7 mile SSE	Grab	Monthly	3.82**	312**			21.2*					4.00*	9.93*			* **	1 of 3 2 of 3
Camp Field Reservoir 3.5 mile NE	Grab	Monthly	4.35	452									328*			*	2 of 3
<u>SURFACE WATER</u>																	
Lake Meahagh 1 mile SSE	Grab	Monthly	5.02	291			25.4*					2.27*	13.0*			*	1 of 3
Trap Rock Lake 0.75 mile SSE	Grab	Monthly	18.2	497			42.4*					3.40*	246**			* **	1 of 3 2 of 3
Indian Point Lake onsite East	Grab	Monthly	4.51**	255									5.28*			* **	1 of 3 2 of 3
<u>HOLSON RIVER</u>																	
Inlet NNE	Continuous	Weekly	7.06*	380												*	16 of 61
Outlet SW	Continuous	Weekly	10.2 *	1267												*	24 of 62

TABLE 4.5

Fallout

PERIOD: 10/1/75 - 12/31/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226	Sb-124	
			Gross Beta												
Eastview 15 miles SE	Continuous	Monthly	* $6.82 \times 10^{-4} \text{ uCi/m}^2$	270			123*			**8.92		6.26*	5.99*		* 2 of 3
Indian Point onsite SSE	Continuous	Monthly	$6.02 \times 10^{-4} \text{ uCi/m}^2$	415*			3.39		0.16*			0.33*	1.44*		** 1 of 3 * 1 of 3 ** 2 of 3
Grassy Point 3 miles South	Continuous	Monthly	$4.07 \times 10^{-4} \text{ uCi/m}^2$	** 309					0.16*			0.23*	** 0.16		* 1 of 3 ** 2 of 3
Croton Point 7.5 miles SSE	Continuous	Monthly	$4.10 \times 10^{-4} \text{ uCi/m}^2$	226			3.39*					0.11*	0.85*	*0.16	* 1 of 3
Roseton 20 miles North	Continuous	Monthly	$3.00 \times 10^{-4} \text{ uCi/m}^2$	** 232								*0.11	*0.74		* 1 of 3
Furnace Dock Substation 3.5 miles SE	Continuous	Monthly	$1.70 \times 10^{-3} \text{ uCi/m}^2$	252									*1.32		** 2 of 3 * 1 of 3

TABLE 4.6Fish ($\times 10^{-6}$ uCi) wet cm)PERIOD: 10/1/75-12/31/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS										REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Ta-228	Ra-226	
Hudson River	Grab	Monthly	2.78*		ND	** 0.02	*** 8.08						*** 1.97	* 7 of 8 ** 5 of 7 *** 3 of 7

TABLE 4.7

Soil

PERIOD: 10/1/75 - 12/31/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS x 10 ⁻⁶ uCi/gm											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226	Mn-54	
			Gross Beta												
Camp Smith 2.5 miles NNE	Grab	Fall	2.85 uCi/m ²		ND	0.08	20.2	0.65	2.02						
St. Mary's Cemetery 0.75 miles SSE	Grab	Fall	2.53 uCi/m ²		ND	0.19	15.8	0.53	0.79				0.08		
Indian Point onsite SE	Grab	Fall	3.13 uCi/m ²		ND	0.83	11.6	0.45	1.08				0.15		
Montrose Marina 1.5 mile south	Grab	Fall	2.39 uCi/m ²		ND	0.16		0.50	1.75				0.14		
George's Island 2.5 mile SSE	Grab	Fall	2.17 uCi/m ²		ND	0.56	18.9	0.34	1.12				0.17		

TABLE 4.8

Terrestrial Vegetation ($\times 10^{-5}$ $\mu\text{Ci/gm}$)

PERIOD: 10/1/75 - 12/31/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS												REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226	Co-58	Mn-54	
			Gross Beta													
Camp Smith 2.5 mile NNE	Grab	Fall	2.23		ND	0.40	2.37									
St. Mary's Cemetery 0.75 mile SSE	Grab	Fall	3.65		ND	0.25	5.53	0.03	0.04	0.09					0.04	
Indian Point onsite SE	Grab	Fall	1.04		ND	0.24	2.65	0.35	0.02	0.16					0.07	0.02
Montrose Marina 1.5 mile South	Grab	Fall	3.56		ND	0.11	6.30									
George's Island 2.5 mile SSE	Grab	Fall	3.19		ND	0.13	5.85	0.03	0.03							

TABLE 4.9

Hudson River Aquatic Vegetation ($\times 10^{-5}$ uCi/dry gm)

PERIOD: 10/1/75 - 12/13/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226		
			Gross Beta												
Lovett 1.5 mile WSW	Grab #1	Fall	2.97		ND	0.05	2.64		0.10			0.11	0.17		
Verplanck 1 mile SSW	Grab #2	Fall	4.05		ND	0.06	3.08			0.43		0.13	0.16		
No vegetation was found in other locations.															

Note: Type 1 Myriophyllum
VerticillatumType 2 Potamogeton
Perfoliatus

TABLE 4.10

Hudson River Sediment ($\times 10^{-6}$ $\mu\text{Ci/gm}$)

PERIOD: 10/1/75 - 12/13/75

LOCATION	TYPE	FREQUENCY	AVG. QUARTERLY RESULTS	ANALYSIS RESULTS											REMARKS
				H-3	Sr-89	Sr-90	K-40	Cs-134	Cs-137	Co-60	I-131	Tn-228	Ra-226	Cr-51	
			Gross Beta												
Iovette 1.5 mile WNW	Grab	Fall	36.9		ND	0.1	18.7		2.73			2.12	1.64		
Lent's Cove 0.5 mile NE	Grab	Fall	25.0		ND	ND	11.9		1.35			1.66	1.60		
Discharge Canal 0.25 mile SW	Grab	Fall	33.7		ND	0.09	23.4	3.36	0.48	2.09		2.23	2.68	2.70	
Tompkins Cove 1.5 mile WSW	Grab	Fall	39.5		ND	ND	20.5	0.42	1.96				1.18		
Verplanck 1 mile SSW	Grab	Fall	35.4		ND	0.1	16.9	0.99	3.91				1.47		
Peekskill Bay 1.5 mile NE	Grab	Fall	35.0		ND	0.08	18.7	0.42	4.22				1.74		

Table of Minimum Detectable Activities

Media	Isotope	MDA
Milk and Water	Sr-89	8×10^{-9} $\mu\text{Ci/cc}$
	Sr-90	8×10^{-10} $\mu\text{Ci/cc}$
	Cs-137	7×10^{-9} $\mu\text{Ci/cc}$
	I-131	5×10^{-10} $\mu\text{Ci/cc}$
	H-3	2×10^{-7} $\mu\text{Ci/cc}$
Soil Samples	Sr-89	2×10^{-7} $\mu\text{Ci/gm}$
	Sr-90	6×10^{-8} $\mu\text{Ci/gm}$
	Cs-137	1×10^{-7} $\mu\text{Ci/gm}$
Air Particulate	Sr-89	5×10^{-15} $\mu\text{Ci/cc}$
	Sr-90	2×10^{-15} $\mu\text{Ci/cc}$
	Cs-137	4×10^{-14} $\mu\text{Ci/cc}$

#6

(C)