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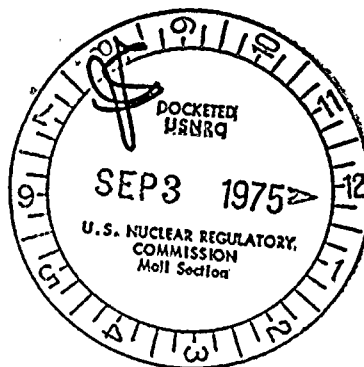
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NINE MILE POINT NUCLEAR STATION UNIT #1

DPR-63 DOCKET NO. 50-220

ENVIRONMENTAL REPORT

JANUARY 1, 1975 - JUNE 30, 1975



#9999999999

5361

I. INTRODUCTION

This report is submitted in accordance with Section 5.6.1 of Appendix B DPR-63. It includes data collected as required by both DPR-63 and DPR-59 (the James A. FitzPatrick Nuclear Power Plant). Since both the Nine Mile Point and James A. FitzPatrick Plant share a common site, there is a common environmental monitoring program.

II. DESCRIPTION AND SUMMARY

The required sample collection and analysis schedule is listed in Tables 1 and 2 for NMP and Tables 1A and 2A for JAF. The locations of the sampling stations are shown in Figures 1, 2 and 3. A quarterly summary of the data giving the averages for the various media is included at the end of this text.

III. ANALYSIS OF ENVIRONMENTAL DATA

A. Lake Program

Table 3 lists the results of the Aquatic samples taken from Lake Ontario at the 3 sampling locations (i.e., JAF, NMP and Oswego Steam Plant).

1. Bottom Sediments

The bottom sediment samples showed a trace of activity with the maximum being 1.1 ± 0.3 pCi/g Cs137 in the JAF sample. This is a higher level than the control sample at Oswego Steam Plant but if one considers the uncertainty of the control ± 1 pCi/g, this value does not appear to be significant.

2. Periphyton

There is a significant level of activity found in the periphyton samples at both NMP and JAF as compared to the Oswego Steam Plant samples. The highest level is the NMP sample Cs 137 level which is a factor of 36 above the control value (36 pCi/g vs 0 ± 1). Cs 134, Co 60 and Mn 54 were also detected in these samples. Because this media is not consumed by humans, no dose estimate can be made based on this data.

III. ANALYSIS OF ENVIRONMENTAL DATA (continued)

A. Lake Program (continued)

3. Fish

The fish samples collected in June did not show any significant level of activity. In order to obtain a greater level of sensitivity, a composite sample of all three species collected (Perch, Bass and Suckers) was made, thus giving a large sample volume. In future, only like species will be composited into samples.

4. Mollusks

Only a single mollusk sample (clams) was analyzed during this report period. It did show a small amount of Mn 54 (0.4 ± 0.2 pCi/g). This sample was collected at NMP; a JAF sample and a Oswego Steam Plant sample could not be obtained; no clams were available.

5. Gammarus

No samples were collected because none of this species could be found at any of the three sampling locations.

6. Lake Water

Table 4 lists the results of the lake water samples. The February and March city water sample appears to have been contaminated in the counting laboratory. Some of the analysis (H-3, Sr 89, Sr 90) is sent out for analysis and is not available for this report. It will be included in a supplemental report.

B. Land Program

Tables 5 through 16 list the results of land samples analyzed for the reporting period.

1. Air particulates

Tables 5 and 6 give the results of the air particulate air sample gross beta analysis for the six (6) off-site monitoring stations (Table 5) and the nine (9) on-site stations (Table 6). Average gross beta activities for the off-site stations during the 1st and 2nd quarters were 0.110 and 0.124 pCi/m³ respectively. The on-site stations averaged 0.094 and 0.093 for the 1st and 2nd quarters respectively. If one considers the down wind off-site sampling stations as controls for the on-site stations, then the following samples could be considered significant (i.e. activity $>2X$ control).

STATION	DATE	ACTIVITY LEVEL pCi/m ³	CONTROL LEVEL pCi/m ³
G on site	1-16-75	$.267 \pm .026$	$.102 \pm .010$
D ₂ on site	2-5-75	$.145 \pm .015$	$.063 \pm .010$
E on site	2-5-75	$.135 \pm .013$	$.064 \pm .008$
F on site	2-5-75	$.237 \pm .024$	$.053 \pm .010$
G on site	2-26-75	$.144 \pm .014$	$.059 \pm .005$
E on site	5-7-75	$.106 \pm .009$	$.044 \pm .004$

III. ANALYSIS OF ENVIRONMENTAL DATA (continued)

B. Land Program (continued)

1. (continued)

STATION	DATE	ACTIVITY LEVEL pCi/m ³	CONTROL LEVEL pCi/m ³
D ₂ on site	5-21-75	.156 ± .014	.064 ± .006
G on site	6-18-75	.243 ± .022	.110 ± .010
F on site	7-2-75	.155 ± .012	.051 ± .005
G on site	7-2-75	.133 ± .013	.052 ± .005

2. Precipitation

Tables 7 and 8 give the results of the precipitation (rain water) sample gross beta analysis for the six (6) off-site stations (Table 7) and the nine (9) on-site stations. The average gross beta activity for the off-site samples during the 1st and 2nd quarters were 33.4 pCi/m²/month and 24.1 pCi/m²/month respectively. The average gross beta activity for the on-site stations for the 1st and 2nd quarters was 30.5 pCi/m²/month and 19.5 pCi/m²/month respectively. The samples listed below were considered significantly higher (i.e. activity >2X Control) than their corresponding down-wind control station.

STATION	DATE	ACTIVITY LEVEL pCi/m ² /mo	CONTROL LEVEL pCi/m ² /mo
D ₁ on site	March 1975	28.0 ± 3.0	9.9 ± 1.1
D ₁ on site	May 1975	40.5 ± 4.2	17.7 ± 1.8
F on site	March 1975	37.8 ± 3.8	9.9 ± 1.5
G on site	March 1975	36.1 ± 3.6	10.7 ± 1.9
G on site	June 1975	21.0 ± 2.5	8.4 ± 1.4
H on site	March 1975	25.1 ± 2.3	9.9 ± 1.1
I on site	March 1975	33.8 ± 3.2	9.9 ± 1.1

3. TLD

Table 9 gives the environmental TLD dosimeter readings for the 1st and 2nd quarters as an average of 5 individual TLD chips located at each station. The average for the on-site dosimeters was 24 mrem/qtr and 30 mrem/qtr for the 1st and 2nd quarter respectively. The TLD's located at the east and west site boundary averaged 13 mrem/qtr and 14 mrem/qtr for the 1st and 2nd quarters respectively while the off-site stations averaged 16 mrem/qtr and 17 mrem/qtr respectively.

If one considers that the off-site station represents normal background levels (i.e., 17 mrem/qtr) then those listed below show readings greater than 25% above this background.

II-I. ANALYSIS OF ENVIRONMENTAL DATA (continued)

B. Land Program (continued)

3. Continued

Badge No.	Location	mrem/qtr	
		Jan-March	April-June
3	D-1 on site	21.1 ± 9.8	35.6 ± 12.9
4	D-2 on site	-----	23.4 ± 8.7
5	E on site	-----	22.4 ± 8.5
17	Progress Center		
	East Yard	-----	24.2 ± 9.5
20	JAF West Yard	22.3 ± 4.8	27.2 ± 18.9
22	Pole 53 E. Bndy	21.9 ± 4.8	-----
23	H On Site	25.1 ± 6.8	20.8 ± 11.5
27	Lite Pole N JAF	25.3 ± 8.2	31.0 ± 10.9
28	Lite Pole NW JAF	22.7 ± 7.4	33.6 ± 7.9
29	N Fence E JAF	23.3 ± 5.2	38.0 ± 9.3
30	N Fence Mid E		
	JAF	28.1 ± 9.0	51.9 ± 12.7
31	N Fence Mid W		
	NMP	46.7 ± 15.1	54.0 ± 12.5
32	N Fence W NMP	57.7 ± 14.6	86.4 ± 16.9
33	NMP/JAF Twin		
	Pole	24.1 ± 7.0	30.6 ± 9.3

There is probably three unrelated sources of radiation which could affect any and/or all of the above 1) storage of radioactive waste at NMP, 2) the NMP gaseous release from the stack and the JAF turbine shine. Badges 31 and 32 are located near the NMP Radwaste Building and are probably "seeing" the loading of high level waste trucks and they would be expected to be consistently higher than other on-site TLD readings. Badges 29 and 30 are probably influenced by the JAF N-16 gamma radiation or "Turbine Shine", other badges may also be affected by this "shine" but these two badges located along the JAF North fence are the most prominent. The other on-site TLD's are probably affected mostly by the gaseous release from the NMP stack which was approximately 0.05 Ci/sec during this report period.

4. Radiation Monitors

Table 10 gives the minimum, maximum and average reading of each of the continuous radiation monitors. Both the on-site monitors and the off-site monitor averaged 37 mrem/qtr during the 1st quarter while the off-site monitor read 71 mrem/qtr during the 2nd quarter and during the same time the on-site monitor averaged 50 mrem/qtr. All of these monitors are spiked with a small radiation source in order to ensure on-scale positive readings.

III ANALYSIS OF ENVIRONMENTAL DATA (continued)

B. Land Program (continued)

4. (Continued)

Some of the more significant reading occurred on Jan. 13 and Jan 30 at the J on-site station and on June 23 at the I on site station. During these period, it appears that these stations were under the influence of the NMP stack plume. A check of the meteorological conditions and release rates during these times show that these stations were directly down-wind from the NMP stack.

DATE	STATION	READINGS mr/hr	NMP RELEASE RATE	METEOROLOGICAL CONDITION		
				W Sp	Dir	Turb. Class
Jan 13	J On Site	0.50	.046Ci/sec	23	285°	II
Jan 30	J On Site	0.50	.023Ci/sec	10	295°	III
June 23	I On Site	0.70	.050Ci/sec	9	290°	IV

The above monitor readings lasted for a period of less than 2 hrs and were probably occurring because the plume was directly over the detector. The JAF release during this time were extremely low (i.e. < 0.001 Ci/sec) and would not have influenced these readings.

5. Airborne I¹³¹

Table 11 and 12 gives the results of the airborne Iodine 131 measurements. There do not appear to be any significant readings above normal background for these samples.

6. Milk

Tables 13 and 14 give the results of the milk analysis. Table 13 lists the I 131 results for the four (4) sample locations none of which are considered to be above normal background and they are all less than the required sensitivity of 0.5 pCi/l. Table 14 lists the results of the Sr 90 and gamma emitter analysis. There is no indication of any above normal reading. The levels of Cs 137 and Sr 90 detected can be attributed to weapons fall out. Table 15 lists the Spring 1975 dairy cow census.

7. Other Land Samples

Table 16 lists the results of soil, pasture grass and eggs. The locations of these samples are listed on Figure 1. None of the activity in the samples is considered to be above local backgrounds.

QUARTERLY ENVIRONMENTAL SAMPLE SUMMARY

Medium/Sample/Location	Nuclide	Jan-March	April-June
Airborne			
Particulates	Gross Beta	(pCi/m ³)	(pCi/m ³)
On-Site Samples			
D ₁		.101	.115
D ₂		.116	.112
E ²		.123	.124
F		.129	.115
G		.144	.124
H		.075	.089
I		.026	.044
J		.058	.069
K		.078	.046
Off-Site Samples			
C		.092	.111
D ₁		.106	.123
D ₂		.106	.118
E ²		.109	.129
F		.124	.135
G		.124	.133
Iodines			
	Gross Iodine	(pCi/m ³)	(pCi/m ³)
On-Site Samples			
D ₁		.002	.001
D ₂		.003	.002
E ²		.003	.003
F		.006	.000
G		.005	.002
H		.001	.001
I		.002	.000
J		.001	.002
K		.002	.002
Off-Site Samples			
C		.001	.004
D ₁		.001	.001
D ₂		.002	.004
E ²		.001	.002
F		.002	.005
G		.002	.002

Medium/Sample/LocationNuclideJan-MarchApril-JuneWaterborneSurfacePrecipitationOn-Site Stations(pCi/m²/mo)(pCi/m²/mo)D₁
D₂
E
F
G
H
I
J
K

Gross Beta

32.6
26.1
27.9
30.3
43.3
25.4
34.1
25.9
23.225.7
16.7
21.4
18.1
26.2
15.7
19.5
17.5
14.3Off Site StationsC
D₁
D₂
E²
F
G

Gross Beta

48.0
27.0
36.5
37.7
24.8
26.335.4
17.7
23.2
19.4
19.7
18.9Surface

(pCi/l)

(pCi/l)

Lake Water

NMP

Gross Beta
H³
Sr⁸⁹, Sr⁹⁰19
482
0.0, 0.011
124

JAF

Gross Beta
H³
Sr⁸⁹, Sr⁹⁰19

22

OSW

Gross Beta
H³
Sr⁸⁹, Sr⁹⁰88

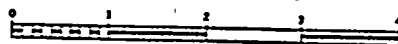
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NOTE: For other sample data see tables that follow (i.e. Fish, Soil, Pasture Grass, etc.).

<u>Medium/Sample/Location</u>	<u>Nuclide</u>	<u>Jan-March</u>	<u>April-June</u>
<u>Ingestion</u>			(pCi/l)
Milk Sample #1	Sr-90		4.8
	I-131		0.0
	K-40		1326
	Cs-137		27
Milk Sample #2	Sr-90		4.9
	I-131		0.0
	K-40		1677
	Cs-137		27
Milk Sample #3	Sr-90		3.4
	I-131		0.0
	K-40		1681
	Cs-137		16
Milk Sample #4	Sr-90		5.9
	I-131		0.0
	K-40		1673
	Cs-137		16

<u>Direct Radiation</u>		(mrem/qtr)	(mrem/qtr)
Continuous Monitors (GM)			
Off Site		37	71
On Site			
D ₁		50	32
D ₂		43	60
E		39	43
F		28	45
G		32	41
H		28	45
I		32	80
J		26	43
K		60	60
TLD			
Off Site		16	17
Site Boundary		13	14
On Site		24	30

SCALE OF MILES



LEGEND

Interstate.....	
U.S. & State Highways.....	
County Roads.....	
Town Roads.....	
County Lines.....	
Town Lines.....	
City & Village Lines.....	
Railroads.....	

Latitude 43°28' N.
Longitude 76°30' W.
at Oswego County Bldg., Oswego, N.Y.
Land Area 968 Square miles

L A K E

O N T A R I O

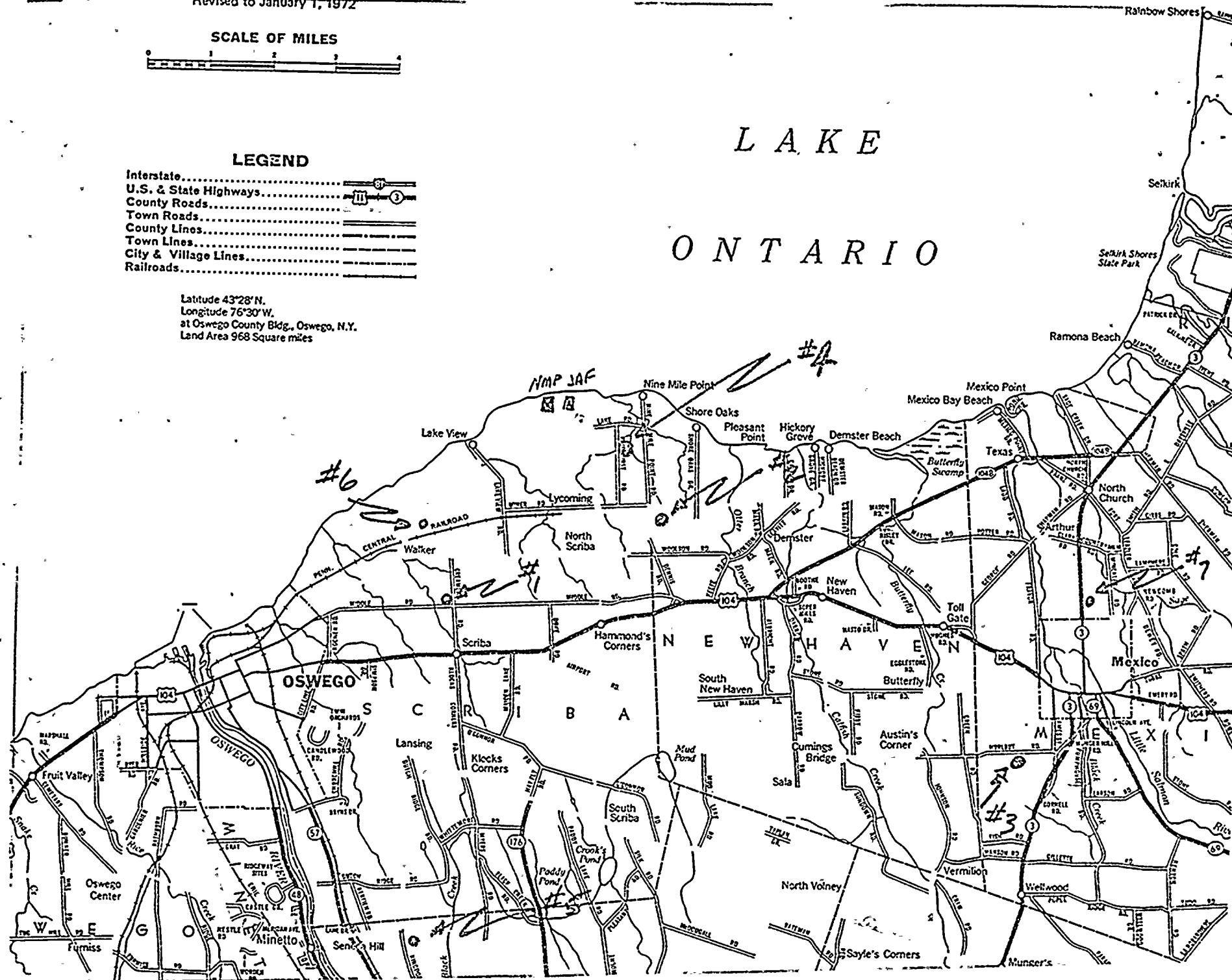
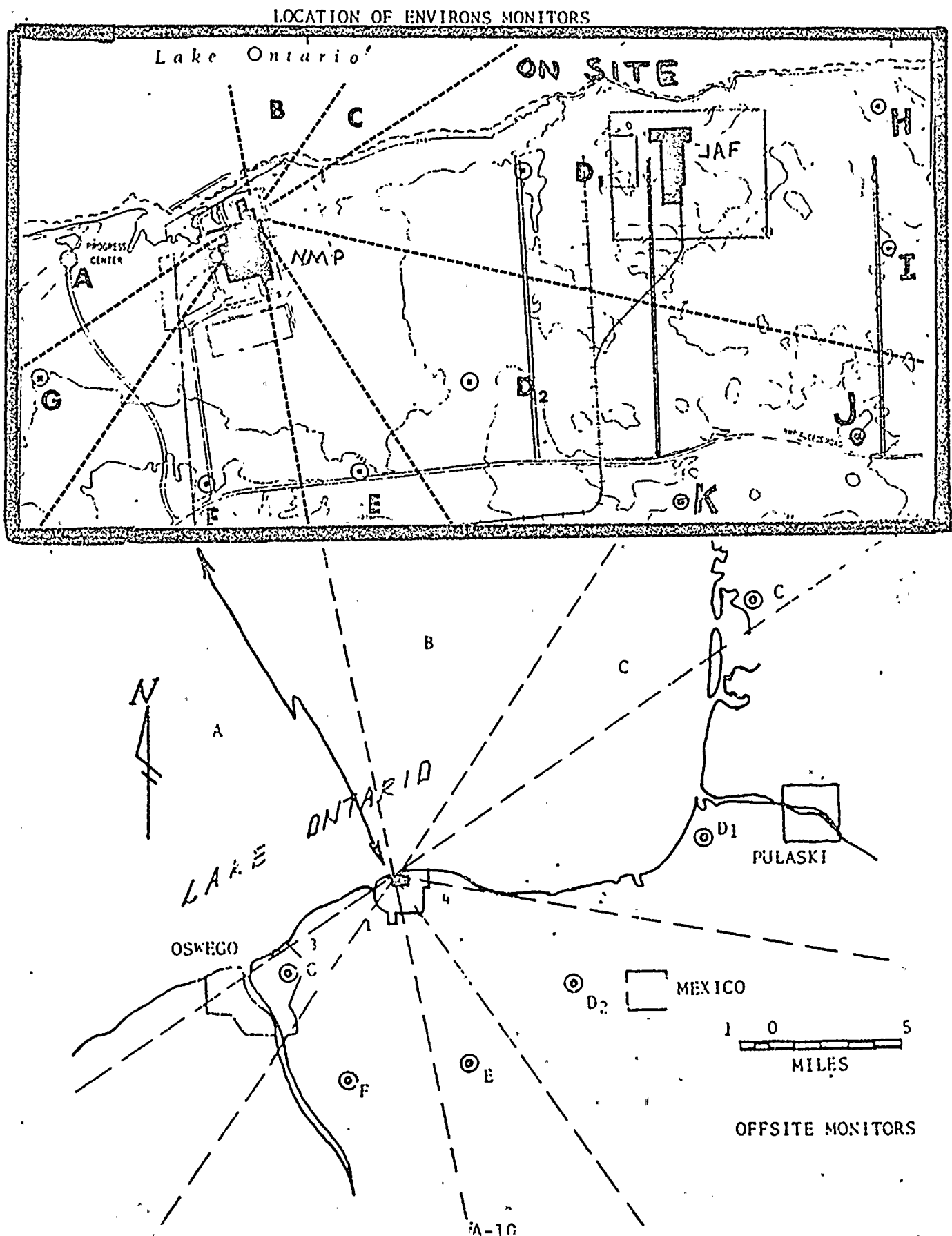


FIGURE I - MILK & LAND SAMPLE LOCATIONS

FIGURE 2
LOCATION OF ENVIRONMENTAL MONITORS

JAF-NMP



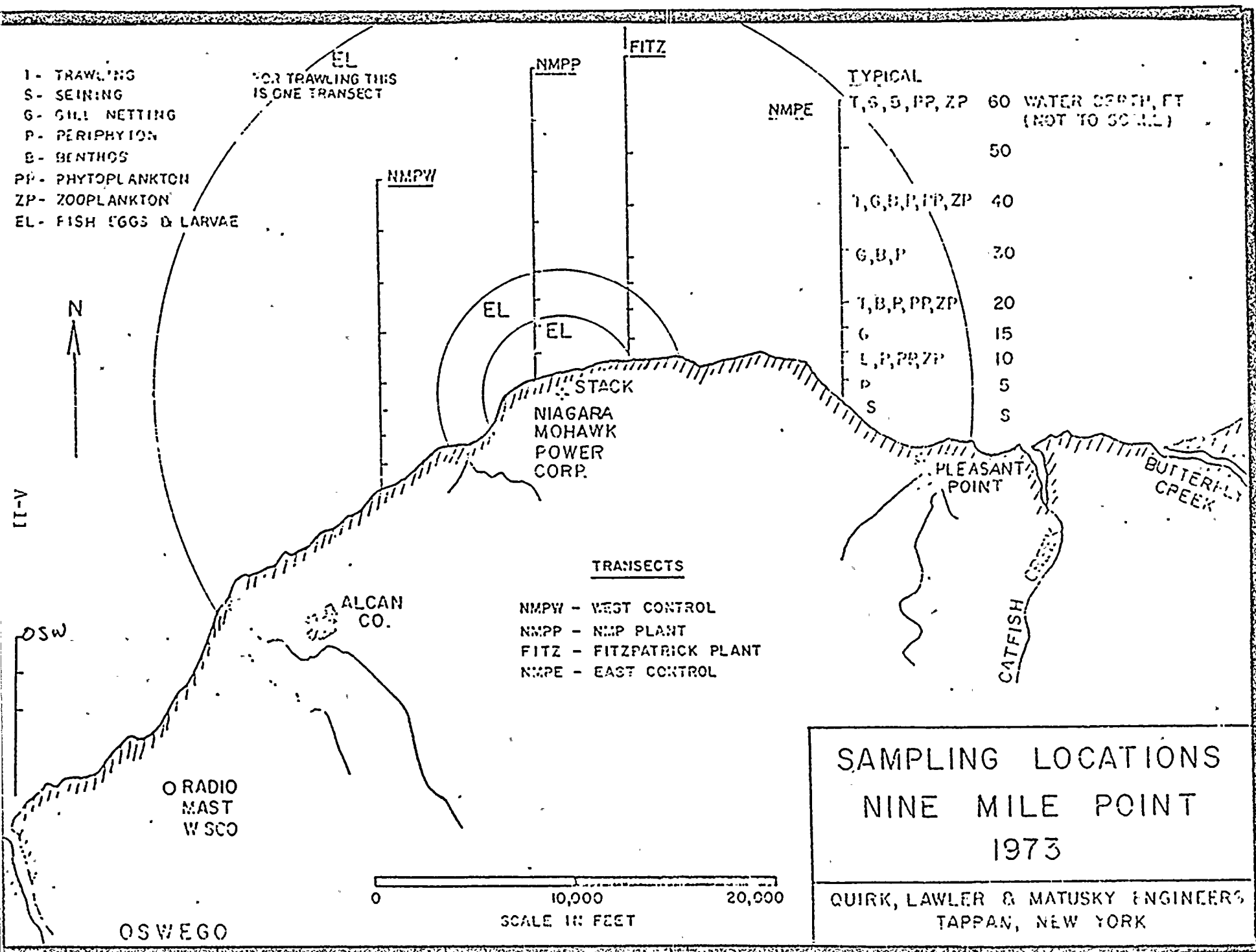


FIGURE 3
AQUATIC SAMPLE LOCATIONS

TABLE 1
SAMPLE COLLECTION AND ANALYSIS
SITE RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

A. LAKE PROGRAM⁽¹⁾

<u>MEDIA</u>	<u>ANALYSIS</u> ⁽⁵⁾	<u>FREQUENCY</u> ⁽⁴⁾	<u>LOCATIONS</u> ⁽²⁾	
1. Fish	GeLi, ⁸⁹ Sr & ⁹⁰ Sr	2/yr	2 onsite	1 offsite
2. Mollusks	GeLi, ⁸⁹ Sr & ⁹⁰ Sr	2/yr	2 onsite	1 offsite
3. Gammarus	GeLi, ⁸⁹ Sr & ⁹⁰ Sr	2/yr	2 onsite	1 offsite
4. Bottom Sediments	GeLi, ⁹⁰ Sr	2/yr	2 onsite	1 offsite
5. Periphyton	GeLi	2/yr	2 onsite	1 offsite
6. Lake Water	GB, GSA or GeLi ³ H, ⁸⁹ Sr, ⁹⁰ Sr	M Comp. Qtr. Comp.	3(3)	

Notes:

- (1) Program continued for at least three years after the startup of James A. FitzPatrick Nuclear Power Plant.
- (2) Onsite locations samples collected in the vicinity of discharges, offsite samples collected at a distance of at least five miles from site.
- (3) The three lake water samples to include Nine Mile Point Unit 1 intake water, James A. FitzPatrick intake water, and Oswego City water.
- (4) Samples of items 1 through 5 collected in spring, summer and fall when available.
- (5) GeLi analysis will have a MDL of 3 times σ of background based on a 400 minute count on a 55 cc GeLi system.

TABLE 1A

SAMPLE COLLECTION AND ANALYSISNMP-JAF SITE RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAMA. LAKE PROGRAM⁽¹⁾

<u>MEDIA</u>	<u>ANALYSIS</u> ⁽⁵⁾	<u>FREQUENCY</u> ⁽⁴⁾	<u>LOCATIONS</u> ⁽²⁾	
1. Fish	GeLi, ⁸⁹ Sr & ⁹⁰ Sr	3/yr	2 onsite	1 offsite
2. Mollusks	GeLi, ⁸⁹ Sr & ⁹⁰ Sr	3/yr	2 onsite	1 offsite
3. Gammarus	GeLi, ⁸⁹ Sr & ⁹⁰ Sr	3/yr	2 onsite	1 offsite
4. Bottom Sediments	GeLi, ⁸⁹ Sr & ⁹⁰ Sr	3/yr	2 onsite	1 offsite
5. Periphyton	GeLi	3/yr	2 onsite	1 offsite
6. Lake Water	GB, GSA or GeLi ³ H	M Comp. Qtr. Comp.	3 ⁽³⁾	

Notes:

- (1) Program continued for at least three years after the startup of JAFNPP.
- (2) Onsite locations samples collected in the vicinity of NMP and JAF discharges, offsite samples collected at a distance of at least five miles from site.
- (3) The three lake water samples to include NMP intake water, JAF intake water and Oswego City water.
- (4) Samples of items 1 through 5 collected in spring, summer and fall when available.
- (5) GeLi analysis will have a MDL of 3 times σ of background based on a 400 minute count on a 55 cc GeLi system.

TABLE 2

SAMPLE COLLECTION AND ANALYSIS

SITE RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

B. LAND PROGRAM⁽¹⁾

<u>MEDIA</u>	<u>ANALYSIS</u>	<u>FREQUENCY</u>	<u>NO. OF LOCATIONS</u>	<u>LOCATIONS</u>	
1. Air Particulates	GB GSA	W M Comp. (6)	At least 10	9 onsite	6 offsite
2. Soil	GSA, ⁹⁰ Sr	Every 3 years	15	9 onsite	6 offsite
3. TLD	Gamma Dose	Qtr.	20	14 onsite	6 offsite
4. Radiation Monitors	Gamma Dose	C	10	9 onsite	1 offsite
5. Airborne - I ¹³¹	GSA	W	At least 10	9 onsite	6 offsite
6. Milk	I GSA, ⁹⁰ Sr	M M Comp.	4(7)	(8)	
7. Human Food Crops	GSA, I ¹³¹	A	3	(8)	
8. Meat, Poultry, Eggs	GSA Edible Portions	SA	3	(8)	

Notes: (Continued)

- (6) Onsite samples counted together, offsite counted together, any high count samples counted separately.
 (7) Frequency applied only during grazing season.
 (8) Samples to be collected from farms within a 10-mile radius having the highest potential concentrations of radionuclides.

Abbreviations:

M Comp. - Monthly composite of weekly or bi-weekly samples
 GB - Gross beta analysis
 GeLi - Gamma spectral analysis on a GeLi system (quantitative)
 GSA - Gamma spectral analysis on a NaI system (quantitative)

A - Annually
 W - Weekly
 M - Monthly
 C - Continuous

BW - Bi-weekly (alternate wks.)
 Qtr. - Quarterly
 SA - Semiannually

TABLE 2A
SAMPLE COLLECTION AND ANALYSIS
NMP-JAF SITE RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

B. LAND PROGRAM⁽¹⁾

<u>MEDIA</u>	<u>ANALYSIS</u>	<u>FREQUENCY</u>	<u>NO. OF LOCATIONS</u>	<u>LOCATIONS</u>	
1. Air Particulates	GB GSA	W M Comp. (2)	At least 10	9 onsite	6 offsite
2. Precipitation	GB GSA	M	At least 10	9 onsite	6 offsite
3. TLD	Gamma dose	Qtr.	20	14 onsite	6 offsite
4. Radiation Monitors	Gamma dose	C	10	9 onsite	1 offsite
5. Airborne - I ¹³¹	GSA	W	At least 10	9 onsite	6 offsite
6. Milk	I, GSA, ⁹⁰ Sr	W M Comp.	4 ⁽³⁾	(4)	
7. Pasture Grass	GSA	M ⁽³⁾	4 ⁽³⁾	(4)	
8. Human Food Crops	GSA, ⁹⁰ Sr	A	3	(4)	
9. Soil	GSA, ⁹⁰ Sr	SA	3	(4)	

Notes:

- (1) Program continued for at least three years after startup of JAFNPP.
- (2) Onsite samples counted together, offsite counted together, any high count samples counted separately.
- (3) Frequency applied only during grazing season.
- (4) Samples to be collected from farms within a 10-mile radius having the highest potential concentrations of radionuclides.

Abbreviations:

GB - Gross beta analysis
 GeLi - Gamma spectral analysis on a GeLi system (quantitative)
 GSA - Gamma spectral analysis on a NaI system (quantitative)
 W - Weekly
 M - Monthly
 M Comp. - Monthly composite of weekly or bi-weekly samples

C - Continuous
 BW - Bi-weekly (alternate weeks)
 Qtr. - Quarterly
 SA - Semiannually
 A - Annually

TABLE 3

AQUATIC SAMPLES FROM LAKE ONTARIO

BOTTOM SEDIMENTS

pCi/g (Wet Weight) (1)

gamma emitters

COLLECTION SITE	COLLECTION DATE	Sr-89	Sr-90	Cs-134	Cs-137	Co-60	Others*
Nine Mile Point 20' & 40'	5-14-75	0.0 ± 0.1	0.0 ± 0.02	0.4 ± 0.3	0.7 ± 0.2	0.4 ± 0.3	0.0 ± 1
FitzPatrick 20' & 40'	5-14-75	0.0 ± 0.1	0.0 ± 0.02	0.9 ± 0.3	1.1 ± 0.3	0.7 ± 0.3	0.0 ± 1
Oswego Steam 20' & 40'	5-14-75	0.0 ± 0.1	0.0 ± 0.02	0.0 ± 1	0.0 ± 1	0.0 ± 1	0.0 ± 1

PERIPHYTON

pCi/g (Wet Weight) (1)

COLLECTION SITE	COLLECTION DATE	Cs 134	Cs 137	Co60	Mn54	Others*	
Nine Mile Point	5-6-75	23 ± 1	36 ± 3	11 ± 1	3 ± 1	0.0 ± 1	
FitzPatrick	5-6,8-75	19 ± 2	31 ± 3	7 ± 1	2 ± 1	0.0 ± 1	
Oswego Steam	5-6-75	0.0 ± 1	0.0 ± 1	0.0 ± 1	---	0.0 ± 1	

(1) Analytical uncertainties are at the 2σ (95% confidence) level. All uncertainties based on the dominant analytical uncertainty which is usually the counting error.

* The spectrum is computer scanned from ~20 to ~2000 KeV. Specifically included in the gamma analysis are Ce-144, Cr-51, Ba-La-140, Cs-134, Cs-137, Zr-Nb-95, Co-58, Co-60, Mn-54, Zn-65. Naturally occurring gamma emitters such as K-40 and Ra daughters are frequently detected but not listed here.

TABLE 3 (continued)

AQUATIC SAMPLES (Continued)

FISH (Composite Samples of 3 Species)

COLLECTION SITE	COLLECTION DATE	pCi/g (Wet)		
		Sr 89	Sr 90	gamma emitters
Nine Mile Point	6-10-75	0.0 ± 0.1	0.06 ± 0.1	0.0 ± 1
FitzPatrick	6-10-75	0.0 ± 0.1	0.05 ± 0.1	0.0 ± 1
Oswego Steam	6-19-75	0.0 ± 0.1	0.08 ± 0.1	0.0 ± 1

MOLLUSKS

COLLECTION SITE	COLLECTION DATE	pCi/g (Wet)			
		Sr 89	Sr 90	gamma emitter	
Nine Mile Point	5-14-75	0.0 ± 0.1	0.06 ± 0.02	Mn-54	Others
FitzPatrick	(No Samples Available)			0.4 ± 0.2	0.0 ± 1
Oswego Steam					

GAMMARUS

No samples available at any of the three sampling locations.

TABLE 4

LAKE ONTARIO WATER SAMPLES pCi/l

DATE		CITY WATER	NMP	JAF
Jan. '75	gross beta	18 ± 2	13 ± 3	6 ± 2
Feb. '75	gross beta	85 ± 7*	22 ± 5	18 ± 2
March '75	gross beta	160 ± 10*	21 ± 5	32 ± 4
April '75	gross beta	16 ± 3	8 ± 4	26 ± 2
May '75	gross beta	6 ± 2	9 ± 4	24 ± 3
June '75	gross beta	33 ± 3	15 ± 4	16 ± 2
1st qtr.	Sr 89	**	0.0 ± 4.0	**
	Sr 90	**	0.0 ± 4.0	**
	H3	**	482 ± 80	**
2nd qtr.	Sr 89	**	3.0 ± 1.9	**
	Sr 90	**	0.0 ± 2.6	**
	H3	**	124 ± 44	**

* Sample believed to be inadvertently contaminated in counting laboratory.

** Sample data not available at time of report. Will be reported in supplemental report.

TABLE 5

NMP/JAF SITE

ENVIRONMENTAL AIRBORNE PARTICULATE SAMPLESOFF-SITE STATIONSGROSS BETA ACTIVITYPCi/M³

DATE COLLECTED	C	D ₁	D ₂	E	F	G
1-8-75	.049 ± .005	.081 ± .007	.084 ± .009	.080 ± .009	.090 ± .011	.086 ± .009
1-16-75	.062 ± .006	.095 ± .008	.091 ± .009	.084 ± .008	.140 ± .015	.102 ± .010
1-22-75	.147 ± .013	.122 ± .011	.138 ± .013	.122 ± .012	.140 ± .016	.140 ± .014
1-29-75	.019 ± .004	.092 ± .009	.100 ± .010	.121 ± .012	.142 ± .017	.137 ± .014
2-5-75	.076 ± .007	.076 ± .007	.063 ± .007	.064 ± .008	.053 ± .010	.057 ± .008
2-12-75	.100 ± .008	.138 ± .011	.110 ± .001	.103 ± .009	.102 ± .010	.109 ± .009
2-19-75	.068 ± .006	.067 ± .006	.066 ± .006	.085 ± .008	.076 ± .008	.081 ± .008
2-26-75	.105 ± .008	.113 ± .009	.100 ± .009	.137 ± .012	.138 ± .013	.059 ± .005
3-6-75	.088 ± .007	.064 ± .005	.103 ± .009	.094 ± .010	.096 ± .009	.121 ± .011
3-12-75	.111 ± .012	.139 ± .011	.113 ± .010	.095 ± .010	.181 ± .017	.283 ± .025
3-19-75	Out of Service	.153 ± .012	.162 ± .013	.145 ± .013	.170 ± .016	.164 ± .015
3-26-75	.119 ± .010	.124 ± .010	.114 ± .010	.135 ± .012	.146 ± .014	.135 ± .013

TABLE 5 (continued)
ENVIRONMENTAL AIRBORNE PARTICULATE SAMPLES (Continued)

OFF-SITE STATIONS

DATE COLLECTED	C	D ₁	D ₂	E	F	G
4-2-75	.162 ± .013	.120 ± .010	.136 ± .011	.150 ± .013	.144 ± .014	.157 ± .014
4-9-75	.095 ± .008	.087 ± .007	.089 ± .008	.099 ± .009	.100 ± .011	.100 ± .010
4-16-75	.212 ± .017	.210 ± .016	.224 ± .018	.202 ± .017	.208 ± .019	.213 ± .019
4-23-75	.195 ± .015	.191 ± .015	.220 ± .018	.195 ± .016	.203 ± .019	.202 ± .018
4-30-75	.127 ± .010	.120 ± .009	.129 ± .011	.123 ± .011	.133 ± .014	.124 ± .012
5-7-75	.111 ± .088	.100 ± .008	.061 ± .005	.044 ± .004	.148 ± .014	.190 ± .016
5-14-75	.015 ± .002	.016 ± .002	.017 ± .002	.019 ± .002	.015 ± .003	.015 ± .002
5-21-75	.201 ± .016	.234 ± .018	.064 ± .006	.245 ± .020	.216 ± .017	.236 ± .021
5-28-75	.079 ± .006	.112 ± .009	.107 ± .008	.109 ± .009	.105 ± .008	.101 ± .009
6-4-75	.072 ± .006	.077 ± .006	.075 ± .006	.085 ± .007	.084 ± .007	.087 ± .008
6-11-75	.107 ± .008	.100 ± .008	.123 ± .010	.145 ± .012	.152 ± .012	.097 ± .009
6-18-75	.060 ± .005	.037 ± .003	.039 ± .004	.073 ± .007	.041 ± .004	.110 ± .010
6-25-75	.077 ± .006	.207 ± .016	.229 ± .018	.242 ± .020	.294 ± .023	.198 ± .017
7-2-75	.087 ± .007	.105 ± .008	.093 ± .008	.100 ± .009	.051 ± .005	.052 ± .005

TABLE 6
NMP/JAF SITE

ENVIRONMENTAL AIRBORNE PARTICULATE SAMPLES*

GROSS BETA ACTIVITY

ON-SITE STATIONS

pCi/m³

DATE COLLECTED	D ₁	D ₂	E	F	G	H	I	J	K
1-8-75	.069 ± .006	.078 ± .009	.079 ± .008	.081 ± .010	.054 ± .005	.044 ± .004	.026 ± .005	.020 ± .002	.050 ± .005
1-16-75	.097 ± .009	.121 ± .012	.110 ± .011	.096 ± .011	.267 ± .026	.081 ± .007	.015 ± .002	.021 ± .003	.086 ± .008
1-22-75	.104 ± .009	.130 ± .013	.112 ± .011	.124 ± .014	.117 ± .012	.064 ± .006	.015 ± .002	.082 ± .007	.100 ± .009
1-29-75	.131 ± .012	.145 ± .015	.184 ± .018	.146 ± .017	.158 ± .015	.109 ± .009	.034 ± .004	.090 ± .008	.071 ± .007
2-5-75	.010 ± .003	.145 ± .015	.135 ± .013	.237 ± .024	.055 ± .009	.012 ± .003	.025 ± .005	.019 ± .003	.084 ± .007
2-12-75	.085 ± .007	.084 ± .007	.101 ± .015	.083 ± .008	.110 ± .010	.091 ± .007	.015 ± .002	.071 ± .006	.086 ± .007
2-19-75	.072 ± .006	.097 ± .009	.091 ± .009	.098 ± .011	.095 ± .010	.069 ± .006	.017 ± .004	.066 ± .006	.077 ± .006
2-26-75	.108 ± .008	.121 ± .011	.136 ± .012	.141 ± .015	.144 ± .014	.100 ± .008	.020 ± .002	.028 ± .003	.080 ± .007
3-6-75	.086 ± .007	.102 ± .009	.104 ± .010	.100 ± .011	.117 ± .011	.083 ± .007	.015 ± .002	.070 ± .006	.079 ± .007
3-12-75	.058 ± .005	.123 ± .012	.093 ± .010	.160 ± .017	.329 ± .029	.023 ± .003	.075 ± .006	.139 ± .011	.058 ± .005
3-19-75	.143 ± .011	.112 ± .023	.176 ± .016	.152 ± .015	.170 ± .016	.139 ± .011	.025 ± .003	.135 ± .011	.138 ± .011
3-26-75	.128 ± .011	.125 ± .011	.156 ± .014	.129 ± .014	.130 ± .013	.057 ± .003	.015 ± .002	.042 ± .004	.044 ± .004

TABLE 6 (continued)
ENVIRONMENTAL AIRBORNE PARTICULATE SAMPLES (Continued)

ON-SITE STATIONS

DATE COLLECTED	D ₁	D ₂	E	F	G	H	I	J	K
4-2-75	.127 ± .010	.124 ± .011	.126 ± .014	.128 ± .013	.170 ± .012	.128 ± .010	.038 ± .004	.096 ± .008	.058 ± .005
4-9-75	.089 ± .007	.088 ± .009	.116 ± .011	.136 ± .014	.105 ± .011	.092 ± .008	.051 ± .005	.080 ± .007	.042 ± .004
4-16-75	.190 ± .015	.185 ± .016	.202 ± .017	.195 ± .019	.190 ± .018	.181 ± .014	.049 ± .004	.165 ± .014	.045 ± .004
4-23-75	.185 ± .014	.166 ± .015	.192 ± .017	.173 ± .014	.187 ± .017	.174 ± .014	.021 ± .002	.140 ± .012	.082 ± .007
4-30-75	.120 ± .010	.144 ± .013	.122 ± .011	.133 ± .011	.133 ± .014	.123 ± .010	.012 ± .002	.104 ± .009	.059 ± .005
5-7-75	.096 ± .007	.100 ± .009	.106 ± .009	.090 ± .007	.098 ± .009	.089 ± .007	.060 ± .005	.050 ± .005	.045 ± .004
5-14-75	.017 ± .002	.012 ± .002	.012 ± .002	.014 ± .002	.013 ± .003	.010 ± .001	.002 ± .001	.007 ± .001	.007 ± .001
5-21-75	.182 ± .014	.156 ± .014	.180 ± .016	.155 ± .012	.167 ± .002	.129 ± .010	.035 ± .005	.064 ± .006	.071 ± .006
5-28-75	.072 ± .006	.099 ± .009	.096 ± .008	.082 ± .007	.072 ± .006	.071 ± .006	.024 ± .002	.053 ± .004	.032 ± .003
6-4-75	.096 ± .008	.101 ± .009	.110 ± .009	.087 ± .007	.094 ± .009	.064 ± .005	.082 ± .006	.058 ± .005	.034 ± .003
6-11-75	.050 ± .004	.051 ± .005	.055 ± .006	.052 ± .004	.050 ± .006	.039 ± .003	.018 ± .002	.029 ± .003	.018 ± .002
6-18-75	.044 ± .004	.089 ± .008	.072 ± .007	.056 ± .005	.245 ± .022	.019 ± .002	.025 ± .002	.017 ± .002	.016 ± .002
6-25-75	.201 ± .016	.195 ± .017	.189 ± .002	.168 ± .013	.139 ± .013	.053 ± .003	.149 ± .011	.083 ± .007	Out of Service
7-2-75	.147 ± .012	.077 ± .008	.121 ± .011	.155 ± .012	.135 ± .013	.128 ± .010	.065 ± .005	.072 ± .006	.100 ± .009

TABLE 7
RAIN WATER

GROSS BETA ACTIVITY

(pCi/m²/Mo)

OFF SITE

MONTH	C	D ₁	D ₂	E	F	G
JANUARY	63.4 ± 4.9	36.7 ± 2.9	40.5 ± 3.7	57.6 ± 5.2	36.7 ± 3.2	28.6 ± 3.0
FEBRUARY	50.0 ± 4.5	34.4 ± 3.2	47.0 ± 4.6	37.9 ± 3.8	27.9 ± 2.4	39.5 ± 4.2
MARCH	30.6 ± 3.4	9.9 ± 1.1	21.9 ± 2.9	17.7 ± 2.7	9.9 ± 1.5	10.7 ± 1.9
APRIL	78.1 ± 6.1	SAMPLE LOST	30.0 ± 2.7	27.1 ± 2.1	21.7 ± 1.7	21.7 ± 1.9
MAY	8.4 ± 1.1	17.7 ± 1.8	27.2 ± 2.5	19.0 ± 2.0	13.5 ± 1.7	26.7 ± 3.2
JUNE	19.6 ± 2.0	SAMPLE LOST	12.3 ± 1.8	12.2 ± 1.7	24.1 ± 2.6	8.4 ± 1.4

TABLE 8

RAIN WATER
GROSS BETA ACTIVITY
(pCi/m²/Mo)

MONTH	ON SITE								
	D ₁	D ₂	E	F	G	H	I	J	K
JAN	34.4 ± 3.2	18.0 ± 2.0	15.1 ± 2.1	10.2 ± 5.8	50.5 ± 5.6	23.1 ± 2.1	37.3 ± 3.7	17.8 ± 2.0	19.6 ± 2.1
FEB	35.5 ± 3.0	35.8 ± 3.5	43.3 ± 4.4	42.9 ± 4.1	43.4 ± 4.6	27.9 ± 2.7	31.2 ± 3.1	35.8 ± 3.4	29.4 ± 3.0
MARCH	28.0 ± 3.0	24.5 ± 2.6	25.2 ± 2.6	37.8 ± 3.8	36.1 ± 3.6	25.1 ± 2.3	33.8 ± 3.2	24.0 ± 2.3	20.5 ± 2.2
APRIL	15.5 ± 1.4	12.1 ± 1.1	21.0 ± 1.9	20.5 ± 1.6	28.5 ± 2.6	14.9 ± 1.2	19.0 ± 1.5	15.2 ± 1.2	9.2 ± 0.8
MAY	40.5 ± 4.2	32.1 ± 3.5	31.8 ± 3.5	15.7 ± 1.8	29.1 ± 3.5	14.8 ± 2.0	24.7 ± 2.9	26.5 ± 3.0	21.3 ± 2.5
JUNE	21.1 ± 2.5	5.9 ± 0.9	11.4 ± 1.8	SAMPLE LOST	21.0 ± 2.5	17.4 ± 2.0	14.8 ± 1.9	10.9 ± 1.5	12.5 ± 1.1

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TABLE 9

ENVIRONMENTAL TLD DOSIMETER READINGSTotal Dose in mRem $\pm 2\sigma$

BADGE NO.	LOCATION	JAN THRU MARCH	APRIL THRU JUNE
3	D-1 On Site	21.1 \pm 9.8	35.6 \pm 12.9
4	D-2 On Site	18.9 \pm 9.0	23.4 \pm 8.7
5	E On Site	13.7 \pm 5.0	22.4 \pm 8.5
6	F On Site	14.3 \pm 4.8	21.0 \pm 9.1
7	G On Site	14.7 \pm 7.6	16.4 \pm 7.3
8	C Off Site	18.1 \pm 7.8	17.8 \pm 8.3
9	D-1 Off Site	17.3 \pm 6.2	18.0 \pm 6.7
10	D-2 Off Site	15.3 \pm 3.6	16.0 \pm 4.9
11	E Off Site	16.1 \pm 6.2	14.4 \pm 6.9
12	F Off Site	13.5 \pm 8.2	15.8 \pm 8.5
13	G Off Site	15.1 \pm 8.6	19.8 \pm 8.5
14	S.W. Oswego	16.3 \pm 6.4	14.4 \pm 5.5
15	Pole 51, W. Boundary	14.3 \pm 7.2	12.2 \pm 8.9
16	Pole 66, W. Boundary	12.5 \pm 10.6	14.8 \pm 5.3
17	Progress Center, East Yd.	19.5 \pm 6.4	24.2 \pm 9.5
18	Progress Center, Picnic Area	17.7 \pm 6.6	20.6 \pm 9.3
19	Pole 9, East Boundary	13.7 \pm 2.6	14.6 \pm 15.3
20	JAF West Yard	22.3 \pm 4.8	27.2 \pm 18.9
21	Pole 67, East Boundary	14.9 \pm 7.0	16.0 \pm 10.5
22	Pole 53, East Boundary	21.9 \pm 4.8	13.8 \pm 12.5
23	H On Site	25.1 \pm 6.8	20.8 \pm 11.5
24	I On Site	18.1 \pm 8.2	19.0 \pm 7.3
25	J On Site	LOST	16.6 \pm 12.5

TABLE 9 (continued)
ENVIRONMENTAL TLD DOSIMETER READINGS

(continued)

BADGE NO.	LOCATION	JAN THRU MARCH	APRIL THRU JUNE
26	K On Site	17.1 ± 7.0	18.2 ± 6.5
27	Lite Pole (N) JAF	25.3 ± 8.2	31.0 ± 10.9
28	Lite Pole (NW) JAF	22.7 ± 7.4	33.6 ± 7.9
29	N. Fence (E) JAF	23.3 ± 5.2	38.0 ± 9.3
30	N. Fence (Mid E) JAF	28.1 ± 9.0	51.8 ± 12.7
31	N. Fence (Mid W) NMP	46.7 ± 15.2	54.0 ± 12.5
32	N. Fence (W) NMP	57.7 ± 14.6	86.4 ± 16.9
33	NMP/JAF (Twin Pole)	24.1 ± 7.0	30.6 ± 9.3

TABLE 10

CONTINUOUS RADIATION MONITORS (GM) 1975

Reading in mr/h

LOCATION	PERIOD	MIN.	AVE.	MAX.
C Off Site	January	.010	.010	.010
	February	.010	.010	.010
	March	.010	.030	.100
	April	.022	.040	.051
	May	.021	.030	.036
	June	.010	.030	.050
D ₁ On Site	January	.004	.020	.024
	February	.010	.018	.033
	March	.011	.030	.090
	April	.010	.020	.060
	May	.010	.014	.022
	June	.010	.012	.026
D ₂ On Site	January	.012	.020	.080
	February	.010	.020	.060
	March	.014	.020	.120
	April	.015	.025	.100
	May	.017	.030	.120
	June	.018	.028	.120
E On Site	January	.013	.015	.025
	February	.010	.020	.050
	March	.010	.018	.050
	April	.015	.022	.067
	May	.013	.020	.120
	June	.012	.018	.140
F On Site	January	.010	.012	.030
	February	.010	.013	.050
	March	.010	.014	.055
	April	.012	.015	.100
	May	.013	.017	.110
	June	.018	.030	.110
G On Site	January	.010	.013	.053
	February	.010	.013	.060
	March	.010	.020	.110
	April	.011	.018	.090
	May	.012	.020	.150
	June	.010	.020	.110

TABLE 10 (Continued)
CONTINUOUS RADIATION MONITORS (GM) 1975

LOCATION	PERIOD	MIN.	AVE.	MAX.
H On Site	January	.010	.013	.060
	February	.010	.012	.083
	March	.010	.013	.110
	April	.010	.014	.110
	May	.010	.018	.150
	June	.010	.030	.200
I On Site	January	.010	.017	.090
	February	.010	.013	.045
	March	.010	.014	.080
	April	.012	.020	.090
	May	.010	.030	.300
	June	.030	.060	.700
J On Site	January	.010	.012	.500
	February	.010	.012	.05
	March	.010	.012	.045
	April	.010	.013	.120
	May	.010	.016	.010
	June	.010	.030	.040
K On Site	January	.014	.030	.090
	February	.014	.025	.100
	March	.015	.030	.200
	April	.015	.030	.100
	May	.016	.030	.120
	June	.015	.025	.250

TABLE 11

NMP/JAF SITE
ENVIRONMENTAL AIRBORNE CHARCOAL CARTRIDGE

IODINE ACTIVITYON-SITE STATIONSpCi/m³

DATE COLLECTED	D ₁	D ₂	E	F	G	H	I	J	K
1-8-75	.002 ± .006	.000 ± .012	.000 ± .012	.010 ± .018	.000 ± .014	.000 ± .004	.000 ± .004	.001 ± .006	.000 ± .005
1-16-75	.000 ± .005	.002 ± .010	.000 ± .020	.000 ± .020	.000 ± .020	.000 ± .008	.000 ± .004	.001 ± .010	.000 ± .005
1-22-75	.000 ± .007	.000 ± .006	.010 ± .020	.010 ± .020	.000 ± .040	.000 ± .005	.001 ± .010	.000 ± .010	.004 ± .006
1-29-75	.002 ± .008	.003 ± .010	.002 ± .040	.002 ± .020	.003 ± .020	.003 ± .007	.006 ± .007	.000 ± .006	.002 ± .007
2-5-75	.008 ± .007	.010 ± .010	.010 ± .010	.020 ± .010	.021 ± .010	.001 ± .007	.005 ± .006	.005 ± .006	.005 ± .006
2-12-75	.003 ± .005	.002 ± .010	.000 ± .010	.000 ± .010	.006 ± .010	.000 ± .004	.000 ± .004	.000 ± .005	.003 ± .006
2-19-75	.000 ± .004	.002 ± .010	.000 ± .009	.001 ± .010	.000 ± .010	.000 ± .005	.000 ± .010	.000 ± .005	.002 ± .005
2-26-75	.002 ± .009	.000 ± .010	.009 ± .010	.000 ± .020	.003 ± .020	.000 ± .005	.001 ± .008	.000 ± .008	.001 ± .006
3-6-75	.003 ± .007	.014 ± .018	.006 ± .010	.029 ± .017	.000 ± .010	.004 ± .008	.006 ± .007	.001 ± .007	.002 ± .004
3-12-75	.001 ± .006	.000 ± .010	.000 ± .010	.001 ± .020	.005 ± .010	.001 ± .006	.001 ± .005	.001 ± .007	.000 ± .005
3-19-75	.000 ± .002	.002 ± .006	.005 ± .010	.000 ± .020	.010 ± .010	.000 ± .004	.001 ± .005	.001 ± .005	.000 ± .005
3-26-75	.000 ± .008	.004 ± .020	.000 ± .010	.000 ± .015	.012 ± .021	.000 ± .007	.001 ± .007	.001 ± .008	.001 ± .007

ENVIRONMENTAL AIRBORNE CHARCOAL CARTRIDGE (Continued)

ON-SITE STATIONS

DATE COLLECTED	D ₁	D ₂	E	F	G	H	I	J	K
4-2-75	.000 ± .005	.00 ± .01	.00 ± .01	.00 ± .01	.00 ± .01	.000 ± .005	.000 ± .004	.002 ± .007	.000 ± .005
4-9-75	.000 ± .006	.00 ± .01	.00 ± .01	.00 ± .02	.00 ± .01	.000 ± .005	.001 ± .005	.003 ± .008	.006 ± .007
4-16-75	.000 ± .005	.00 ± .01	.00 ± .01	.00 ± .01	.00 ± .02	.00 ± .02	.00 ± .02	.000 ± .009	.00 ± .02
4-23-75	.01 ± .02	.02 ± .03	.02 ± .03	.00 ± .02	.00 ± .02	.00 ± .02	.00 ± .01	.01 ± .02	.00 ± .01
4-30-75	.00 ± .01	.00 ± .02	.002 ± .008	.004 ± .005	.02 ± .03	.01 ± .01	.003 ± .004	.01 ± .01	.001 ± .003
5-7-75	.001 ± .006	.00 ± .01	.01 ± .01	.002 ± .007	.00 ± .01	.000 ± .005	.000 ± .007	.002 ± .008	.001 ± .004
5-14-75	.00 ± .02	.00 ± .01	.00 ± .03	.000 ± .007	.00 ± .04	.00 ± .01	.00 ± .01	.00 ± .01	.000 ± .005
5-21-75	.00 ± .01	.00 ± .02	.01 ± .02	.00 ± .01	.00 ± .01	.003 ± .004	.000 ± .008	.00 ± .01	.02 ± .01
5-28-75	0.0 ± 3.4	SAMPLE LOST	0.0 ± 7.2	0.0 ± 4.2	0.0 ± 9.7	0.0 ± 2.9	0.0 ± 2.9	0.0 ± 3.4	0.0 ± 2.5
6-4-75	0.0 ± 2.5	0.0 ± 1.0	0.00 ± 0.75	0.00 ± 0.50	0.0 ± 1.3	0.00 ± 0.25	0.00 ± 0.50	0.00 ± 0.50	0.00 ± 0.25
6-11-75	0.0 ± 7.3	0 ± 20	SAMPLE LOST	0 ± 13	0 ± 30	0.0 ± 8.6	0.00 ± 0.89	0.00 ± 0.78	0.00 ± 0.67
6-18-75	0.00 ± 0.31	0.00 ± 0.65	0.00 ± 0.55	0.00 ± 0.28	0.00 ± 0.78	0.00 ± 0.12	0.00 ± 0.53	0.00 ± 0.26	0.00 ± 0.22
6-25-75	0.00 ± 0.38	0.00 ± 0.69	0.00 ± 0.71	0.00 ± 0.29	0.00 ± 0.62	0.00 ± 0.32	0.00 ± 0.36	0.00 ± 0.40	0.00 ± 0.26
7-2-75	0.00 ± 0.35	0.00 ± 0.31	SAMPLE LOST	0.00 ± 0.75	0.0 ± 0.99	0.00 ± 0.46	0.00 ± 0.57	0.00 ± 0.14	0.00 ± 0.57

TABLE 12

NMP/JAF SITE

ENVIRONMENTAL AIRBORN CHARCOAL CARTRIDGE SAMPLESIODINE ACTIVITYOFF-SITE STATIONSpCi/m³

DATE COLLECTED	C	D ₁	D ₂	E	F	G
1-8-75	.003 ± .008	.000 ± .006	.000 ± .010	.000 ± .011	.000 ± .020	.004 ± .014
1-16-75	.000 ± .009	.000 ± .006	.000 ± .010	.000 ± .012	.000 ± .020	.000 ± .020
1-22-75	.000 ± .007	.000 ± .006	.000 ± .009	.003 ± .010	.000 ± .010	.000 ± .010
1-29-75	.001 ± .008	.002 ± .009	.010 ± .009	.000 ± .020	.000 ± .020	.000 ± .010
2-5-75	.000 ± .005	.001 ± .005	.005 ± .009	.005 ± .010	.010 ± .010	.004 ± .010
2-12-75	.002 ± .006	.001 ± .007	.001 ± .007	.001 ± .009	.010 ± .010	.000 ± .010
2-19-75	.000 ± .006	.000 ± .004	.001 ± .008	.000 ± .009	.000 ± .010	.000 ± .010
2-26-75	.000 ± .010	.000 ± .008	.000 ± .008	.000 ± .010	.000 ± .020	.000 ± .009
3-6-75	.001 ± .009	.004 ± .008	.003 ± .007	.005 ± .020	.004 ± .009	.007 ± .010
3-12-75	.000 ± .020	.000 ± .006	.004 ± .008	.000 ± .010	.000 ± .010	.008 ± .010
3-19-75	Out of Service	.001 ± .005	.004 ± .009	.000 ± .010	.000 ± .010	.000 ± .010
3-26-75	.000 ± .009	.003 ± .009	.000 ± .010	.000 ± .020	.000 ± .012	.000 ± .020

TABLE 12 (continued)

ENVIRONMENTAL AIREORN CHARCOAL CARTRIDGE (Continued)

OFF-SITE STATIONS

DATE COLLECTED	C	D ₁	D ₂	E	F	G
4-2-75	.001 ± .007	.000 ± .006	.001 ± .009	.000 ± .009	.00 ± .01	.00 ± .01
4-9-75	.00 ± .01	.000 ± .008	.003 ± .008	.006 ± .010	.01 ± .02	.001 ± .010
4-16-75	.00 ± .02	.00 ± .02	.01 ± .02	.00 ± .03	.00 ± .03	.01 ± .04
4-23-75	.003 ± .008	.000 ± .006	.003 ± .008	.00 ± .01	.00 ± .04	.01 ± .03
4-30-75	.00 ± .01	.002 ± .005	.01 ± .02	.01 ± .02	.03 ± .02	.01 ± .02
5-7-75	.000 ± .009	.00 ± .02	.01 ± .02	.00 ± .03	.01 ± .02	.00 ± .04
5-14-75	.019 ± .021	.00 ± .01	.00 ± .02	.00 ± .01	.01 ± .04	.00 ± .02
5-21-75	.03 ± .03	.01 ± .02	.01 ± .02	.01 ± .02	.01 ± .01	.00 ± .03
5-28-75	0.0 ± 3.5	0.0 ± 2.8	0.0 ± 3.8	0.0 ± 5.2	0.0 ± 4.5	0.0 ± 6.2
6-4-75	0.0 ± 2.5	0.0 ± 2.3	0.0 ± 3.1	0.0 ± 4.1	0.0 ± 3.0	0.0 ± 5.0
6-11-75	0.00 ± 0.78	0.00 ± 0.78	0.0 ± 1.0	0.0 ± 1.6	0.0 ± 1.2	0.0 ± 1.9
6-18-75	0.0 ± 1.1	0.0 ± 1.0	0.0 ± 1.3	0.0 ± 1.9	0.00 ± 0.67	0.00 ± 0.59
6-25-75	0.00 ± 0.25	0.00 ± 0.23	0.00 ± 0.32	0.00 ± 0.54	0.00 ± 0.38	0.00 ± 0.70
7-2-75	0.00 ± 0.79	0.00 ± 0.53	0.00 ± 0.69	0.0 ± 1.0	0.00 ± 0.68	0.0 ± 1.2

TABLE 13

ENVIRONMENTAL MILK SAMPLE ANALYSIS

 I^{131} pCi/liter (at time of sampling)

COLLECTION DATE	SAMPLE LOCATION			
	#1	#2	#3	#4
4-29-75	0.14 \pm 0.10	0.15 \pm 0.11	0.07 \pm 0.09	0.1 \pm 0.1
5-7-75	0.12 \pm 0.14	0.1 \pm 0.1	0.0 \pm 0.1	0.1 \pm 0.1
5-13-75	0.35 \pm 0.27	0.27 \pm 0.21	0.0 \pm 0.2	0.33 \pm 0.25
5-20-75	0.1 \pm 0.2	0.0 \pm 0.2	0.0 \pm 0.2	0.0 \pm 0.2
5-27-75	0.0 \pm 0.2	0.0 \pm 0.1	0.0 \pm 0.1	0.0 \pm 0.1
6-3-75	0.0 \pm 0.2	0.0 \pm 0.2	0.0 \pm 0.1	0.0 \pm 0.5
6-10-75	0.0 \pm 0.2	0.27 \pm 0.19	0.0 \pm 0.1	0.0 \pm 0.1
6-17-75	0.0 \pm 0.2	0.0 \pm 0.2	0.0 \pm 0.2	0.0 \pm 0.2
6-24-75	0.1 \pm 0.2	0.0 \pm 0.2	0.19 \pm 0.22	0.1 \pm 0.2

TABLE 14

ENVIRONMENTAL MILK SAMPLE ANALYSIS

GAMMA ISOTOPIC AND STRONTIUM-90 IN MONTHLY MILK COMPOSITES

COLLECTION SITE	COLLECTION DATE	pCi/l			
		K-40	Cs-137	Sr-90	Others*
#1	April	1210 ± 160	31 ± 8	4.9 ± 2.0	<10
	May	1455 ± 185	23 ± 10	7.4 ± 3.1	<10
	June	1313 ± 285	27 ± 12	2.3 ± 1.0	<10
#2	April	1410 ± 210	29 ± 10	3.2 ± 2.0	<10
	May	1890 ± 210	17 ± 10	4.5 ± 2.2	<10
	June	1730 ± 250	36 ± 13	6.9 ± 1.0	<10
#3	April	1590 ± 195	11 ± 9	2.8 ± 1.0	<10
	May	1785 ± 190	23 ± 8	4.5 ± 2.2	<10
	June	1670 ± 260	13 ± 8	3.0 ± 2.0	<10
#4	April	1480 ± 190	23 ± 10	8.1 ± 2.0	<10
	May	2000 ± 200	19 ± 8	3.9 ± 2.7	<10
	June	1540 ± 351	< 5	5.8 ± 3.1	<10

* The spectrum is computer scanned from ~20 to ~2000 KeV. Data listed as "<" are at the 3σ level, others are 2 σ. Specifically included in the gamma analysis are Ce-144, Cr-51, Ba-La-140, Cs-134, Cs-137, Zr=Nb-95, Co-59, Mn-54, Zn-65. Naturally occurring gamma emitters such as K-40 and Ra daughters are frequently detected but not listed here.

TABLE 15

MILKING DAIRY CATTLE

Within a 10 Mile Radius of NMP/JAF Site

<u>TOWN</u>	<u>NO. OF DAIRY CATTLE</u>
Oswego	31
Scriba	180
New Haven	253
Richland	150
Volney	45
Palermo	45
Mexico	635

TABLE 16

LAND SAMPLES

Strontium-90 and Gamma Isotopic Analysis of Soils

Collection Site	Collection Date	pCi/g (Wet) ⁽¹⁾		
		Sr-90	Cs-137	Gamma Emitters*
#1	06-17-75	0.26 ± .01	0.9 ± 0.3	0.0 ± 1
#2	06-17-75	0.04 ± .01	0.0 ± 1	0.0 ± 1
#3	06-17-75	0.06 ± .01	0.0 ± 1	0.0 ± 1

Gamma Isotopic Analysis of Pasture Grass

Collection Site	Collection Date	pCi/g (Dry weight)	
		Cs-137	Gamma Emitters*
#1	06-24-75	0.4 ± .2	0.0 ± 1
#2	06-24-75	0.4 ± .2	0.0 ± 1
#3	06-24-75	0.4 ± .1	Ce-144 0.9±.4 Others 0.0±1
#4	06-24-75	0.3 ± .1	0.0 ± 1

Gamma Isotopic Analysis of Chicken Eggs

Collection Site	Collection Date	pCi/g ⁽¹⁾	
		Cs-137	Gamma Emitters*
#5	05-27-75	0.0 ± 1	0.0 ± 1
#6	05-27-75	0.0 ± 1	0.0 ± 1
#7	05-27-75	0.0 ± 1	0.0 ± 1

(1) Analytical uncertainties are at the 2σ (95% confidence level). All uncertainties based on the dominant analytical uncertainty which is usually the counting error.

*The spectrum is computer scanned from ~20 to ~2000 KeV. Specifically included in the gamma analyses are Ce-144, Cr-51, Ba-La-140, Cs-134, Cs-137, Zr-Nb-95, Co-58, Co-60, Mn-54, Zn-65. Naturally occurring gamma emitters such as K-40 and Ra daughters are frequently detected but not listed here.

