

Sampling Summary for April 4-5  
 Operation Ivory Purpose  
 Environmental Protection Agency  
 April 6, 1979

All 31 of the samples of airborne particulates and gaseous radio-  
 dine collected on filters and charcoal cartridges on April 4-5 and the  
 five samples not included in yesterday's summary were analyzed by gamma  
 spectrometry. All samples had gamma spectra which were negligible for  
 reactor-related radioactivity, except for the samples collected at  
 Station 13 on April 3-4 and Station 29 on April 4-5. These samples  
 had traces of  $^{133}\text{Xe}$  which could not be quantitated.

Several "grab" samples of air collected on the ground and in the  
 air by aircraft were collected and analyzed for tritium and radioactive  
 noble gases. The results of the samples are as follows:

Location	Collection Period	Vol (m <sup>3</sup> )	Analyses	Conc. pCi/m <sup>3</sup>
Cly, Pa. 0.7 mi S. Goldsboro Hwy. 262	1410-1541 4/4	0.619	$^{85}\text{Xe}$	1500 $\pm$ 9 140,000 $\pm$ 82
Cly, Pa. 0.7 mi Goldsboro Hwy. 262	1410-1541 4/4	4.25	$^3\text{H}$	<400
5 mi S.E. TMI (aircraft)	0920-0944 4/5	0.692	$^{133}\text{Xe}$ $^{85}\text{Kr}$ (lost)	2300 $\pm$ 30

Air Sampling Summary for April 5-6  
 Operation Ivory Purpose  
 Environmental Protection Agency  
 April 7, 1979

From Gamma Spectrometry analyses on air filters and charcoal cartridges collected at all 31 stations of the air sampling network during April 5-6, 1979, reactor-related radioactivity was detected at Stations 4, 5, 7, 9, 10, 21, and 25. Only trace quantities of  $^{133}\text{Xe}$  was detected on the charcoal cartridges at Stations 5, 10, and 21. The other stations had the following concentrations of  $^{131}\text{I}$ , which were used to postulate the radiation dose to an infant receptor breathing air with the observed radioiodine concentrations.

Station Number	Sampling Period (h)	Conc. (pCi/m <sup>3</sup> )	Infant Thyroid Dose (mrad)*
4	25.1	0.22 ± 0.90	0.0012 <sup>↑</sup> mrad
9	25.0	0.17 ± 0.090	0.00092
25	25.5	0.16 ± 0.092	0.00078

\* Dose conversion constant for  $^{131}\text{I} = 2.12 \times 10^{-3} \text{mrad} \cdot \text{m}^3 / \text{pCi} \cdot \text{h}$ . A cumulative listing of all air sampling results to date is attached.

One "grab" sample of air collected earlier, but not reported, was analyzed for noble gases. The results for this sample is as follows:

Location	Collection Period	Vol. (m <sup>3</sup> )	Analyses	Conc. (pCi/m <sup>3</sup> )
Station 13	1800-1940 4/3	0.612	$^{133}\text{Xe}$ $^{85}\text{Kr}$	3900±60 (lost)

Sampling Summary-Operation Ivory Purpose  
Environmental Protection Agency  
April 8, 1979

Air Sampling

As shown by the cumulative listing of air results, the only reactor-related radioactivity observed on the particle filters and charcoal cartridges collected from the 31 network stations during the period April 6-7 was at Stations 11, 16, and 29. Only trace quantities of  $^{133}\text{Xe}$  was observed in the samples from Stations 16 and 29. The sample from Station 11 had a  $^{131}\text{I}$  concentration of  $0.21 \pm 0.10$  pCi/m<sup>3</sup>, which converted to an estimated infant thyroid dose of 0.0010 mrad.

Two samples of air for noble gas analysis were collected; however, the results are not available at this time.

Water Sampling

Thirteen water samples were collected around the <sup>five</sup> four different outfalls of TMI, and analyzed by gamma spectrometry. No radioiodine above the minimum detectable concentration of 130 pCi/l was measured. Concentrations of  $^{133}\text{Xe}$  (1200  $\pm$  540 pCi/l and 5100  $\pm$  620 pCi/l) were respectively measured in water samples collected at a location 30 yd. upstream of Outfall 001 (4/4/79, 1630 hours) and at Outfall Marker 112 (4/4/79, 1640 hours).

Ninety-nine samples of river water and sediment were collected near the Columbus Bridge and Dam by USGS during the period March 30, 1979 to April 3, 1979. All samples were shipped to the EPA Las Vegas laboratory for gamma spectrometry analysis.

A total of 141 water samples were collected by State of Pennsylvania personnel from drinking water supplies in the area and mailed to the EPA Montgomery, Alabama laboratory for gamma spectrometry analysis and gross beta radioactivity analysis.

The analysis on all priority 1 and 2 samples indicated that the  $^{131}\text{I}$  concentrations and gross beta radioactivity concentrations were <25 pCi/l and <15 pCi/l, respectively. The results on the priority 3 samples are not available at the present time.

Milk Sampling

Beginning April 6, milk samples were collected from eight dairies within an 8-mile radius of TMI and one near Hershey, Pa. All samples were shipped to the EPA Las Vegas laboratory for gamma spectrometry analysis.

Daily samples of milk will be collected from these locations until reactor cool-down.

Gamma Exposure Monitoring

A review of gamma rate recorder charts for the period April 7-8 indicated that the gamma exposure rates at 31 of the 35 monitoring locations were at background levels. The charts for two stations were not available at the present time, one unit failed, and the chart for one recorder indicated an above background reading for the period 0220-0320 hours on April 8.

Sampling Summary - Operation Ivory Purpose  
Environmental Protection Agency  
April 9, 1979

Air Sampling

Compressed air samples collected on 4/7/79 showed the following results:

<u>Station</u>	<u>Azimuth</u>	<u>Distance</u>	<u>Xe-133 pCi/m<sup>3</sup></u>	<u>Kr-85 pCi/n<sup>3</sup></u>
1	290	6.2	< 7.5	27 ± 7.8
14	145	5.3	464 ± 7.6	150 ± 5

Laboratory analysis of filters and charcoal cartridges is being transferred to Las Vegas. Results will be reported to Harrisburg as available.

Water Sampling

One hundred five of 138 samples collected on 4/4/79 from public drinking water supplies within 25 miles of Three Mile Island have been analyzed with no radioactive material above background detected. The minimum detectable activity is defined as 18 pCi/l for I-131 and 3 pCi/l for gross beta activity.

USGS/EPA water sampling from the Susquehanna River has been discontinued. Municipal supplies for Columbia, Wrightsville, and Lancaster will be sampled daily and mailed to Las Vegas for analysis. Three Mile Island discharge water will continue to be sampled and gamma counted in Harrisburg.

Sampling Summary - Operation Ivory Purpose  
Environmental Protection Agency  
April 10, 1979

Air

Compressed air sample results to be added to existing data are:

<u>STATION</u>	<u>AZ.</u>	<u>DIST.(mi)</u>	<u>ON</u>	<u>OFF</u>	<u>Kr-85 pCi/m<sup>3</sup></u>	<u>Xe-133 pCi/m<sup>3</sup></u>
001	290	6.2	4/7 1455	4/9 1305	61.7 ± 3.7	265 ± 8
014	145	5.3	4/7 1340	4/9 1215	44.4 ± 2	882 ± 25

WATER

The remaining 38 river samples collected by USGS and analyzed by EPA show no detectable iodines or gross beta above background. Each of the 145 samples received a liquid scintillation count for <sup>3H</sup> and <sup>90Sr</sup>; all results were negative. Results for 21 grab samples related to TMI are shown in the attached tables.

Terrestrial

Six of 31 gamma rate recorders reviewed today showed positive responses. No response was alarming.

POOR ORIGINAL

SAMPLING Summary - OPERATION Ivory Purpose  
 Environmental Protection Agency  
 April 11, 1979

Analytical results generated in Las Vegas will henceforth be reported as appendages to this summary. Results will include air filters, charcoal cartridge, and milk sample data. TLD results will be included as available. Results generated at Harrisburg will appear under the above heading.

Air (compressed sample)

<u>STA</u>	<u>Az</u>	<u>DIST</u>	<u>ON</u>	<u>OFF</u>	<u>Kr-85 pCi/m<sup>3</sup></u>	<u>Xe-133 pCi/m<sup>3</sup></u>
005			4-6 1550	4-8 0745	40.5 ± 4	173 ± 12

WATER

<u>Location</u>	<u>Date</u>	<u>Type</u>	<u>Results pCi/l</u>
TMI Site Waste water from truck ca 63723	4-10-79	Grab	GSN
TMI Outfall 001 72" pipe	4-10-79	Composite	GSN
TMI Outfall 005	4-10-79	Grab	<sup>133</sup> Xe = 219 ± 96
TMI Outfall 003	4-10-79	Grab	<sup>133</sup> Xe = 108 ± 83
TMI 20" pipe, Marker 112	4-10-79	Grab	GSN

POOR ORIGINAL

SAMPLING Summary - Operation Ivory Purpose  
 Environmental Protection Agency  
 April 12, 1979

Ground monitoring with scintillation type  $\mu\text{R/hr}$  meters has typically been not greater than 10-15  $\mu\text{R/hr}$ . Gamma exposure rate recorders occasionally detect radioactivity. Two recorders indicated activity on 4-11-79 although the response from Station 10, Elizabethtown, is apparently an error. It is suspected that the instrument was not functioning properly due to moisture influencing the electronics.

AIR (compressed sample)

<u>STA</u>	<u>AZ.</u>	<u>DIST. (mi)</u>	<u>ON</u>	<u>OFF</u>	<u>Kr-85 pCi/m<sup>3</sup></u>	<u>Xe-133 pCi/m<sup>3</sup></u>
005	040	2.6	4-8,1750	4-10,0750	$38.3 \pm 5.2$	LOST
011	130	2.9	4-10,1500	4-10,1645	$22 \pm 4.5$	$132 \pm 12$
014	145	5.3	4-9,1220	4-11,1220	$26.3 \pm 5.5$	$1680 \pm 25$

WATER

A rain sample was collected at Capital City Airport during the period 4-9,1630 to 4-10,0730. The sample contained no detectable gamma emitters. Preliminary  $^3\text{H}$  counting indicates about 500 pCi/l.

Corrections to previous results due to calculational error.

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>Results pCi/l</u>
Industrial Waste Sump, TMI	4-8-79		$\text{I-131} = 2.04 \times 10^3 \pm 5.99 \times 10^1$
TMI MARK 112	4-9-79		$\text{I-131} = 22.4 \pm 8.34$
TMI Onsite Oily Waste Water	4-9-79		$\text{I-131} = 1.3 \times 10^3 \pm 4.68 \times 10^1$
TMI Onsite Filter System Sump	4-9-79		$\text{I-131} = 109 \pm 16.8$
TMI Onsite Oily Waste Water	4-10-79		$\text{I-131} = 905 \pm 39.6$

**POOR ORIGINAL**

WATER (cont'd)

<u>Location</u>	<u>Date</u>	<u>Type</u>	<u>Results <math>\mu\text{Ci/l}</math></u>
TMI Sewage Holding Tank	4-11-79	Grab	GSN
TMI East Dike	4-11-79	Grab	GSN
TMI Oily Waste Water	4-11-79	Grab	I-131 = $951 \pm 40.3$
TMI 001	4-10 to 4-11	Composite	GSN
TMI MARKER 112	4-11-79	Grab	GSN
TMI 003	4-11-79	Grab	GSN
TMI Site Waste Water Truck	4-11-79	Grab	GSN

POOR ORIGINAL

SAMPLING SUMMARY - OPERATION Ivory Purpose  
 Environmental Protection Agency  
 April 13, 1979

Air (filters)

All particulate filters and charcoal cartridges collected 4-9-79 showed no detectable gamma emitters with the exceptions below

<u>STA</u>	<u>AZ</u>	<u>DIST (mi)</u>	<u>ON</u>	<u>OFF</u>	<u>RESULTS (pCi/m<sup>3</sup>)</u>
18	220	2.5	4-8	4-9	I-131 = $0.092 \pm 0.048$
21	250	4.0	4-8	4-9	I-131 = $0.81 \pm 0.34$
23	265	2.9	4-8	4-9	I-131 = $0.74 \pm 0.13$
34	305	2.7	4-8	4-9	I-131 = $0.16 \pm 0.063$

Milk

All milk samples collected through 4-9-79 at nine locations showed no gamma emitting radionuclides above background.

TERRESTRIAL

Soil and vegetation samples have been collected at 27 of the 31 EPA monitoring stations.

WATER

<u>Location</u>	<u>Date</u>	<u>Type</u>	<u>Results pCi/l</u>
TMI East Dike	4-12	grab	GSN
TMI Oily Waste Water	4-12	grab	I-131 = $736 \pm 36.5$
TMI Sewage	4-12	grab	GSN
TMI 001	4-12	composite	possible Xe
TMI Marker 112	4-12	grab	GSN
TMI 003	4-12	grab	GSN
TMI Marker 112	4-13	grab	GSN
TMI 003	4-13	grab	GSN
TMI East Dike	4-13	grab	GSN
TMI Sewage	4-13	grab	GSN
TMI Oily Waste Water	4-13	grab	I-131 = $372 \pm 26.3$

**POOR ORIGINAL**

Fish

collected 4-12-79

Background composite, Susquehanna River

Walleye

Carp

Small Mouth Bass

Redhorse

Result

GSN

GSN

GSN

GSN

GSN

Air (filters)

All particulate filters and charcoal cartridges collected 4-10-79 showed background with the following exceptions.

<u>STA</u>	<u>AZ</u>	<u>DIST(mi)</u>	<u>ON</u>	<u>OFF</u>	<u>RESULTS (pCi/m<sup>3</sup>)</u>
11	130	2.9	4/9 0940	4/10 1010	I-131 = $0.59 \pm 0.17$
21	250	4.0	4/9 0904	4/10 0858	I-131 = $0.29 \pm 0.12$

Milk Note

Hertzler Dairy, near Saginaw sample collected 4-8-79 showed Cs-137 =  $6.7 \pm 0.63$  pCi/l considered to be background.

POOR ORIGINAL

SAMPLING Summary - Operation Ivory Porpose  
Environmental Protection Agency  
April 14, 1979

All gamma rate recorders operating 4-12 thru 4-13<sup>AM</sup> showed background with the possible exception of York Haven. A slight indication above background was shown for early afternoon of 4-13 which is not confirmed by the ARAC data. Two excursions were noted on the York Haven recorder chart for 4-11 thru 4-12. As the recorder had indicated a high background (about 20  $\mu$ R/m), the data was considered suspect - perhaps anomalous due to moisture effecting the instrument. After reviewing the ARAC data, it appears the recorder may have detected about 6 times background during the afternoon (1400-1700) of 4-12 and about 3 times background around 0400 on 4-13. The instrument has been replaced.

The recorder operating at Highspire detected levels above background from noon, 4-13 to 1900, 4-13 with maximum values up to 50% above the indicated background.

Samples are being counted in Las Vegas today. The computer will present the results to us Monday, including results computed there for analyses done here.

Happy Easter from Harrisburg.

POOR ORIGINAL

Sampling Summary - Operation Ivory Purpose  
 Environmental Protection Agency  
 April 16, 1979

Air, compressed

Sta.	O <sub>3</sub>	Dist(mi)	On	Off	Result (pCi/m <sup>3</sup> )
001	290	6.2	4/9 1310	4/11 1645	Kr-85 = 48 ± 5.0 ??? Xe-133 = 32 ± 5.0
017	180	3.0	4/11 1535	4/11 1730	Kr-85 = 33 ± 3.5 Xe-133 = 229 ± 6.3

Air, molecular sieve

Sta	O <sub>3</sub>	Dist(mi)	On	Off	Result
011	130	2.9	4/10 1505	4/10 1640	3H = 0.6 ± 0.58 pCi/ml HTO = 2.24 ± 2.15 pCi/m <sup>3</sup> H <sub>2</sub> O = 3.74 g/m <sup>3</sup>
017	180	3.0	4/11 1540	4/11 1740	3H = 0.73 ± 0.57 pCi/ml HTO = 2.46 ± 1.93 pCi/m <sup>3</sup> H <sub>2</sub> O = 3.36 g/m <sup>3</sup>

Air, filters plus charcoal cartridge

STA	A <sub>2</sub>	DIST	ON	OFF	I-131 Result (pCi/m <sup>3</sup> )
11			4/10 1015	4/11 1005	0.91 ± 0.34
13			4/10 1205	4/11 1035	0.59 ± 0.20
14			4/10 1240	4/11 1215	0.17 ± 0.096
15			4/10 1227	4/11 1440	0.27 ± 0.12
16			4/10 1120	4/11 1326	0.21 ± 0.16
17			4/10 1155	4/11 1310	0.34 ± 0.13
20			4/10 1340	4/11 1150	0.56 ± 0.24
21			4/10 0904	4/11 0943	1.21 ± 0.35 *
23			4/10 1005	4/11 1010	0.51 ± 0.21

\* relates to 0.063 mRad infant thyroid dose for period of sample

oil.

26 soil samples collected on 4-11 from near EPA stations - 25 are analyzed and show only natural activity and some Cs-137. 9 samples showed Cs-137 ranging from 0.22 to 0.96 pCi/g.

POOR ORIGINAL

Resimetry

stations - TLDs from 34 stations for the period 3-31 thru 4-8 show background except two. York Haven and Goldsboro showed 2.0 and 2.5 mR. Background was estimated from the TMI 1978 annual report as 0.21 mR/day. This level agrees with other EPI data for the area. A net exposure is 1.8 mR value which exceeds 3 sigma above background. The net response of the TLD was multiplied by 4 to correct for the 25% efficiency showed by the NBS check last week.

~~stations~~ - badges from 44 residents and 11 ~~stations~~ - personnel for the same period ~~showed~~ no net exposures above background.

POOR ORIGINAL

Sampling Summary - Op. Survey Purpose  
 Environmental Protection Agency  
 April 17, 1979

AIR

STA	ON	OFF	RESULTS	
31	4/12 1635 (grab)	1823	3H < 0.93 pCi/ml H <sub>2</sub> O	
			HTO < 6.39 pCi/m <sup>3</sup> Air	
			H <sub>2</sub> O 6.9 g/m <sup>3</sup>	
34	4/13 1515 (grab)	1715	3H < 0.98 pCi/ml H <sub>2</sub> O	
			HTO < 5.0 pCi/m <sup>3</sup> Air	
			H <sub>2</sub> O 5.14 g/m <sup>3</sup>	
			Kr-85	Xe-133
031	4/12 1635	4/12 1823	11 ± 4.6	115 ± 14
005	4/10 0800	4/12 0800	13.3 ± 6.0	294 ± 10
014	4/11 1230	4/13 1100	18.1 ± 6.0	300 ± 14
001	4/11 1650	4/13 1417	21.3 ± 6.7	1490 ± 2.9
034	4/13 1520	4/13 1715	26.7 ± 5.4	93.2 ± 7.0
005	4/12 0805	4/14 0830	15.3 ± 5.0	42.7 ± 6.9

POOR ORIGINAL

I-131

- (A) 175 p.c./l  $\pm 106$
- (B) 1160  $\times e^{-133} \pm 860$

4-14	TMI	Outfall 5		
4-14	TMI	Outfall 3		
4/13-4/14	TMI	Outfall 001	composite	GSN
4/14	TMI	20' outfall		GSN
4/16	TMI	"		GSN
4/16	TMI	Outfall 001		GSN
4/16	TMI	Outfall 003		GSN

(A) Ziegler assures I-131

(B) He may not be there

POOR ORIGINAL

April 17, 1979

Air Sampling

Air samples collected from the 31 network stations on April 12 and 13 and analyzed were negative for radiodine except for the stations below.

Station No.	Collection Period On	Off	Total Hours	<sup>131</sup> I Conc. (pCi/m <sup>3</sup> )
1	4/11 0810	4/12 0751	23.8	0.46 ± 0.12
2	4/11 0736	4/12 0738	24.0	0.34 ± 0.095
3	4/11 0803	4/12 0805	24.0	0.31 ± 0.12
4	4/11 0817	4/12 0830	24.2	0.15 ± 0.061
5	4/12 0800	4/13 0750	23.7	0.092 ± 0.045
11	4/12 0930	4/13 1000	24.5	0.43 ± 0.12
13	4/12 1030	4/13 1015	23.7	0.53 ± 0.14
14	4/12 1135	4/13 1035	23.0	0.26 ± 0.077
16	4/12 1225	4/13 1154	23.5	0.24 ± 0.13
17	4/12 1105	4/13 0855	21.8	0.35 ± 0.13
18	4/11 1445	4/12 1250	22.0	0.54 ± 0.14
19	4/12 0926	4/13 1005	24.6	0.49 ± 0.14
20	4/12 1150	4/12 1225	24.6	0.36 ± 0.11
20	4/12 1230	4/13 0940	21.1	0.39 ± 0.10
21	4/11 0945	4/12 0839	22.9	0.32 ± 0.099
21	4/12 0842	4/13 0933	24.8	0.34 ± 0.095
22	4/11 1550	4/12 1325	21.5	0.66 ± 0.14
23	4/11 1010	4/12 0820	22.2	0.47 ± 0.13
24	4/11 0810	4/12 0745	23.6	0.072 ± 0.043

The highest concentration of <sup>131</sup>I was 0.66 ± 0.14 pCi/m<sup>3</sup> at Station 22.

This concentration over the sampling period is equivalent to an infant thyroid dose of 0.030 mrad.

### Milk Sampling

Milk samples collected at all nine locations on April 12, 13, and 14 and analyzed were found to contain no radioiodine above the detection level of  $\sim 10$ - $15$  pCi/l.

### Soil and Vegetation Sampling

Twenty-two soil samples and 26 out of 30 vegetation samples collected at the network stations on April 11 were analyzed by gamma spectrometry and found to contain no radioiodine or other reactor-related radioactivity.

### Water Sampling

No water samples were received at EMSL-LV for analysis.

### Dosimetry

The radiation exposures measured with TLD's along the two arcs near TMI were determined. Only one location ( $200^{\circ}$ , 2.2 mi. from TMI) had a net exposure (3.1 mR) above background. The exposure was over the period April 1-8, 1979.

SAMPLING SUMMARY - Operation Ivory Purpose  
Environmental Protection Agency

April 18, 1979

Water

The following water samples reported 4-17-79 are shown below with counting errors now included.

<u>Location</u>	<u>Collection Date</u>	<u>Result pCi/l</u>
TMI Outfall 005	4-14-79	I-131 = $175 \pm 106$
TMI Outfall 003	4-14-79	Xe-133 = $1160 \pm 860$

The samples are not available for recounting however the spectra have been reviewed. I-131 is present in the 005 spectra. The 003 Xe result is questionable.

Air (compressed)

<u>STA</u>	<u>AZ</u>	<u>DIST</u>	<u>ON</u>	<u>OFF</u>	<u>RESULT pCi/m<sup>3</sup></u>
014	145	5.3	4/13 1105	4/16 0945	Kr-85 = $14.8 \pm 2.5$ Xe-133 = $101 \pm 5.9$
005	040	2.6	4/14 0840	4/16 0945	Kr-85 = $10.5 \pm 4.2$ Xe-133 = $754 \pm 22.5$

POOR ORIGINAL

Sampling Summary for Operation Ivory Purpose  
Environmental Protection Agency  
April 18, 1979

Air Sampling

Air samples collected on April 14 and listed below were positive for radioiodine:

Station No.	Collection Period On	Off	Total Hours	<sup>131</sup> I Conc. ± 2σ Error (pCi/m <sup>3</sup> )
13	4/13 1020	4/14 1350	21.2	0.50 ± 0.15
17	4/13 0855	4/14 1155	28.0	0.46 ± 0.17
18	4/13 1015	4/14 1300	26.7	0.38 ± 0.16
19	4/13 1008	4/14 0952	23.7	0.29 ± 0.13
22	4/13 1040	4/14 1335	26.9	0.15 ± 0.097
23	4/13 0805	4/14 0900	24.9	0.79 ± 0.22

(corrections for April 17, 1979 report)

17	4/12 1105	4/13 0855	21.8	0.63 ± 0.13
19	4/12 0928	4/13 1005	24.6	0.53 ± 0.14

The highest concentration of radioiodine ( $0.79 \pm 0.22$  pCi/m<sup>3</sup>) was at Station 23. The concentration over the sampling period is equivalent to an infant thyroid dose of 0.042 mrad.

Soil and Vegetation Sampling

Twenty-nine soil samples and 27 out of 30 vegetation samples were analyzed and found to contain no radioiodine or other reactor-related radioactivity.

Milk Sampling

Samples collected on April 15 were being analyzed at the time of this report.

Water Sampling

None were received at EMSL-LV for analysis.

## SAMPLING SUMMARY FOR OPERATION IVORY PURPOSE

Environmental Protection Agency

April 19, 1979

Sampling

Air samples collected on April 15 and 16 were negative for radioiodine except for the samples listed below:

Station No.	Collection Period		Total Hours	<sup>131</sup> I Concentration $\pm$ 2 $\sigma$ Error (pCi/m <sup>3</sup> )
	On	Off		
2	04/14 0816	04/16 0742	47.5	0.25 $\pm$ 0.10
5	04/14 0855	04/16 0730	46.6	0.45 $\pm$ 0.12
7	04/14 0810	04/16 0800	47.8	0.21 $\pm$ 0.077
9	04/14 1025	04/16 0830	46.1	0.10 $\pm$ 0.032
11	04/14 1158	04/16 0915	21.2	2.3 $\pm$ 0.36
12	04/14 0950	04/16 0950	48.0	0.0048 $\pm$ 0.0013
17	04/14 1150	04/15 1303	25.0	0.0023 $\pm$ 0.0013
34	04/14 0815	04/16 0850	48.5	0.28 $\pm$ 0.033
35	04/14 0920	04/16 0810	46.7	0.13 $\pm$ 0.090

The samples collected from Station 30 on April 16 was not analyzed at the time of this report. The highest concentration of radioiodine above, which is the highest observed to the present time, was  $2.3 \pm 0.36$  pCi/m<sup>3</sup> at Station 11. The infant thyroid dose calculated for this concentration and sampling period is 0.10 mrad. A listing of the cumulative thyroid dose estimated for each station location is enclosed.

Milk Sampling

Milk samples collected on April 15 and 16 were analyzed and found to contain no radioiodine above the MDC of 10-15 pCi/l.

Soil and Vegetable Sampling

Thirty soil samples and 27 out of 31 vegetation samples have been analyzed to the present time.

Water Sampling

No water samples were received at EMSL-LV for analysis.

## SPECIAL THYROID INHALATION DOSE REPORT

STATION	DESCRIPTION	INFANT TOTAL DOSE MRADS	ADULT TOTAL DOSE MRADS
1	FROGTOWN PA ROBERT BEAN GULF STA	.0232	.0125
2	HIGHSPIRE PA HIGHSPIRE FIRE STA NO 1	.0173	.0093
3	MEADE HEIGHTS PA HARRISBURG INTL AIRPORT	.0409	.0221
4	MIDDLETOWN PA ELWOODS SUNOCO STA	.0194	.0105
5	ROYALTON PA LONDONDERRY TOWNSHIP BLDG	.0532	.0287
6	ROYALTON PA BLANDINE HERSHBERGER RES	.0000	.0000
7	ELIZAREHTOWN PA KOSER'S FRUIT MARKET	.0213	.0115
8	HELLAIRE PA ROBERT KISSER RES	.0000	.0000
9	NEVILLE PA EARL NISSLEY RES	.0201	.0108
10	ELIZAREHTOWN PA ARCO SERVICE STA	.0000	.0000
11	FALMOUTH PA CHARLES BROOKS RES	.2102	.1133
12	MAYTOWN PA BASSLER'S CHURCH	.0005	.0003
13	FALMOUTH PA DICK LIBHART RES	.1129	.0609
14	BAINBRIDGE PA BAINBRIDGE FIRE CO	.0211	.0113
15	SAGINAW PA UNITED METHODIST CHURCH	.0238	.0128
16	MANCHESTER PA MANCHESTER FIRE DEPT	.0445	.0240
17	YORK HAVEN PA YORK HAVEN FIRE STA	.1078	.0581
18	PLEASANT GROVE PA GEORGE ZIEGLER RES	.0515	.0278
19	STINEFSTOWN PA BRENNER MORIL SER STA	.0422	.0227
20	WOODSIDE PA ZANE REESER RES	.0705	.0380
21	NEWBERRYTOWN EXXON KWICK STOP	.1716	.0925
22	YOCUMTOWN PA IML FREIGHT YARD	.0863	.0465
23	GOLDSBORO PA MUELLER RES	.1833	.0988
24	CARLISLE PA UNION FIRE CO NO 1	.0036	.0019
25	HIMMELSTOWN PA KEFFER IS EXXON SER STA	.0081	.0044
26	HERSHEY PA ARCO SER STA	.0000	.0000
27	CAMPBELLTOWN PA GULF SERVICE STA	.0000	.0000
28	LEHANON PA GOODWILL FIRE CO	.0000	.0000
29	LANCASTER PA SOUTHERN MANHEIM FIRE CO	.0000	.0000
30	YORK PA SPRINGETTS FIRE CO NO 1	.0000	.0000
34	PLAINFIELD PA PALITES RES	.0911	.0491
35	ROYALTON PA GEORGE HERSHBERGER RES	.0129	.0069

SAMPLING SUMMARY - OPERATION Ivory Purpose  
 Environmental Protection Agency  
 April 19, 1979

Air Sampling

<u>STATION</u>	<u>Az</u>	<u>Dist</u>	<u>ON</u>	<u>OFF</u>	<u>RESULT</u>
TMI Observation Center			4/17 1543	4/17 1725	Kr-85 = $20.1 \pm 3.5$ pCi/m <sup>3</sup> Xe-133 = $24.6 \pm 4.0$ pCi/m <sup>3</sup>
013	150	3.0	4/18 1555	4/18 1738	Kr-85 = $15.3 \pm 4.0$ pCi/m <sup>3</sup> Xe-133 = $22.1 \pm 7.6$ pCi/m <sup>3</sup>
005	040	2.6	4/16 0750	4/18 1250	Kr-85 = $18.4 \pm 4.0$ pCi/m <sup>3</sup> Xe-133 = $13.3 \pm 6.2$ pCi/m <sup>3</sup>
TMI Observation Center			4/17 1543	4/17 1725	<sup>3</sup> H = $< 0.08$ pCi/ml H <sub>2</sub> O HTO = $< 3.9$ pCi/m <sup>3</sup> air H <sub>2</sub> O = $4.8$ g/m <sup>3</sup>
013	150	3.0	4/18 1555	4/18 1735	<sup>3</sup> H = $1.51 \pm 1.03$ pCi/ml H <sub>2</sub> O HTO = $5.56 \pm 3.8$ pCi/m <sup>3</sup> air H <sub>2</sub> O = $3.68$ g/m <sup>3</sup>
014	145	5.3	4/16	4/18	Xe = positive
001	290	6.2	4/16	4/18	Xe < MDL

WATER SAMPLING

<u>Location</u>	<u>Collection DATE</u>	<u>RESULT (pCi/l)</u>
TMI Outfall 001	4-18	GSN
TMI Outfall 003	4-18	GSN
Bruner Island	4-16 (4 per day)	GSN
Bruner Island	4-17 (4 per day)	GSN
Bruner Island	4-18 (2-qtr days)	GSN

SAMPLING SUMMARY - OPERATION Ivory Purpose  
 Environmental Protection Agency  
 April 20, 1979

Compressed Air

STA	AZ	DIST	ON	OFF	RESULTS (pci/m <sup>3</sup> )
001	290	6.2	4-16 0950	4-18 0822	Kr-85 = 14.3 ± 4.0 Xe-133 = < 4.6
014	145	5.3	4-16 0950	4-18 0905	Kr-85 lost in analysis Xe-133 = 254 ± 17

WATER

LOCATION	COLLECTION DATE	RESULT (pci/l)
TMI Outfall 001	4-19-79	GSN*
" " 001	4-20-79	GSN
" " 003	4-20-79	GSN

\* GSN = gamma spectrum negligible

Aerial samples collected on silver impregnated silica gel  
 4-19-79 at ~1830 and 4-20-79 at ~0900 showed no  
 I-131 present.

No results will be reported from EMSL-LV today. Results  
 will be reported tomorrow and Monday.

Sampling Summary - Operation Ivory Purpose  
 Environmental Protection Agency  
 April 21, 1979

Air Sampling

Air samples collected on April 18 were negative for radioiodine except for:

Sta.	Az	Dist	On	Off	I-131 $\pm$ 2 $\sigma$ (pCi/m <sup>3</sup> )
10	095	6.3	4/17 1100	4/18 1110	0.42 $\pm$ 0.15
11	130	2.9	4/17 0950	4/18 0950	3.7 $\pm$ 0.78
12	120	6.9	4/17 1000	4/18 1005	1.9 $\pm$ 0.35
13	150	3.0	4/16 0935	4/18 0855	1.33 $\pm$ 0.09

The highest concentration of radioiodine above,  $3.7 \pm 0.78$  pCi/m<sup>3</sup>, is the highest observed to date from the EPA continuous monitoring stations. This concentration for the period of the sample is equivalent to an infant thyroid dose of 0.19 mRad.

Milk sampling

Three of nine samples collected 4-18 have been analyzed and showed no I-131 levels above the minimum detectable level of 10-15 pCi/l. All previous samples were also below the MDL.

EPA April 21, 1979 p.m.

Milk SAMPLING

DAILY collections and analyses of milk from nine local dairies from April 5 through April 18 show no reactor related radioactivity. The MDL for I-131 in milk is  $5 \times 10^{-9}$   $\mu\text{Ci/ml}$  or 5  $\text{pCi/l}$ . The dairies being sampled are:

- 1 Milton Hershey Dairy #41, Hershey, Pa.
- 2 Conewago Farms Dairy, Elizabethtown, Pa.
- 3 Aungst Dairy, Rheems, Pa.
- 4 A.W. Hoffer Dairy
- 5 Ira Ruhl Dairy, Middletown, Pa.
- 6 David Miller Dairy, Falmouth, Pa.
- 7 Elmer Gruder Dairy, Falmouth, Pa.
- 8 Leroy Hertzler Dairy, Rd 1, Mount Wolf, Pa. (Saginaw)
- 9 Beshore Farms Dairy, Rd 1, New Cumberland, Pa.

Soil and Vegetation

Analyses are complete for gamma radioactivity in soil and vegetation collected from each of the 31 EPA continuous monitoring stations. No reactor related radioactivity was detected in any of the samples.

SAMPLING SUMMARY- OPERATION IVORY PURPOSE  
 ENVIRONMENTAL PROTECTION AGENCY

APRIL 22, 1979

AIR (FILTERS)

ALL PARTICULATE FILTERS AND CHARCOAL CARTRIDGES COLLECTED 4-21-79 SHOWED NO DETECTABLE GAMMA EMITTERS WITH THE EXCEPTIONS BELOW.

STA	AZ	DIST(MI)	ON	OFF	RESULTS ( $\mu\text{Ci}/\text{m}^3$ )
003	325	3.5	4-20	4-21	I-131 = $0.24 \pm 0.07$
004	360	3.0	4-20	4-21	I-131 = $0.11 \pm 0.07$
005	040	2.6	4-20	4-21	I-131 = $0.86 \pm 0.01$
013	150	3.0	4-20	4-21	I-131 = $0.27 \pm 0.07$
011	130	2.9	4-20	4-21	I-131 = $0.15 \pm 0.07$
014	145	5.3	4-20	4-21	I-131 = $0.15 \pm 0.07$
018	220	2.5	4-20	4-21	I-131 = $0.29 \pm 0.08$
019	205	5.0	4-20	4-21	I-131 = $0.14 \pm 0.07$
020	205	2.5	4-20	4-21	I-131 = $0.18 \pm 0.08$
021	250	4.0	4-20	4-21	I-131 = $0.14 \pm 0.07$
031	270	1.5	4-20	4-21	I-131 = $0.29 \pm 0.09$
034	305	2.7	4-20	4-21	I-131 = $0.23 \pm 0.09$
COMPRESSED AIR					
013	150	3.0	4-19	4-19	KR-85 = $20 \pm 2.0$ Xe-133 = $118 \pm 2.7$
013	150	3.0	4-20	4-20	KR-85 = $24 \pm 2.0$

SAMPLING SUMMARY FOR OPERATION IVORY PURPOSE

Environmental Protection Agency

April 23, 1979

~~(last previous report April 21, 1979)~~

240 West - Laboratory

Air Sampling

All gamma spectrometry analyses on air samples collected on April 19 were negative for radioiodine except for the samples listed below:

Station No.	Collection Period On	Off	Total Hours	<sup>131</sup> I Concentration ± 2σ Error (pCi/m <sup>3</sup> )
11	04/18 0955	04/19 0800	22.1	0.53 ± 0.18
13	04/18 0930	04/19 0745	22.2	0.69 ± 0.24
14	04/18 0900	04/19 0715	22.2	0.21 ± 0.11
16	04/18 1155	04/19 1040	22.7	0.33 ± 0.13
17	04/18 1145	04/19 0840	20.9	0.39 ± 0.16

(All the above concentrations when converted to infant thyroid doses are less than 0.1 mrad. Correction — The <sup>131</sup>I concentration of 0.33 ± 0.090 pCi/m<sup>3</sup> reported on April 21, 1979, for Station 13 was actually for a sample collected from Station 14.

Milk Sampling

The milk samples collected on April 19 at the nine dairies were analyzed and found to contain no radioiodine above the minimum detectable concentration of 15-20 pCi/l. The same was true for the other six milk samples collected on April 18 and not analyzed in time for the April 21 report.

Soil and Vegetation Sampling

Thirty-one soil samples and 30 out of 31 vegetation samples have been analyzed to the present time. No reactor-related radioactivity was observed in any of the samples.

Water Sampling

No water samples were received at EMSL-LV for analysis.

SAMPLING SUMMARY - OPERATION IVORY PURPOSE  
 ENVIRONMENTAL PROTECTION AGENCY  
 HARRISBURG LABORATORY  
 APRIL 23, 1979

AIR (FILTERS) - Preliminary Estimate

ALL PARTICULATE FILTERS AND CHARCOAL CARTRIDGES COLLECTED 4-22-79 SHOWED NO DETECTABLE GAMMA EMITTERS WITH THE EXCEPTIONS BELOW.

<u>STA</u>	<u>AZ</u>	<u>DIST (MI)</u>	<u>ON</u>	<u>OFF</u>	<u>RESULTS pCi/m<sup>3</sup></u>
031	270	1.5	4/21	4/22	I-131 = $0.32 \pm 0.08$
034	305	2.7	4/21	4/22	I-131 = $0.62 \pm 0.09$

COMPRESSED AIR

C 5	040	2.6	4/18	4/20	KR-85 = $14 \pm 3.9$ Xe-133 = $8.5 \pm 3.9$
014	145	5.3	4/18	4/20	KR-85 = $18 \pm 3.8$ Xe-133 = $98 \pm 6.0$
013	150	3.0	4/20	4/20	KR-85 = $19 \pm 3.5$ Xe-133 = $10 \pm 3.2$
005	040	2.6	4/20	4/22	KR-85 = $22 \pm 3.9$ Xe-133 = $141 \pm 8.6$
014	145	5.3	4/20	4/22	KR-85 = $22 \pm 4.2$ Xe-133 = $168 \pm 7.7$

SAMPLING SUMMARY-OPERATION VERY PURPOSE  
 PRELIMINARY RESULTS FROM EPA'S  
 HARRISBURG LABORATORY  
 APRIL 24, 1979

AIR (FILTERS)

ALL PARTICULATE FILTERS AND CHARCOAL CARTRIDGES COLLECTED 4-23-79 SHOWED NO DETECTABLE GAMMA EMITTERS WITH THE EXCEPTIONS BELOW.

<u>STA</u>	<u>AZ</u>	<u>DIST(mi)</u>	<u>ON</u>	<u>OFF</u>	<u>RESULTS PCi/m<sup>3</sup></u>
003	325	3.5	4/22	4/23	0.69 ± 0.24
011	130	2.9	4/22	4/23	0.58 ± 0.26
017	180	3.0	4/22	4/23	0.23 ± 0.03
023	265	2.9	4/22	4/23	0.71 ± 0.24
031	270	1.5	4/22	4/23	0.42 ± 0.35

COMPRESSED AIR

001	290	6.2	4/18	4/20	KR-85 = 19 ± 5.6 Xe-133 = < 5.0
013	150	3.0	4/19	4/19	KR-85 = 16.3 ± 4.3 Xe-133 = 149 ± 7.9

SAMPLING SUMMARY-OPERATION IVORY PURPOSE  
PRELIMINARY RESULTS FROM EPA'S  
HARRISBURG LABORATORY  
APRIL 25, 1979

AIR (FILTERS)

ALL PARTICULATE FILTERS AND CHARCOAL CARTRIDGES  
COLLECTED 4-24-79 SHOWED NO DETECTABLE GAMMA  
EMITTERS WITH THE EXCEPTIONS BELOW.

<u>STA</u>	<u>AZ</u>	<u>DIST(MI)</u>	<u>ON</u>	<u>OFF</u>	<u>RESULTS pCi/m<sup>3</sup></u>
005	040	2.6	4/23	4/24	I-131 = $0.70 \pm 0.25$
001	250	4.0	4/23	4/24	I-131 = $0.54 \pm 0.23$

4/26/79

SPECIAL THYROID INHALATION DOSE REPORT (Cumulative)

STATION	DESCRIPTION	INFANT TOTAL DOSE MRADS	ADULT TOTAL DOSE MRADS
1	FROGTOWN PA ROBERT BEAN GULF STA	.0232	.0125
2	HIGHSPIRE PA HIGHSPIRE FIRE STA NO 1	.0196	.0105
3	MEADE HEIGHTS PA HARRISBURG INTL AIRPORT	.0409	.0221
4	MIDDLETOWN PA ELWOODS SUNOCO STA	.0194	.0105
5	ROYALTON PA LONDONDERRY TOWNSHIP BLDG	.0532	.0287
6	ROYALTON PA BLANDINE HERSHBERGER RES	.0000	.0000
7	ELIZABETHTOWN PA KOSEK'S FRUIT MARKET	.0213	.0115
8	BELLAIRE PA ROBERT RISSER RES	.0000	.0000
9	NEWVILLE PA EARL NISSLEY RES	.0523	.0282
10	ELIZABETHTOWN PA ARCO SERVICE STA	.0214	.0115
11	PALMOUTH PA CHARLES BROOKS RES	.5131	.2766
12	HAYTOWN PA BASSLER'S CHURCH	.0993	.0535
13	PALMOUTH PA DICK LIBHART RES	.2580	.1390
14	BAINBRIDGE PA BAINBRIDGE FIRE CO	.0641	.0345
15	SAGINAW PA UNITED METHODIST CHURCH	.0523	.0282
16	MANCHESTER PA MANCHESTER FIRE DEPT	.0604	.0325
17	YORK HAVEN PA YORK HAVEN FIRE STA	.1251	.0674
18	PLEASANT GROVE PA GEORGE ZIEGLER, RES	.0899	.0484
19	STRINESTOWN PA BRENNER MOBIL SER STA	.0649	.0350
20	WOODSIDE PA ZANE REESER RES	.1034	.0557
21	NEWBERRYTOWN EXXON KWICK STOP	.1716	.0925
22	YOCUMTOWN PA IHL FREIGHT YARD	.0863	.0465
23	GOLDSBORO PA MUELLER RES	.1833	.0988
24	CARLISLE PA UNION FIRE CO NO 1	.0036	.0019
25	HURDIELSTOWN PA KEFFER IS EXXON SER STA	.0081	.0044
26	HERSHEY PA ARCO SER STA	.0000	.0000
27	CAMPBELLTOWN PA GULF SERVICE STA	.0000	.0000
28	LEBANON PA GOODWILL FIRE CO	.0000	.0000
29	LANCASTER PA SOUTHERN MANHEIM FIRE CO	.0000	.0000
	YORK PA SPRINGETTS FIRE CO NO 1	.0000	.0000
	GOLDSBORO PA DUSTY MILLER RES	.0511	.0275
	MAINFIELD PA PALITES RES	.1395	.0752
	PA GEORGE HERSHBERGER RES	.29	.0069

POOR ORIGINAL

SAMPLING SUMMARY FOR OPERATION IVORY PURPOSE

Environmental Protection Agency

April 26, 1979

LAS VEGAS LABORATORY  
(Last Previous Report April 24, 1979)

Air Sampling

Air samples collected on April 21, and of three collected on April 22, were all negative for radioiodine except for the following samples listed below:

Station No.	Collection Period On	Off	Total Hours	<sup>131</sup> I Concentration ± 2σ Error (pCi/m)
18	04/20 1157	04/21 1025	22.4	0.68 ± 0.21
19	04/20 0840	04/21 0810	23.6	0.24 ± 0.17
20	04/20 1210	04/21 1005	21.9	0.33 ± 0.16
31	04/20 0900	04/21 0830	23.4	0.31 ± 0.19
31	04/21 0835	04/22 1040	25.9	0.65 ± 0.19
34	04/21 0730	04/22 0855	25.1	0.91 ± 0.24

Milk Sampling

Milk samples collected from the nine locations on April 21 and 22 were analyzed and found to contain no radionuclides above the minimum detectable concentration of 15-20 pCi/l.

Seven of the nine samples for each of April 23 and 24 were analyzed and also found to contain no radionuclides above the MDL.

Water Sampling

No water samples were received at the EMSL-LV for analysis.

SAMPLING SUMMARY - OPERATION IVORY PURPOSE  
PRELIMINARY RESULTS FROM EPA'S  
HARRISBURG LABORATORY  
APRIL 26, 1979

AIR (FILTERS)

ALL PARTICULATE FILTERS AND CHARCOAL CARTRIDGES  
COLLECTED 4-25-79 SHOWED NO DETECTABLE GAMMA  
EMITTERS.

# DATA REPORT

4/27/79

## WATER SAMPLES

TMI	001		Composite	4/25-4/26	GSN
	003			4/21	GSN
	003			4/26	GSN
	005			4/21	GSN
	005			4/23	GSN
	007			4/23	GSN
	007			4/25	GSN
	007			4/26	GSN
DER	802447	OILY SUMP		4/26	<sup>131</sup> I = 340 pCi/L
	802448	EAST DIKE		4/26	GSN
	802449	MAIN SEWER		4/26	GSN
	802450	SEWAGE		4/26	GSN
TMI	040388	SEWER		4/19 <del>4/26</del>	GSN
	040387	SEWER		4/18 <del>4/26</del>	GSN
	040386	SEWER		4/17 <del>4/26</del>	GSN

## AIR SAMPLES

STA.	014		04/25-04/26	GSN
	016		04/25-04/26	GSN
	034		04/25-04/26	0.34 ± 0.16 pCi/m <sup>3</sup>

ONLY AIR SAMPLES COMPLETED BY 1600 4/27

001	021	}	25-4/26	GSN
003	031			
020	036			
023				

EPA DATA REPORT

4/28/79

AIR SAMPLES

CURRENTLY OPERATING NET WORK CONSISTS OF STATIONS:  
 001; 003; 004; 005; 009; 010; 011; 013; 014; 016; 017;  
 020; 021; 023; 031; 034; 035; And 036 (at OBSERVATION PT.)

NO GAMMA EMITTING RADIONUCLIDES (INCLUDES I-131)  
 WERE DETECTED ON ANY SAMPLE COLLECTED DURING  
 THE PERIOD 4/27 - 4/28 A.M.

NOBLE GAS STA	PERIOD	85 Kr	133 Xe
003	4/22-4/24	28 ± 4.3 pCi/m <sup>3</sup>	920 ± 16 "
" 001	4/22-4/24	27 ± 4.4 "	250 ± 16 "
" 014	4/22-4/24	18 ± 4 "	5.5 ± 5.4 "
" 003	4/25-4/25	~ 29	~ 45

WATER

LOCATION	IDENTIFICATION	PERIOD	RESULTS
LANCASTER Co. WATER COMPANY	TMI 001 Composite	4/26-4/27	GSN - (NOTHING DETECTED BY GAMMA SCAN)
	DER 800006	4/19	GSN
	" 800007	4/20	GSN
	" 800008	4/22	GSN
	" 800009	4/22	GSN
NEW FREEDOM BO. WATER PLANT	W-3122	~ 4/20	GSN
BRUNNER ISLAND	DER 899012	4/24	GSN
	" 899011	4/23	GSN
	" 899010	4/22	GSN
	899009	4/21	GSN
	899008	4/20	GSN
	899015	4/27	GSN
	899014	4/26	GSN

SAMPLING SUMMARY FOR OPERATION IVORY PURPOSE

Environmental Protection Agency

April 30, 1979

BY EMSL-LV

Air Sampling

All filters collected April 22 have been counted. One filter not previously reported showed detectable levels of I-131 as shown below. Twenty-five samples collected April 23 were analyzed. All were negative for radioiodine with the 2 exceptions shown below. Seven samples collected April 24 were negative for radioiodine.

Station No.	Collection Period On	Off	Total Hours	<sup>131</sup> I Concentration ± 2σ Error (pCi/m <sup>3</sup> )
003	04/22 0840	04/23 0716	22.6	0.05 0.25
023	04/21 0800	04/22 0940	25.3	0.23 0.12
023	04/22 0940	04/23 0825	21.7	1.0 0.26

Station 023 at Goldsboro showed no detectable radioiodine on 04/24.

Milk Sampling

Seven milk samples collected April 23 and 7 milk samples collected April 24 as well as 4 samples collected April 25 showed no radioiodine levels above the minimum detectable level of 15-20 pCi/l.

Water Sampling

No water samples were received at the EMSL-LV for analysis.

# EPA DATA SUMMARY 4/30/79

## NOBLE GAS

STATION	ON	OFF	85Kr	133Xe
003	4/25	4/25	$21.7 \pm 3.4$ pCi/m <sup>3</sup>	$9.78 \pm 3.36$ "
003	4/24	4/26	$15.6 \pm 5.5$ "	$63.3 \pm 6.9$ "
001	4/24	4/26	$17.5 \pm 6.6$ "	$277.6 \pm 9.4$ "
013	4/27	4/27	LOST	$< 5$ "
014	4/24	4/26	LOST	$52.6 \pm 5.8$ "
014	4/26	4/28	LOST	$958.6 \pm 12.0$ "

## WATER

BRUNNER ISLAND DER 899013	4/25	GSN
" 899014	4/26	GSN
CITY ISLAND DER 801216	4/25	GSN

## TMI

Outfall 003	4/22	GSN
003	4/23	GSN
003	4/27	GSN
005	4/27	GSN
007	4/27	GSN

## AIR

ALL STATIONS	4/27 - 4/28	GSN
STA. 0005	4/28 - 4/29	$^{131}I = 0.48 \pm 0.19$ pCi/m <sup>3</sup>
0054	4/28 - 4/29	$^{131}I = 0.38 \pm 0.15$ "
035	4/28 - 4/29	GSN
003	4/28 - 4/29	GSN

SAMPLING SUMMARY FOR OPERATION IVORY PURPOSE

Environmental Protection Agency

May 1, 1979

Air Sampling

All samples collected April 25 have been analyzed (18 stations) and none showed detectable levels of I-131. Of 10 samples collected April 26 and analyzed, all were below the detectable level for I-131 with the one exception noted below.

Station No.	Collection Period		Total Hours	I-131 Conc. $\pm$ 2 $\sigma$ Error (pCi/m <sup>3</sup> )
	On	Off		
034	04/25 0835	04/26 0830	23.8	0.28 $\pm$ 0.16

Milk Sampling

Gamma analyses have been completed for 4 samples collected April 26, 4 samples collected April 27, and 2 samples collected April 28. All results were below the minimum detectable level of 15-20 pCi/l for I-131.

Water Sampling

No additional water analyses are reported from EMSL-LV on this date.

## EPA DATA SUMMARY

MAY 1, 1979

Water

TMI			<u>Outfall</u>		
DER	805510		001	4/30	GSN
	805507		001	4/29	GSN
	805503		001	4/28	GSN
	805511		003	4/30	GSN

Air

Station	020	ON	4/29	OFF	4/30	$^{131}\text{I}$	$= 0.31 \pm 0.20$	pCi/m <sup>3</sup>
	036		4/29		4/30	$^{131}\text{I}$	$= 1.10 \pm 0.23$	pCi/m <sup>3</sup>
	036 duplicate		4/29		4/30	$^{131}\text{I}$	$= 1.20 \pm 0.24$	pCi/m <sup>3</sup>
	035		4/29		4/30	$^{131}\text{I}$	$= 0.36 \pm 0.18$	pCi/m <sup>3</sup>
	*036		4/28		4/29		$0.17 \pm 0.025$	pCi/m <sup>3</sup>

\*Previously reported as not detectable --  
count time lengthened to confirm possible trace of  $^{131}\text{I}$

All other air sampling stations for the period 4/29-4/30 were below detection limits (GSN - Gamma Scan showed nothing).

SAMPLING SUMMARY, OPERATION IVORY PURPOSE

Environmental Protection Agency

May 2, 1979

Air Sampling

No air samples were received at EMSL-LV on May 1 for analysis and incorporation in this report.

Milk Sampling

The remaining 2 samples collected April 28 and the 4 samples collected April 29 have been analyzed by gamma spectroscopy and the results indicate no detectable I-131 above the MDL of 15-20 pCi/l.

Water Sampling

Eleven water samples were analyzed by gamma spectroscopy. No reactor-related radionuclides were detected. The collection dates and locations are listed below.

- 4-9-79 Qu $\acute{e}$ ntin, Pa. Water Co. Wells 2 & 3
- 4-10-79 McCallisterville, Pa. Municipal Water Authority
- 4-10-79 Chambersburg, Pa. Water Plant Effluent
- 4-10-79 Mercersburg, Pa. Borough Water Company
- 4-10-79 Delta, Pa. Borough Water
- 4-10-79 Guilford, Pa. Water Authority
- 4-10-79 Hiff $\ddot{u}$ lntown, Pa. Municipal Authority
- 4-10-79 Schuylkill County, Pa. Municipal Authority
- 4-10-79 Minersville, Pa. Water Authority No. 3 Dam
- 4-10-79 Richfield, Pa. Area Joint Water Authority
- 4-10-79 Schuylkill, Pa. Haven Water Works

POOR ORIGINAL

EPA DATA SUMMARY

MAY 2, 1979

Air 4/30 - 5/1

Station 017	ON 4/30	OFF 5/1	$^{131}\text{I} = 0.26 \pm .15 \text{ pCi/m}^3$
034			$^{131}\text{I} = 0.27 \pm .16 \text{ pCi/m}^3$
014			$^{131}\text{I} = 0.37 \pm .15 \text{ pCi/m}^3$
036			$^{131}\text{I} = 0.52 \pm .21 \text{ pCi/m}^3$
036 duplicate			$^{131}\text{I} = 0.49 \pm .20 \text{ pCi/m}^3$

All others non-detectable.

Water

		<u>Outfall</u>	<u>Date</u>	<u>Result</u>
TMI		001	4/30-5/1	GSN
		007	5/1	GSN
DER	511179	003	5/1(?)	GSN
	805504	003	4/28	GSN
	805508	003	4/29	GSN
	805809	007	4/29	GSN

Sampling Summary Operation Ivory Purpose  
Environmental Protection Agency  
May 4, 1979

Air Sampling

Samples collected on April 26 through April 29 from Stations 1, 3, and 4 and samples collected on April 26 and April 28 from Station 5 were analyzed. No reactor-related radioactivity was detected above the minimum detectable concentration.

Milk Sampling

Samples collected from the following locations and on the following dates were analyzed.

- 4/30/79 Falmouth, PA - Miller Dairy
- 4/30/79 New Cumberland, PA - Beshore Farms Dairy
- 5/01/79 Middletown, PA - Hoffer Dairy
- 5/01/79 Saginaw, PA - Hertzler Dairy

No reactor-related radioactivity was detected.

Water Sampling

Water samples collected from the New Holland Borough, PA. raw surface supply and raw supply well were received, but not analyzed in time for this report.

## EPA PRELIMINARY SUMMARY DATA

MAY 4, 1979

Air Sampling

All air samples collected from 5/1/79 to 5/2/79 and from 5/2/79 to 5/3/79 were analyzed by gamma spectroscopy. No sample showed evidence of fission product radioactivity ( $< 0.1 - 0.2 \text{ pCi/m}^3$  for  $^{131}\text{I}$ ).

Noble Gas Sampling

Station	On	Off	
001	4/26	4/29	$^{85}\text{Kr} = 16 \pm 6.3 \text{ pCi/m}^3$ $^{133}\text{Xe} = 19 \pm 7.3 \text{ pCi/m}^3$
001	4/29	5/2	$^{85}\text{Kr} = 16.6 \pm 4.0$ $^{133}\text{Xe} = < 5.7$
001	5/2	5/3	$^{85}\text{Kr} = 18.2 \pm 2.7$ $^{133}\text{Xe} = < 3.4$
005	4/26	4/28	$^{85}\text{Kr} = 16 \pm 6.3$ $^{133}\text{Xe} = 19 \pm 7.3$
005	4/28	4/30	$^{85}\text{Kr} = \text{Lost}$ $^{133}\text{Xe} = 35.4 \pm 2.9$
005	4/30	5/2	$^{85}\text{Kr} = 19.8 \pm 2.7$ $^{133}\text{Xe} = 19.4 \pm 2.7$
014	4/28	4/30	$^{85}\text{Kr} = \text{Lost}$ $^{133}\text{Xe} = 9.9 \pm 2.2$
014	4/30	5/2	$^{85}\text{Kr} = 20.0 \pm 2.8$ $^{133}\text{Xe} = 20.6 \pm 2.7$

Water Samples

The following samples were analyzed by gamma spectroscopy. None contained fission products above the detection limit (approximately  $130 \text{ pCi/l}$  for  $^{131}\text{I}$ ).

805809	Outfall 007	4/28
805505	Outfall 007	4/28
805525	Outfall 007	5/3
	Outfall 003	5/2
805524	Outfall 003	5/3
	Outfall 001	5/1-5/2
805523	Outfall 001	5/2-5/3
805519	E. Dike	5/2
805521	Oily Sump	5/2
802460	Oily Sump	5/3
802461	E. Dike	5/3
802462	Sewage Tank	5/3
805520	Train, Room Tank	5/2

to DER:

Water samples #802460, 461, and 462 (from accompanying paper work) were labeled as 802360, 361, and 362 respectively on the sample bottles.

## SPECIAL THYROID INHALATION DOSE REPORT

STATION

DESCRIPTION

INFANT  
TOTAL DOSE  
MRADSADULT  
TOTAL DOSE  
MRADS

STATION	DESCRIPTION	INFANT TOTAL DOSE MRADS	ADULT TOTAL DOSE MRADS
1	FROGTOWN PA ROBERT BEAN GULF STA	.0232	.0125
2	HIGHSPIRE PA HIGHSPIRE FIRE STA NO 1	.0315	.0170
3	MEADE HEIGHTS PA HARRISBURG INTL AIRPORT	.0865	.0466
4	MIDDLETOWN PA ELWOODS SUNOCO STA	.0194	.0105
5	ROYALTON PA LONDONDERRY TOWNSHIP BLDG	.1266	.0682
6	ROYALTON PA BLANDINE HERSHBERGER RES	.0000	.0000
7	ELIZABETHTOWN PA KOSER'S FRUIT MARKET	.0213	.0115
8	BELLAIRE PA ROBERT RISSER RES	.0000	.0000
9	NEWVILLE PA EARL NISSLEY RES	.0523	.0282
10	ELIZABETHTOWN PA ARCO SERVICE STA	.0214	.0115
11	FALMOUTH PA CHARLES BROOKS RES	.5131	.2766
12	MAYTOWN PA BASSLER'S CHURCH	.0993	.0535
13	FALMOUTH PA DICK LIBHART RES	.2667	.1437
14	BAINBRIDGE PA BAINBRIDGE FIRE CO	.0641	.0345
15	SAGINAW PA UNITED METHODIST CHURCH	.0523	.0282
16	MANCHESTER PA MANCHESTER FIRE DEPT	.0604	.0325
17	YORK HAVEN PA YORK HAVEN FIRE STA	.1251	.0674
18	PLEASANT GROVE PA GEORGE ZIEGLER RES	.0899	.0484
19	STRINESTOWN PA BRENNER MOBIL SER STA	.0649	.0350
20	WOODSIDE PA ZANE REESER RES	.1034	.0557
21	NEWBERRYTOWN EXXON KWICK STOP	.1716	.0925
22	YOCUMTOWN PA IML FREIGHT YARD	.0863	.0465
23	GOLDSBORO PA MUELLER RES	.2417	.1302
24	CARLISLE PA UNION FIRE CO NO 1	.0036	.0019
25	HUMMELSTOWN PA KEFFER IS EXXON SER STA	.0081	.0044
26	HERSHEY PA ARCO SER STA	.0000	.0000
27	CAMPBELLTOWN PA GULF SERVICE STA	.0000	.0000
28	LEBANON PA GOODWILL FIRE CO	.0000	.0000
29	LANCASTER PA SOUTHERN MANHEIM FIRE CO	.0000	.0000
30	YORK PA SPRINGETTS FIRE CO NO 1	.0000	.0000
31	GOLDSBORO PA DUSTY MILLER RES	.0511	.0275
34	PLAINFIELD PA PALITES RES	.1829	.0986
35	ROYALTON PA GEORGE HERSHBERGER RES	.0129	.0069
36	THREE MILE ISLAND PA OBSERVATION CENTER	.1037	
36	THREE MILE ISLAND PA OBSERVATION CENTER (DUPLICATE)	.1188	

SAMPLING SUMMARY FOR OPERATION IVORY PURPOSE

Environmental Protection Agency

May 9, 1979<sup>e</sup>

Air Sampling

All air samples collected April 30 through May <sup>2</sup> have been counted and were negative for I-131 with the exception tabulated below. Samples collected May 3 from Manchester, York Haven, Woodside, Plainfield, and Goldsboro (Miller Res.) were also negative.

Station No.	Collection Period On	Off	Total Hours	<sup>131</sup> I Concentration ± 2σ Error (pCi/m <sup>3</sup> )
36 (dup.)	4/30 0955	5/01 1205	26.0	0.69 ± 0.18
25	4/30 0955	5/01 1210	26.1	0.83 <sup>SD</sup> ± 0.19

Milk Sampling

Samples collected May 3, May 4, and from Hoffer's and Miller's dairies on May 5 have been gamma counted and none showed detectable levels of reactor related radionuclides.

Water Sampling

No water samples were analyzed for reporting on this date.

\*Through last date of operation or May 5 as appropriate for each station.

EPA SUMMARY DATA

MAY 7, 1979

Water Samples

The following samples were analyzed by gamma spectroscopy. All sample results were negative.

Station 001 - composite collected 5/3-5/4  
                  composite collected 5/4-5/5  
                  composite collected 5/5-5/6  
  
                  collected 5/6

Station 003 - collected 5/4 @ 1045  
                  collected 5/5 @ 1115

Station 005 - collected 5/4 @ 1130

20 inch outfall (marker 112) - collected 5/4 @ 1040  
  collected 5/5 @ 1130  
  collected 5/6

Air Samples

All samples (18 per day) for 5/3 to 5/4, 5/4 to 5/5, and 5/5 to 5/6 were analyzed by gamma spectroscopy. No sample showed any reactor related radioactivity.

LRPA - PRELIMINARY DATA SUMMARY

MAY 8, 1979

Noble Gas Samples

014	05/02	05/04	<sup>85</sup> Kr 19 ± 3.8 pCi/m <sup>3</sup>
			<sup>133</sup> Xe 59 ± 5.1 pCi/m <sup>3</sup>
005	05/02	05/04	<sup>85</sup> Kr Lcst
			<sup>133</sup> Xe 13.4 ± 3 pCi/m <sup>3</sup>
001	05/03	05/05	<sup>85</sup> Kr 16 ± 2.6 pCi/m <sup>3</sup>
			<sup>133</sup> Xe 35 ± 3.1 pCi/m <sup>3</sup>

Water Samples

The following samples from TMI were analyzed by gamma spectroscopy. No radioactivity was detected in any of these samples:

Outfall 001 composite	5/6-5/7
Outfall 001 composite	5/7-5/8
Outfall 003	5/7
Outfall 003	5/8
Outfall 005	5/8
Marker 112	5/7
Marker 112	5/8
#802465 (on site)	5/7

One sample was positive for <sup>131</sup>I:

#802464 - oily sump <sup>131</sup>I = (1.4 ± 0.2) x 10<sup>3</sup>pCi/l

Air Samples

All air samples collected 5/6-5/7 were analyzed by gamma spectroscopy. No reactor related radionuclides were detected in any sample.

EPA - PRELIMINARY DATA SUMMARY

MAY 9, 1979

Noble Gas Samples

Station 005	ON	05/04	OFF	05/06	$^{85}\text{Kr} = 22 \pm 1.7$
					$^{133}\text{Xe} = 47 \pm 2.4$
014		05/04		05/06	$^{85}\text{Kr} = 21 \pm 1.7$
					$^{133}\text{Xe} = 150 \pm 3.4$

Air Samples

Air samples were collected from all 18 stations for the period 05/07-05/08 and were analyzed by gamma spectroscopy. No reactor related radionuclides were detected in any sample.

Water Samples

Due to the installation of a permanent shield for the EPA detector system at the Third & Reilly Lab, outfall samples collected 05/09 were not analyzed as of 1630, 05/09/79.

SAMPLING SUMMARY FOR OPERATION IVORY PURPOSE

Environmental Protection Agency

May 10, 1979

(Last Previous Report May 9, 1979)

Air Sampling

All samples collected May 3, 4, and 5 have been gamma analyzed and none showed detectable levels of reactor-related activity. Fourteen of the 18 samples collected May 6 have been counted and are also negative. Those stations not yet analyzed for May 6 are Goldsboro (2), Manchester, and Plainfield.

Milk Sampling

Eight samples were analyzed and none showed detectable levels of reactor-related radionuclides. The samples and collection dates were:

<u>May 5</u>	<u>May 6</u>	<u>May 7</u>
New Cumberland	Falmouth	Falmouth
Saginaw	Middletown	Middletown
	New Cumberland	
	Saginaw	

Water Sampling

No water samples were analyzed at EMSL-IV for this report.

EPA - PRELIMINARY DATA SUMMARY

MAY 10, 1979

Noble Gas Samples

Station 001	ON 05/05	OFF 05/07	$^{85}\text{Kr} = 19.3 \pm 1.8 \text{ pCi/m}^3$
			$^{133}\text{Xe} = 17.9 \pm 1.8 \text{ pCi/m}^3$
005	05/06	05/08	$^{85}\text{Kr} = 19.2 \pm 2.8 \text{ pCi/m}^3$
			$^{133}\text{Xe} = 34.0 \pm 3.1 \text{ pCi/m}^3$
014	05/06	05/08	$^{85}\text{Kr} = 18.0 \pm 2.2 \text{ pCi/m}^3$
			$^{133}\text{Xe} = < 2.9 \text{ pCi/m}^3$

Water Samples

The following samples were analyzed by gamma spectroscopy. No detectable radioactivity was found in any sample.

TMI

Outfall 001 composite	5/8-5/9
Outfall 001 composite	5/9-5/10
Outfall 003	5/7-5/9
Outfall 003	5/9
Outfall 003	5/10
Marker 112	5/9
Marker 112	5/10

Air Samples

Air samples were collected on 05/09 from 10 stations in accordance with the revised three times per week sampling schedule. No reactor related radionuclides were detected in any sample.

Station:	003	05/08 - 05/09
	004	05/08 - 05/09
	005	05/08 - 05/09
	009	05/08 - 05/09
	010	05/08 - 05/09
	011	05/08 - 05/09
	013	05/08 - 05/09
	014	05/08 - 05/09
	035	05/08 - 05/09
	036	05/08 - 05/09
	036(dup)	05/08 - 05/09

EPA Preliminary Data Summary 05/11/79

Air Samples

Air samples were collected and analyzed by gamma gamma spectroscopy from the stations indicated below for the period 05/09 - 05/10. No sample showed any detectable level of reactor related radionuclides.

Water

FMI outfall	001	Composite	05/10 - 05/11	
	003		5/11/79	10:40
Marker 112			5/11/79	10:50

No detectable radioactivity was observed in any of the above samples.

EPA Preliminary Data Summary 05/14/79

Air Sampling

All air samples collected 5/11 and 5/12 were analyzed by gamma spectroscopy. No reactor related radionuclides were detected in any sample. No samples were collected 5/13 in line with the 3 times per week collection frequency.

Water Sampling

The following water samples were analyzed by gamma spectroscopy. All samples were below detection limits for all gamma emitting radionuclides.

DER 805536	Outfall	001	5/12
805539		001	5/13
805537		003	5/12
805540		003	5/13
805538 (marker 112)		007	5/12
805541		007	5/13

Noble Gas

Sampling has been discontinued as of 5/10/79.

EPA Preliminary Data Report 05/15/79

Water Samples

Water samples listed below were analyzed by gamma spectroscopy.  
No radioactivity was detected in any of the following three samples:

TMI outfall	001	composite	5/13 - 5/14
"	003		5/14
"	007	(marker 112)	5/14

One positive sample was received:

TMI outfall 005 (0.5 gpm) 5/14  $^{131}\text{I}=22.5+12.7$  pCi/l

Air Samples

All air samples collected on 5/14 were analyzed by gamma spectroscopy. No reactor related radionuclides were identified in any sample.

EPA Preliminary Data Report 05/16/79

Air Sampling

All air samples collected 05/15/79 were analyzed by gamma spectroscopy. No reactor related radionuclides were detected in any sample.

Water Sampling

The following samples were analyzed by gamma spectroscopy. No radioactivity was detected in any sample.

DER 805542	Outfall 001	Composite	5/15
805543	003	Grab	5/15
805544	007	Marker 112	5/15

EPA Preliminary Data Report 05/17/79

Air Sampling

All air samples collected 05/16/79 were analyzed by gamma spectroscopy. No reactor related radionuclides were detected in any sample. Those stations analyzed were as follows:

EPA Air Monitoring Network:  
Stations: 3,4,5,9,10,11,13,14,35,36

Water Sampling

Three samples were analyzed by gamma spectroscopy. The results are as follows:

Outfall	001	Composite	5/16	GSN*
Outfall	003	Grab	5/16	GSN
Outfall	20-inch	Marker 112 Grab	5/16	GSN

\*GSN - gamma scan negative

Data compiled by: Chuck Costa  
782-3909

SAMPLING SUMMARY FOR OPERATION IVORY PURPOSE

Environmental Protection Agency

May 17, 1979

Air Sampling

All air samples collected by the adjusted schedule through May 9 have been counted and none show detectable activity from TMI. Stations 01, 16, 17, 20, and 21 collected May 10 likewise show no reactor related activity.

Water Sampling

The following water samples have been analyzed and all are reported 'gamma spectrum negligible'.

<u>Location</u>	<u>Date</u>
Schaeffertown, PA - Water Co.	4/11/79
Htma, PA - Water System	4/11/79
Bainbridge, PA - Water Authority Well 1	4/13/79
Bainbridge, PA - Water Authority Well 2	4/13/79
Bloomfield, PA - Water Authority Spg House	4/11/79
New Holland Borough, PA - Raw Supply Well	4/10/79

Milk Sampling

Milk samples collected May 14 showed no radionuclides detectable by gamma spectrometry. The locations were:

Falmouth, PA - Miller Dairy

Middletown, PA - A. W. Hoffer Dairy

EPA Preliminary Data Report 05/18/79

Air Sampling

The following air samples collected 05/17/79 showed no detectible activity from TMI.

Stations: 1, 5, 9, 16, 17, 20, 21, 23, 31, 34

Water Sampling

805546	TMI - Oil Waste Sump	05/16/79	<sup>131</sup> I 121 <sup>±</sup> 69 pCi/l
805545	TMI - East Dike Basin	05/16/79	*GSN
805547	TMI - Onsite Drain Holding Tank	05/16/79	GSN
040393	TMI - Holding Tank (sewage)	05/16/79	GSN
	TMI - Outfall 001	05/16/79	GSN
	TMI - Outfall 003	05/16/79	GSN
	TMI - Outfall 20"	05/16/79	GSN
801238	City Island	05/17/79	GSN
801239	TMI - Outfall 001	05/17/79	GSN
801240	TMI - Outfall 003	05/17/79	GSN
801241	TMI - Outfall 007	05/17/79	GSN
900001	TMI - Outfall 001	05/18/79	GSN
900002	TMI - Outfall 003	05/18/79	GSN
900003	TMI - Outfall 20"	05/18/79	GSN

\*GSN - Gamma Scan Negative

Data Compiled by: Chuck Costa

EPA Preliminary Data Report 05/19/79

Air Sampling

The following air samples showed no detectible activity from TMI.

Samples collected 05/18/79:

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, and 36

Samples collected 05/19/79:

Stations: 1, 16, 17, 20, 21, 23, 31, and 34

Data Compiled by: Chuck Costa

EPA Preliminary Data Report 05/22/79

Air Sampling

All air samples collected 05/21/79 were analyzed by Ge(Li) gamma spectroscopy. No reactor related radionuclides were detected in any sample. Those stations analyzed were as follows:

EPA Air Monitoring Network:

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 36

Water Sampling

Ten samples were analyzed by Ge(Li) gamma spectroscopy. The results are as follows:

Outfall	001	Composite	05/19	GSN*
Outfall	001	Composite	05/20	GSN
Outfall	001	Composite	05/21	GSN
Outfall	003	Grab	05/19	GSN
Outfall	003	Grab	05/20	GSN
Outfall	003	Grab	05/21	GSN
Outfall	20-inch	Marker 112 Grab	05/19	GSN
Outfall	20-inch	Marker 112 Grab	05/20	GSN
Outfall	20-inch	Marker 112 Grab	05/21	GSN
Brunner Island		Composite	05/20	GSN

Claire Hoover Dairy

Eight samples were collected 05/20/79 from the Claire Hoover Dairy. No reactor related radionuclides were detected in any of the samples. The samples consisted of:

Pasture	Soil	Silage
Grass	Milk	Stored Silage
Sod	Water	

Data compiled by: Daryl Thome'  
782-3909

\*GSN - Gamma scan negative

Air Sampling

The following samples were collected on 05/22/79 and analyzed by gamma spectroscopy:

Stations: 1, 16, 17, 20, 21, 23, 31, and 34

No reactor related radionuclides were detected in any sample.

Water Sampling

The following samples were analyzed by gamma spectroscopy:

<u>Location</u>	<u>Collected</u>	<u>Results*</u>
Lancaster intake	05/16	GSN
Lancaster intake	05/17	GSN
TMI Outfall 001	05/22	GSN
TMI Outfall 001	05/23	GSN
TMI Outfall 005	05/22	GSN
TMI 20-inch Marker 112	05/22	GSN

\*GSN - Gamma spectrum negligible

Milk Sampling

The following samples were analyzed by gamma spectroscopy:

<u>Location</u>	<u>Collected</u>	<u>Results</u>
A. W. Hoffer	05/21	K=1.66 $\pm$ .24 gm/l
David G. Miller	05/21	K=1.47 $\pm$ .23 gm/l
Hertzler Dairy	05/22	K=1.34 $\pm$ .23 gm/l
Eschore Dairy	05/22	K=1.81 $\pm$ .26 gm/l

No reactor related radionuclides were detected in any sample.

Outfall 001 Water Monitor Status

The 001 water monitor is operational. The alarm circuits should be operational in the next few days. Met-Ed will provide permanent power to the shed not later than Friday. An air conditioner has been ordered and will probably be installed around the first of next week. The window is set to detect any gamma emitter between approximately 80 KeV to 670 KeV. A few minor problems exist with the pump and the building up of sediment in the marinelli beaker. Operating procedures are currently being written for the operation of the system.

Air Sampling

The following samples were collected on 05/23/79, 05/24/79 and analyzed by gamma spectroscopy:

05/23/79

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36

05/24/79

Stations: 1, 16, 17, 20, 21, 23, 31, 34

No reactor related radionuclides were detected in any sample.

Water Sampling

The following samples were analyzed by gamma spectroscopy:

<u>Location</u>	<u>Collected</u>	<u>Results*</u>
Brunner Island	05/18/79	GSN
Brunner Island	05/19/79	GSN
Lancaster Intake	05/18/79	GSN
Lancaster Intake	05/19/79	GSN
Lancaster Intake	05/21/79	GSN
Outfall 001	05/23/79	GSN
Outfall 001	05/24/79	GSN
Outfall 003	05/22/79	GSN
Outfall 003	05/23/79	GSN
Outfall 003	05/24/79	GSN
Outfall 005	05/24/79	GSN
10" Outfall S.W. of Cooling Tower #2	05/24/79	GSN

Claire Hoover Dairy

An attempt was made to quantitate the CS-137 and K concentrations in a soil sample collected on 05/20/79 from the Claire Hoover Dairy. The results are as follows:

CS-137      $1.5 \pm 0.5$  pCi/gm  
K             $.014 \pm .01$  gm/gm

As reported on 05/22/79, no reactor related radionuclides were detected in any of the samples.

\*GSN - Gamma scan negative

Air Samples

The following samples were analyzed by gamma spectroscopy:

Date collected: 05/25/79

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36

Date collected: 05/26/79

Stations: 1, 16, 17, 20, 21, 23, 31, 34

Date collected: 05/28/79

Stations: 3, 4, 9, 10, 11, 13, 14, 35, 36

No reactor related radionuclides were detected in any samples.

Water Samples

The following samples were analyzed by gamma spectroscopy:

<u>Location</u>	<u>Collected</u>	<u>Results*</u>
Lancaster Intake	05/20/79	GSN
Lancaster Intake	05/22/79	GSN
Lancaster Intake	05/23/79	GSN
Brunner Island	05/21/79	GSN
Brunner Island	05/22/79	GSN
Brunner Island	05/23/79	GSN
TMI Outfall 001	05/25/79	GSN
TMI Outfall 003	05/25/79	GSN
TMI East Basin	05/25/79	GSN
City Island	05/25/79	GSN

Milk Samples

Miller Dairy	05/28/79	GSN
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\*GSN - Gamma Scan Negligible

EPA Preliminary Data Report 05/30/79  
Compiled by: Chuck Costa

Air Samples

The following samples were collected on 5/29/79 and analyzed by gamma spectroscopy:

Stations: 1, 5, 16, 17, 20, 21, 23, 31, 34

No reactor related radionuclides were detected in any sample.

Water Samples

The following samples were analyzed by gamma spectroscopy:

<u>Location</u>	<u>Collected</u>	<u>Results*</u>
Brunner Island	05/24/79	GSN
TMI Outfall 001	05/26/79	GSN
TMI Outfall 001	05/27/79	GSN
TMI Outfall 001	05/28/79	GSN
TMI Outfall 003	05/26/79	GSN
MI Outfall 003	05/27/79	GSN
TMI Outfall 003	05/28/79	GSN
TMI Outfall 007	05/26/79	GSN
TMI Outfall 007	05/27/79	GSN
TMI Outfall 007	05/28/79	GSN

Milk Sample

A. W. Hoffer Dairy	05/28/79	GSN
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\*GSN - Gamma Scan Negligible

EPA Preliminary Data Report 05/31/79  
Compiled by: Chuck Costa

Air Sampling

The following samples collected on 05/28/79 were analyzed by gamma spectroscopy:

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 33, 36

No reactor related radionuclides were identified.

Water Samples

<u>Location</u>	<u>Collected</u>	<u>Results*</u>
Lancaster (composite)	05/29/79	GSN
TMI Outfall 001 (composite)	05/28/79	GSN
TMI Outfall 001 (composite)	05/29/79	GSN
TMI Outfall 001 (composite)	05/30/79	GSN
TMI Outfall 003 (grab)	05/30/79	GSN
TMI E. Dike Storm Water Basin (grab)	05/30/79	GSN

Milk Samples

Beshore Dairy	05/29/79	GSN
Hertzler Dairy	05/29/79	GSN

\*GSN - Gamma Scan Negligible

EPA Preliminary Data Report 06/04/79  
Compiled by: Erich Bretthauer

AIR SAMPLING

Stations: 1, 17, 20, 21, 23, 31, 34 - Collection date 05/31/79

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36, 36 - Collection date 06/01/79

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 06/02/79

No reactor related radionuclides were identified.

WATER SAMPLING

<u>LOCATION</u>	<u>COLLECTION DATE</u>	<u>RESULTS*</u>
Lancaster	05/25/79	GSN
Brunner Island	05/26/79	GSN
Brunner Island	05/27/79	GSN
TMI 001	05/30/79	GSN
TMI 001	05/31/79	GSN
TMI 003	05/31/79	GSN
TMI 003	06/01/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/05/79  
Compiled by: Erich Bretthauer

Air Sampling

Stations: 5, 11, 13, 14 - Collection date 06/04/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	05/26/79	GSN
Lancaster	05/28/79	GSN
TMI 001	06/02/79	GSN
TMI 001	06/03/79	GSN
TMI 001	06/04/79	GSN
TMI 003	06/02/79	GSN
TMI 003	06/03/79	GSN
TMI 003	06/04/79	GSN

Milk Sampling

A. W. Hoffer Dairy	06/04/79	GSN
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\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/06/79  
Compiled by: Erich Bretthauer

Air Sampling

Stations: 36 - Collection Date 06/03/79

Stations: 3, 4, 5, 9, 10, 35, 36 - Collection Date 06/04/79

Stations: 1, 10, 17, 20, 21, 23, 31, 34 - Collection Date 06/05/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	05/27/79	GSN
Lancaster	05/30/79	GSN
TMI 001	06/05/79	GSN
TMI 003	06/05/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/07/79  
Compiled by: Erich Bretthauer

Air Sampling

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection Date 06/06/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Brunner Island	05/25/79	GSN
Brunner Island	05/30/79	GSN

Milk Sampling

Miller Dairy	06/04/79	GSN
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\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/08/79

Air Sampling

Stations: 1, 9, 13, 16, 17, 20, 21, 23, 31, 34 - Collection date 06/07/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Brunner Island	05/31/79	GSN
Lancaster	06/01/79	GSN
Lancaster	06/02/79	GSN
Lancaster	06/03/79	GSN
TMI 001	06/06/79	GSN
TMI 001	06/07/79	GSN
TMI 003	06/06/79	GSN
TMI 003	06/07/79	GSN

Milk Sampling

Beshore Dairy	06/05/79	GSN
Hertzler Dairy	06/05/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/11/79

Air Sampling

Stations: 3, 4, 5, 10, 11, 14, 35, 36 - Collection date 06/08/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	06/04/79	GSN
Lancaster	06/05/79	GSN
Lancaster	06/06/79	GSN
TMI 001	06/08/79	GSN
TMI 003	06/08/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/13/79  
Compiled by: Wayne Bliss

Air Sampling

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 06/09/79

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 16, 35, 36 - Collection date 06/11/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
TMI 001	06/09/79	GSN
TMI 001	06/10/79	GSN
TMI 001	06/11/79	GSN
TMI 003	06/09/79	GSN
TMI 003	06/10/79	GSN
TMI 003	06/11/79	GSN

Milk Sampling

A. W. Hoffer Dairy	06/11/79	GSN
D. G. Miller Dairy	06/11/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/14/79  
Compiled by: Wayne Bliss

Air Sampling

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 06/12/79

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection date 06/13/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	06/07/79	GSN
Lancaster	06/08/79	GSN
Lancaster	06/09/79	GSN
Lancaster	06/10/79	GSN
TMI 001	06/12/79	GSN
TMI 003	06/12/79	GSN
City Island	06/13/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/15/79  
Compiled by: Al Smith

Air Sampling

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 06/14/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	06/11/79	GSN
TMI C01	06/13/79	GSN
TMI 003	06/13/79	GSN

Milk Sampling

Beshore Dairy	06/12/79	GSN
Hertzler Dairy	06/12/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/18/79

Compiled by: Al Smith

*RES.*

Air Sampling

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection date 06/15/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection date</u>	<u>Results*</u>
TMI 001	06/14/79	GSN
TMI 001	06/15/79	GSN
TMI 003	06/14/79	GSN
TMI 003	06/15/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/19/79  
Compiled by: Al Smith

Air Sampling

Stations: 1, 16, 17, 20, 21, 23, 31, 34  
Collection date: 06/16/79

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36  
Collection date: 06/18/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection date</u>	<u>Results*</u>
TMI 001	06/16/79	GSN
TMI 003	06/16/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/20/79  
Compiled by: Al Smith *Q25*

Air Sampling

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 06/19/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	06/12/79	GSN
Lancaster	06/13/79	GSN
TMI 001	06/18/79	GSN
TMI 003	06/18/79	GSN
City Island	06/20/79	GSN

Milk Sampling

A. W. Hoffer Dairy	06/18/79	GSN
D. G. Miller Dairy	06/18/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/21/79

Compiled by: Al Smith (iss)

Air Sampling

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36  
Collection date: 06/20/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	06/14/79	GSN
Lancaster	06/15/79	GSN
TMI 001	06/19/79	GSN
TMI 003	06/19/79	GSN

Milk Sampling

Beshore Dairy	06/19/79	GSN
Hertzler Dairy	06/19/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/22/79  
Compiled by: Al Smith *AS*

Air Sampling

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 06/21/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	06/17/79	GSN
TMI 001	06/20/79	GSN
TMI 003	06/20/79	GSN
E. Dike Basin	06/21/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/25/79

Compiled by: Al Smith *A.S.*

Air Sampling

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection date 06/22/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	06/19/79	GSN
Lancaster	06/20/79	GSN
TMI 001	06/21/79	GSN
TMI 001	06/22/79	GSN
TMI 003	06/21/79	GSN
TMI 003	06/22/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/26/79

Compiled by: Al Smith *AES*

Air Sampling

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 06/23/79

Stations: 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection date 06/25/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	06/21/79	GSN
Lancaster	06/22/79	GSN
TMI 001	06/22/79	GSN
TMI 001	06/23/79	GSN
TMI 003	06/23/79	GSN

Milk Sampling

A. W. Hoffer Dairy	06/25/79	GSN
D. G. Miller Dairy	06/25/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/27/79  
Compiled by: Al Smith *ES*

Air Sampling

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 06/26/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	06/23/79	GSN
TMI 001 (composite)	06/23/79	GSN
TMI 001 (composite)	06/24/79	GSN
TMI 001 (composite)	06/25/79	GSN
TMI 003	06/25/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/28/79  
Compiled by: Al Smith

Air Sampling

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection date 06/27/79

No reactor related radionuclides were identified. QES

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	06/24/79	GSN
Lancaster	06/25/79	GSN
TMI 001	06/26/79	GSN
TMI 003	06/26/79	GSN
City Island	06/27/79	GSN

Milk Sampling

Hertzler Dairy	06/26/79	GSN
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\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 06/29/79

Compiled by: Dan Wait *DJW*

Air Sampling

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 06/28/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	06/26/79	GSN
Lancaster	06/28/79	GSN

Milk Sampling

Beshore Dairy	06/28/79	GSN
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\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 07/02/79

Compiled by: Al Smith *ASS*.

Air Sampling

Stations: 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection date 06/29/79

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 06/30/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
TMI 001 (composite)	06/26/79	GSN
TMI 001 (composite)	06/27/79	GSN
TMI 001 (composite)	06/28/79	GSN
TMI 003	06/27/79	GSN
TMI 003	06/28/79	GSN
TMI 003	06/29/79	GSN

\*GSN - Gamma Scan Negative

Air Sampling

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection date 07/02/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
TMI 001 (composite)	06/29 - 06/30	GSN
TMI 001 (special 0015)	06/30	GSN
TMI 001 (composite)	06/30 - 07/02	GSN
TMI 003	06/30	GSN
TMI 003	07/02	GSN

Milk Sampling

A. W. Hoffer Dairy	07/02	GSN
D. G. Miller Dairy	07/02	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 07/05/79  
Compiled by: Al Smith *AS*

Air Sampling

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 07/03/79

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection date 07/04/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	06/28/79	GSN
Lancaster	06/29/79	GSN
Lancaster	06/30/79	GSN
TMI 001 (composite)	07/02 - 07/03	GSN
TMI 001 (composite)	07/03 - 07/04	GSN
TMI 003	07/03/79	GSN
TMI 003	07/04/79	GSN

Milk Sampling

Beshore Dairy	07/02/79	GSN
Hertzler Dairy	07/03/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 07/06/79  
Compiled by: Will Corkern *WCC*

Air Sampling

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 07/05/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	07/01/79	GSN
City Island	07/06/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 07/09/79

Compiled by: Will Corkern *WCC*

Air Sampling

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection date 07/06/79

Stations: 16, 17, 20, 21, 23, 31, 34 - Collection date 07/07/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
TMI 001 (composite)	07/04 - 07/05	GSN
TMI 001 (composite)	07/05 - 07/06	GSN
TMI 001 (composite)	07/06 - 07/07	GSN
TMI 003	07/05	GSN
TMI 003	07/06	GSN
TMI 003	07/07	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 07/10/79  
Compiled by: Will Corkern *WC*

Air Sampling

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection date 07/09/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
TMI 001 (composite)	07/07 - 07/09	GSN
TMI 003	07/09/79	GSN

Milk Sampling

A. W. Hoffer Dairy	07/09/79	GSN
D. G. Miller Dairy	07/09/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 07/11/79

Compiled by: Will Corkern *WJC*

Air Sampling

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 07/10/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	07/02/79	GSN
Lancaster	07/03/79	GSN
TMI 001 (composite)	07/09 - 07/10	GSN
TMI 003	07/10/79	GSN

Milk Sampling

Beshore Dairy	07/10/79	GSN
Hertzler Dairy	07/10/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 07/12/79  
Compiled by: Will Corkern

Air Sampling

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection date 07/11/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	07/04/79	GSN
Lancaster	07/05/79	GSN
Lancaster	07/07/79	GSN
TMI 001 (composite)	07/10 - 07/11	GSN
TMI 003	07/11/79	GSN

\*GSN - Gamma Scan Negative

EPA PRELIMINARY DATA REPORT 07/17/79  
Compiled by: Will Corkern *WCC*

Air Sampling

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 07/12/79

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection date 07/13/79

Stations: 1, 16, 17, 20, 21, 23, 31, 34 - Collection date 07/14/79

Stations: 3, 4, 5, 9, 10, 11, 13, 14, 35, 36 - Collection date 07/16/79

No reactor related radionuclides were identified.

Water Sampling

<u>Location</u>	<u>Collection Date</u>	<u>Results*</u>
Lancaster	07/08/79	GSN
Lancaster	07/09/79	GSN
Lancaster	07/10/79	GSN
City Island	07/13/79	GSN
TMI 001 (composite)	07/11 - 07/12	GSN
TMI 001 (composite)	07/12 - 07/13	GSN
TMI 001 (composite)	07/14 - 07/15	GSN
TMI 001 (composite)	07/15 - 07/16	GSN
TMI 003	07/12/79	GSN
TMI 003	07/13/79	GSN
TMI 003	07/16/79	GSN

Milk Sampling

A. W. Hoffer Dairy	07/16/79	GSN
D. G. Miller Dairy	07/16/79	GSN

\*GSN - Gamma Scan Negative