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U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Perry Nuclear Power Plant
Docket No. 50-440
Annual Environmental Operating Report

Gentlemen:

We are hereby submitting the Annual Environmental Operating Report for the Perry Nuclear Power Plant, Unit 1, for the period of January 1, 1993 through December 31, 1993. This includes both the radiological environmental operating report, to meet the requirements of the PNPP Technical Specification, Section 6.9.1.6, and the non-radiological environmental operating report, to meet the requirements of Section 5.4.1 of the Environmental Protection Plan, Appendix B of the PNPP Operating License.

If you have questions or require additional information, please contact Louise Barton, at (216) 280-5512.

Very truly yours,

Robert A. Stratman

RAS:lkb

Attachment

cc: USNRC, Region III
NRC Resident Inspector Office
NRC Project Manager

Operating Companies
Cleveland Electric Illuminating
Toledo Edison

IE25

ANNUAL ENVIRONMENTAL OPERATING REPORT FOR PERRY NUCLEAR POWER PLANT

January 1, 1993 to December 31, 1993

Prepared by:

Environmental Monitoring Element
Perry Nuclear Power Plant
Cleveland Electric Illuminating Company
Perry, Ohio

April, 1994

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EXECUTIVE SUMMARY

The Annual Environmental Operating Report details the results of Environmental Monitoring Programs conducted at the Perry Nuclear Power Plant (PNPP) from January 1 through December 31, 1993. This report meets all of the requirements in the PNPP Technical Specifications 6.9.1.6 and Appendix B of the PNPP Operating License (the Environmental Protection Plan, or EPP). Report topics include Radiological Environmental Monitoring, Land Use Census, Clam/Mussel Monitoring, Herbicide Use, and Special Reports. The operation of the PNPP did not result in any significant environmental impact in 1993.

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

The Radiological Environmental Monitoring Program (REMP) was established in 1981 to monitor the radiological conditions in the environment around PNPP. The REMP is conducted in accordance with PNPP Technical Specification 3.4.12. This program includes the collection and analysis of environmental samples and an evaluation of results.

Radiation levels and radioactivity are monitored within a 22 mile radius around PNPP. The environment around PNPP has been monitored for twelve years. The REMP was established at PNPP six years before the plant became operational. This preoperational program was established to provide data on background radiation and radioactivity normally present in the area. PNPP has continued to monitor the environment during plant operation by collecting and analyzing samples of air, precipitation, milk, fish, produce, soil, grass, water and sediment as well as by measuring radiation directly.

REMP samples are collected from both indicator and control locations. Indicator locations are those which would be most likely to display effects caused by plant operation. They are relatively close to the plant, in the predominant wind direction. Control locations are those which should be unaffected by plant operation. Typically, they are a greater distance from the plant, in the least prevalent wind direction. Data obtained from the indicator locations are compared with data from the control locations and with the concentrations present in the environment before PNPP became operational. This comparison allows naturally occurring background radiation to be taken into account when evaluating any radiological impact PNPP may have had on the environment.

Over 1100 radiological environmental samples were collected in 1993 and over 2100 analyses for radioactivity were performed. The results of the REMP indicate the adequacy of the control of the release of radioactivity in effluents from PNPP. These results also indicate that PNPP complies with all applicable federal regulations. Results are divided into four sections: atmospheric monitoring, terrestrial monitoring, aquatic monitoring and direct radiation monitoring.

- Samples of air and precipitation are collected to monitor the atmosphere. The 1993 results are similar to those observed in preoperational and previous operational programs. Only normal background environmental radioactivity was detected and only at normal concentrations.

- Terrestrial monitoring includes analysis of milk, produce, vegetation, and soil samples. The results of the sample analyses indicate concentrations of radioactivity similar to previous years. For example, the average concentration of cesium-137 in soil was 298.67 pCi/kg in 1993, which is at the low end of the range of 208.5 to 1104.05 pCi/kg observed over the past ten years. The results of the analyses of the other terrestrial samples also indicate concentrations of radioactivity similar to previous years, and indicate no build-up of radioactivity attributable to the operation of PNPP.

- Aquatic monitoring includes the collection and analysis of water, fish, and shoreline sediments. The 1993 analysis results for water and fish sample results indicate normal background concentrations of radionuclides. In addition to routine environmental background monitoring, sediment samples are used to document and track very slight contamination found in a small stream to the east of the plant site (see 1992 Annual Environmental Operating Report for information). This has had no significant radiological impact on the surrounding environment.

- Direct radiation measurements averaged 53.46 mrem/91 days at indicator locations and 55.90 mrem/91 days at control locations, showing that, in 1993, radiation in the area of PNPP was similar to radiation at locations greater than 10 miles away from the Plant.

The 1993 operation of PNPP caused no significant increase in the concentrations of radionuclides in the environment and no significant change in the quality of the environment.

LAND USE CENSUS

In order to estimate radiation dose attributable to the operation of PNPP, the potential pathways through which public exposure can occur must be known. To identify these exposure pathways, an Annual Land Use Census is performed as part of the REMP. During the census, PNPP personnel travel every public road within a five mile radius of the plant to locate key components of the radiological exposure pathways.

CLAM/MUSSEL MONITORING

Clam and mussel shells can clog plant piping and components that use raw water. For this reason, sampling for these benthic macroinvertibrates has been conducted in Lake Erie in the vicinity of PNPP since 1971, specifically for *Corbicula* (Asiatic clams) since 1981, and for *Dreissena* (zebra mussels) since 1989.

Since no *Corbicula* have ever been found at PNPP, routine *Corbicula* monitoring provides data to determine whether this pest species has arrived in the vicinity of PNPP. The zebra mussel program includes both monitoring and control and is directed at minimizing the mussel's impact on plant operation. As in past years, this program has successfully prevented the zebra mussel from causing any operational problems at PNPP in 1993.

HERBICIDE USE

Because the PNPP site has several special habitat areas, the use of herbicides is closely monitored. This ensures compliance with Ohio Environmental Protection Agency requirements and protects the site's natural areas. Herbicide use is restricted to specific areas and has not had a negative impact on the environment around the plant.

SPECIAL REPORTS

Significant environmental events, noncompliance with environmental regulations, and changes in plant design or operation that affect the environment are reported to regulatory agencies as they occur. These special reports are also compiled annually in this report.

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

INTRODUCTION

The radiological environmental monitoring program (REMP) was established at PNPP for several reasons. First, it verifies the adequacy of plant design and operation to control radioactive materials and limit effluent releases; second, it assesses the radiological impact, if any, that the plant has on the surrounding environment; third, it ensures compliance with regulatory guidelines. The REMP is conducted in accordance with the PNPP Operating License, Appendix A, Technical Specifications. The Environmental Technical Specifications, or REMP requirements, were established by the Nuclear Regulatory Commission (NRC).

A wide variety of samples are collected as part of the PNPP REMP. The selection of sample types, sampling locations, and sample collection frequency are based on many things. Potential pathways for the transfer of radionuclides through the environment to humans, sample availability, local meteorology, population characteristics, land use and Nuclear Regulatory Commission requirements are all considered.

To ensure that the REMP data is meaningful and useful, detailed sampling methods and procedures are followed. This guarantees that samples are collected in the same manner and from the same locations each time. All samples are packaged on site, then shipped to a vendor radiological laboratory for analyses. The vendor laboratory analyzes the samples and reports results to the PNPP Environmental Monitoring Element, the Lake County General Health District, and the State of Ohio Department of Health.

The REMP began in 1981 with 24 direct radiation monitoring locations, four sediment locations, and two fish sampling locations. In 1982, collections of air, water, milk, food products, and feed/silage were started. The program was augmented in 1985 to include precipitation and soil. Although these last three media were not required by the NRC, they were incorporated into the program to expand its scope and provide additional data useful for analyzing environmental impacts of plant operation. This year, feed/silage sampling was dropped from the program based on the baseline of data established during the past ten years.

UNITS OF MEASURE

Some of the units of measure used in this report require some explanation.

Activity

Activity is the number of atoms in a material that decay per unit of time. Each time an atom decays, radiation is emitted. The curie (Ci) is the unit used to describe the activity of a material and indicates the rate at which the atoms are decaying. One curie of activity indicates the decay of 37 billion atoms per second.

Smaller units of the curie are often used in this report. Two common units are the microcurie (μCi), one millionth of a curie, and the picocurie (pCi), one trillionth of a curie. The mass, or weight, of radioactive material which would result in one curie of activity depends on the disintegration rate. For example, one gram of radium-226 is one curie of activity, but it would require about 1.5 million grams of natural uranium to equal one curie since radium-226 is more radioactive than natural uranium.

Dose

Biological damage due to alpha, beta, gamma and neutron radiation may result from the ionization caused by these radiations. Some types of radiation, especially alpha particles which cause dense local ionization, can result in up to 20 times the amount of biological damage for the same energy imparted as do gamma or X rays. Therefore, a quality factor must be applied to account for the different ionizing capabilities of various types of ionizing

radiation. When the quality factor is multiplied by the absorbed dose, the result is the dose equivalent, which is an estimate of the possible biological damage resulting from exposure to any type of ionizing radiation. The dose equivalent is measured in rem (roentgen equivalent man). In terms of environmental radiation, the rem is a large unit. Therefore, a smaller unit, the millirem (mrem) is often used. One millirem is equal to 1/1000 of a rem.

BACKGROUND RADIATION

Background radiation includes the decay of radioactive elements in the earth's crust, a steady stream of high-energy particles from space called cosmic radiation, naturally-occurring radioactive isotopes in the human body like potassium-40, medical procedures, man-made phosphate fertilizers (phosphates and uranium are often found together in nature), and even household items like televisions. In the United States, a person's average annual exposure from background radiation is 360 mrem, as the Background Radiation Chart (Figure 1) shows.

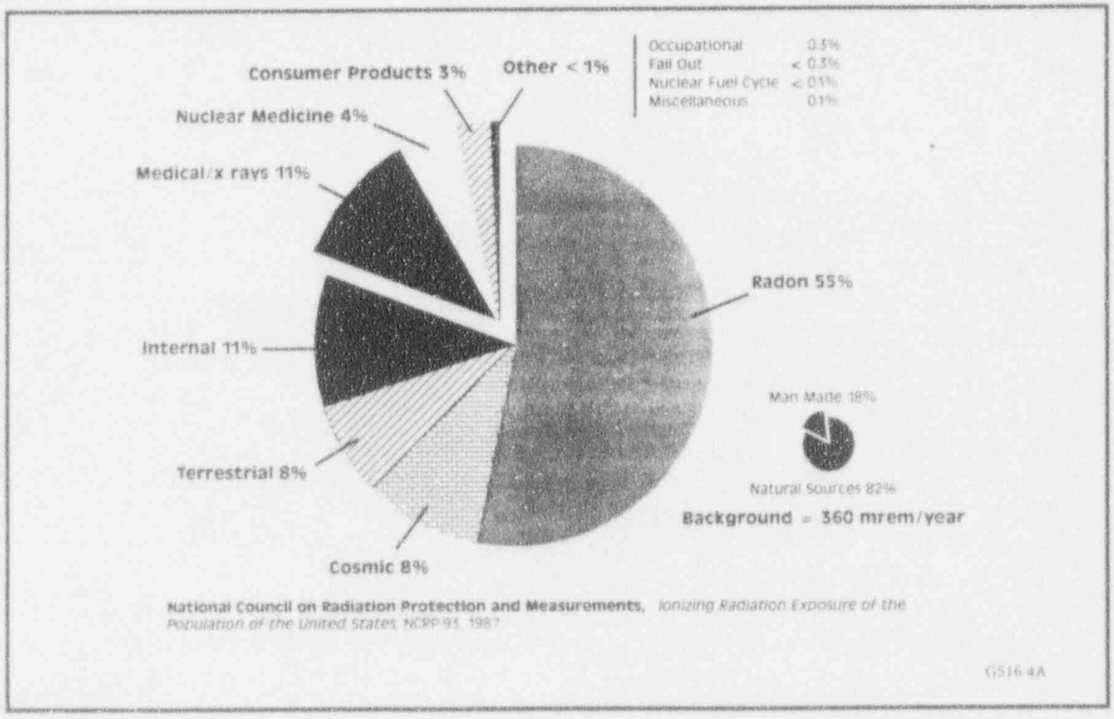


Figure 1: Background Radiation Chart

Many radionuclides are present in the environment due to sources such as cosmic radiation and fallout from nuclear weapons testing. These radionuclides are expected to be present in many of the environmental samples collected in the vicinity of PNPP. Some of the radionuclides normally present include:

- o *tritium*, present as a result of the interaction of cosmic radiation in the upper atmosphere.
- o *beryllium-7*, present as a result of the interaction of cosmic radiation with the upper atmosphere.
- o *potassium-40*, a naturally occurring radionuclide normally found in humans and

throughout the environment, and

- *fallout radionuclides* from nuclear weapons testing, including tritium, cesium-137, strontium-89, and strontium-90. These radionuclides may also be released in minute amounts from nuclear facilities.

Beryllium-7 and potassium-40 are especially common in REMP samples. Since they are naturally occurring and are expected to be present, positive results for these radionuclides are not discussed in the section on 1993 Sampling Program results. However, the data on these radionuclides is included in Appendix B: 1993 REMP Data.

SAMPLING LOCATIONS

REMP samples are collected at numerous locations, both onsite and up to 22 miles away from the plant. Sampling locations are divided into two general categories: indicator and control. Indicator locations are those which would be most likely to display effects caused by plant operation. They are relatively close to the plant, in the predominant wind direction. Control locations are those which should be unaffected by plant operation. Typically, they are a greater distance from the plant, in the least prevalent wind direction. Data obtained from the indicator locations are compared with data from the control locations. This comparison allows naturally occurring background radiation to be taken into account when evaluating any radiological impact PNPP may have had on the environment. Table 1 and Figures 2, 3 and 4 identify the PNPP REMP sampling locations.

Many REMP samples are collected in addition to those required by the PNPP Operating License. In some cases (precipitation and soil, for example), the media is not required to be collected at all. In other cases (air sampling and direct radiation monitoring, for example), the PNPP REMP includes more locations than are required. The Operating License requirements for each sample type are discussed in more detail below; sample types and locations that are required by the Operating License are shown in **BOLD** in Table 1.

Table 1: REMP Sampling Locations

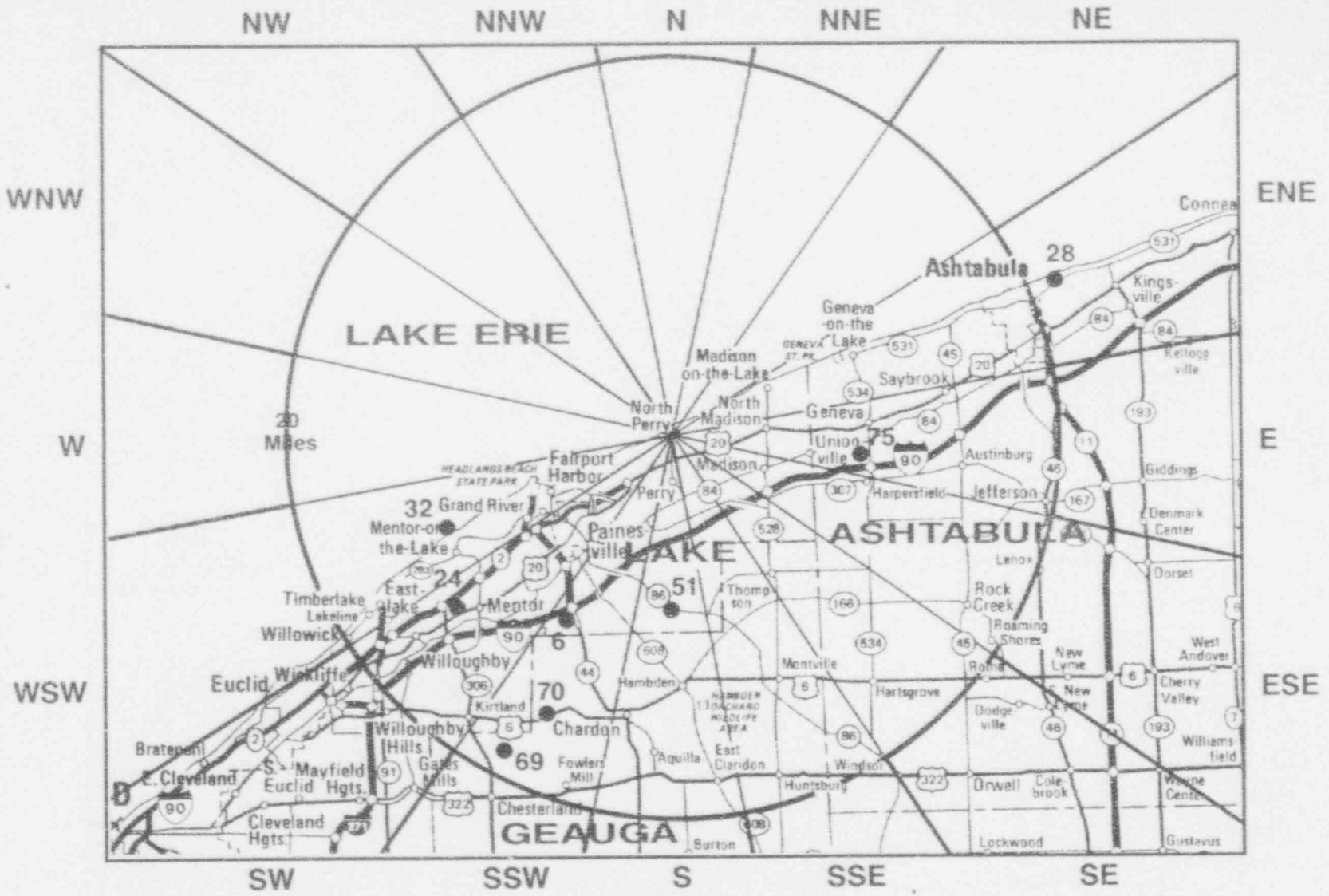
#	Description	Miles	Direction	Media(1)
1	**Redbird**	**3.4**	**ENE**	**AIR, TLD**
2	Site boundary	0.7	E	TLD
3	**Meteorological tower**	**1.0**	**SE**	**AIR, TLD,** PR, SOIL
4	**Site boundary**	**0.7**	**S**	**AIR, TLD,** PR, SOIL
5	**Quincy Substation**	**0.6**	**SW**	AIR, **TLD**
6	**Concord Service Center**	**11.0**	**SSW**	**AIR, TLD,** PR, SOIL, VG
7	**Site boundary**	**0.6**	**NE**	**AIR, TLD,** PR, SOIL, VG
8	**Site boundary**	**0.8**	**E**	**TLD**
9	**Site boundary**	**0.7**	**ESE**	**TLD,** SOIL
10	**Parmly Rd**	**0.8**	**SSE**	**TLD**
11	**Parmly Rd**	**0.6**	**SSW**	**TLD**
12	**Site boundary**	**0.6**	**WSW**	**TLD,** PR, SOIL
13	**Madison-on-the-Lake**	**4.7**	**ENE**	**TLD**
14	**Hubbard Rd**	**4.9**	**E**	**TLD**
15	**Eagle St Substation**	**5.1**	**ESE**	**TLD**
16	**Dayton Rd**	**5.0**	**SE**	**TLD**
17	Chadwick Rd	5.2	SSE	TLD
18	**Blair Rd**	**5.0**	**S**	**TLD**
19	Lane Rd	5.3	SSW	TLD

20	Nursery Rd	5.3	SW	TLD
21	**Hardy Rd**	**5.1**	**WSW**	**TLD**
22	Main St	6.9	SW	TLD
23	**High St**	**7.9**	**WSW**	**TLD**
24	**St. Clair Ave**	**15.1**	**SW**	**TLD**
25	**Offshore at PNPP Discharge**	**0.6**	**NNW**	**SEDIMENT, FISH**
26	Offshore of Redbird	4.2	ENE	SEDIMENT
27	Offshore of Fairport Harbor	7.9	WSW	SEDIMENT
28	**CEI Ashtabula Plant Intake**	**22.0**	**ENE**	**WATER**
29	**River Rd**	**4.3**	**SSE**	**TLD**
30	**Lane Rd**	**4.8**	**SSW**	**TLD**
32	**Offshore of Mentor**	**15.8**	**WSW**	**SEDIMENT, FISH**
34	**PNPP Intake**	**0.7**	**NW**	**WATER**
35	**Site boundary**	**0.6**	**E**	**AIR, TLD,** PR, SOIL, VG
36	**Lake County Water Plant**	**3.9**	**WSW**	**TLD, WATER**
39	Goldings Farm Stand	1.8	SSW	FOOD PRODUCTS
41	Clark Rd	1.1	SW	TLD
42	Parmly Rd	0.8	S	TLD
43	Parmly Rd	1.0	SSE	TLD
44	Parmly Rd	1.0	SSE	VG
45	Clark Rd	0.9	SSW	TLD
47	Zoldak milk farm	6.5	E	MILK
51	Rettger milk farm	9.6	S	MILK
53	**Neff Perkins Company**	**0.5**	**WSW**	**TLD**
54	**Hale Rd School**	**4.6**	**SW**	**TLD**
55	**Center Rd**	**2.5**	**S**	**TLD**
56	**Madison High School**	**4.0**	**ESE**	**TLD**
58	**Antioch Rd**	**0.8**	**ENE**	**TLD**
59	Lake shoreline at Green Rd	4.0	ENE	WATER
60	Lake shoreline at Perry Park	1.0	WSW	WATER
61	Keller milk farm	7.4	SE	MILK
62	**Shreve farm**	**1.2**	**ENE**	**FOOD PRODUCTS**
63	Minor stream mouth	0.08	NNE	SEDIMENT
64	Northwest Drain mouth	0.09	NW	SEDIMENT
65	Major Stream mouth	0.18	W	SEDIMENT
67	Sabo Farm	2.9	E	FOOD PRODUCTS
69	Rhoades Farm	18.7	SSW	MILK
70	**H&H Farm Stand**	**16.2**	**SSW**	**FOOD PRODUCTS**
71	Mosley Farm	7.9	SE	MILK
72	Sasu Farms	2.4	SW	FOOD PRODUCTS
73	West Market	2.4	SW	FOOD PRODUCTS
74	Wayman Farms	4.8	E	FOOD PRODUCTS
75	Old Orchard	15.7	E	FOOD PRODUCTS
76	Minor Stream Lower Pool	0.08	NNE	SEDIMENT
77	**Orosz Farm**	**1.2**	**E**	**FOOD PRODUCTS**
78	Gerlica Farm	1.5	ENE	FOOD PRODUCTS
79	Townline Rd	2.3	ESE	FOOD PRODUCTS

(1) AIR = Air Iodine and Particulate
PR = Precipitation
VG = Vegetation
TLD = Thermoluminescent Dosimeters

Figure 2

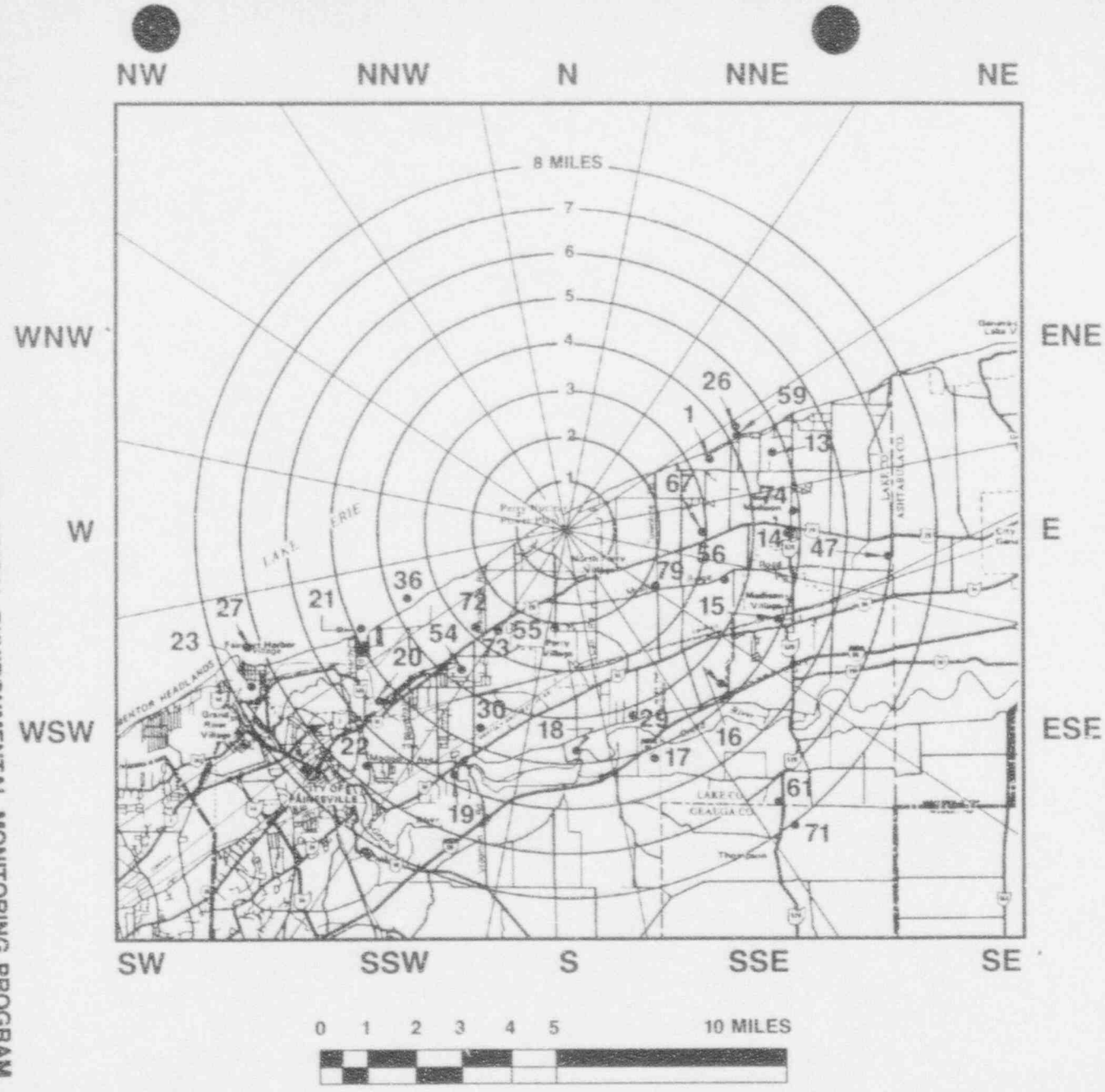
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM



STATION NO.	MEDIA	DIRECTION
6	AIR, TLD, PR, SOIL, VG	SSW
24	TLD	SW
28	WATER	ENE
32	SEDIMENT, FISH	WSW
51	MILK	S
69	MILK	SSW
70	FOOD PRODUCTS	SSW
75	FOOD PRODUCTS	E

Figure 2: REMP sampling locations greater than eight miles from the plant site.

KEY:
TLD = THERMOLUMINESCENT DOSIMETER
PR = PRECIPITATION
VG = VEGETATION
AIR = AIR IODINE & PARTICULATE



STATION NO.	MEDIA	DIRECTION
1	AIR, TLD	ENE
13	TLD	ENE
14	TLD	E
15	TLD	ESE
16	TLD	SE
17	TLD	SSE
18	TLD	S
19	TLD	SSW
20	TLD	SW
21	TLD	WSW
22	TLD	SW
23	TLD	WSW
26	SEDIMENT	ENE
27	SEDIMENT	WSW
29	TLD	SSE
30	TLD	SSW
36	WATER, TLD	WSW
47	MILK	E
54	TLD	SW
55	TLD	S
56	TLD	ESE
59	WATER	ENE
61	MILK	SE
67	FOOD PRODUCTS	E
71	MILK	SE
72	FOOD PRODUCTS	SW
73	FOOD PRODUCTS	SW
74	FOOD PRODUCTS	E
79	FOOD PRODUCTS	ESE

KEY:

AIR = AIR IODINE & PARTICULATE

TLD = THERMOLUMINESCENT DOSIMETER

Figure 3: REMP sampling locations between two and eight miles from the plant site.

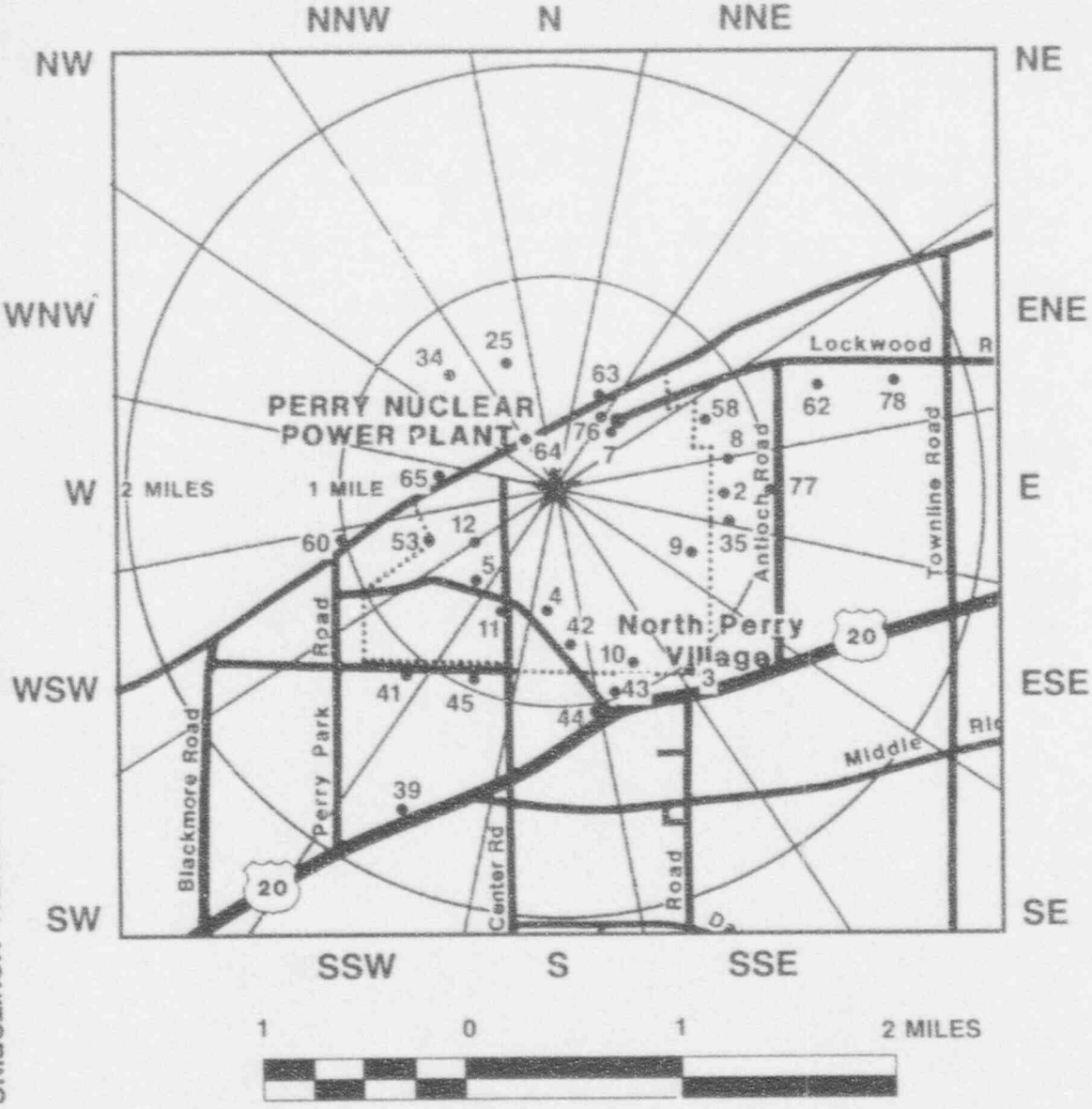


Figure 4: REMP sampling locations within two miles of the plant site.

STATION NO.	MEDIA	DIRECTION
2	TLD	E
3	AIR, TLD, PR, SOIL	SE
4	AIR, TLD, PR, SOIL	S
5	AIR, TLD	SW
7	AIR, TLD, PR, SOIL, VG	NE
8	TLD	E
9	TLD, SOIL	ESE
10	TLD	SSE
11	TLD	SSW
12	TLD, PR, SOIL	WSW
25	SEDIMENT, FISH	NNW
34	WATER	NW
35	AIR, TLD, PR, SOIL, VG	E
39	FOOD PRODUCTS	SSW
41	TLD	SW
42	TLD	S
43	TLD	SSE
44	VG	SSE
45	TLD	SSW
53	TLD	WSW
58	TLD	ENE
60	WATER	WSW
62	FOOD PRODUCTS	ENE
63	SEDIMENT	NNE
64	SEDIMENT	NW
65	SEDIMENT	W
76	SEDIMENT	NNE
77	FOOD PRODUCTS	E
78	FOOD PRODUCTS	ENE

KEY:
AIR = AIR IODINE & PARTICULATE
TLD = THERMOLUMINESCENT DOSIMETER
PR = PRECIPITATION
VG = VEGETATION

SAMPLE ANALYSIS

When environmental samples are analyzed for radioactivity, several types of measurements are performed to provide information about the types of radiation and radionuclides present. The major analyses that are performed are discussed below.

Gross beta analysis measures the total amount of beta emitting radioactivity present in a sample. Beta radiation may be released by many different radionuclides. Since beta decay gives a continuous energy spectrum rather than the discreet lines or "peaks" associated with gamma radiation, identification of specific beta emitting nuclides is much more difficult. Therefore, gross beta analysis only indicates whether the sample contains normal or abnormal concentrations of beta emitting radioactivity; it does not identify specific radionuclides. Gross beta analysis primarily acts as a tool to identify samples that may require further analysis.

Gamma spectral analysis provides more specific information than does gross beta analysis. Gamma spectral analysis identifies each radionuclide present in the sample that emits gamma radiation, and the amount of radioactivity associated with each. No two radionuclides emit the same energy gamma rays. Therefore, each radionuclide has a very specific "fingerprint" that allows for accurate identification.

Iodine analysis measures the amount of radioiodine present in a sample. Some media (e.g. air sample charcoal cartridges), are analyzed directly. In other media (e.g. milk), iodine is extracted by chemical separation.

Tritium analysis indicates whether a sample contains the radionuclide tritium (H-3) and the amount of radioactivity present as a result. Tritium is a natural or man-made isotope of hydrogen that emits low energy beta particles.

Gamma doses received by thermoluminescent dosimeters (TLD) while in the field are determined by a special laboratory procedure. Thermoluminescence is a process by which ionizing radiation interacts with the sensitive material in the TLD, the phosphor. Energy is trapped in the TLD material and can be stored for months or years. This provides an excellent method to measure the dose received over long periods of time. The amount of energy that was stored in the TLD as a result of interaction with radiation is removed and measured by a controlled heating process in a calibrated reading system. As the TLD is heated, the phosphor releases the stored energy as light. The amount of light is directly proportional to the amount of radiation to which the TLD was exposed. The reading process zeroes the TLD and prepares it for reuse.

Table 2 provides a list of the type(s) and frequency of analyses performed on environmental samples collected for the PNPP REMP in 1993.

SAMPLE TYPE	FREQUENCY	ANALYSES PERFORMED
Atmospheric Monitoring		
Airborne Particulates	Weekly	Gross Beta
	Quarterly	Gamma Spectral
Airborne Radioiodine	Weekly	Iodine-131
Precipitation	Monthly	Gross Beta
		Gamma Spectral
		Tritium

Terrestrial Monitoring		
Milk	Monthly/Bimonthly	Gamma Spectral Iodine-131
	Quarterly	Strontium
Food Products	Monthly	Gamma Spectral
Vegetation	Monthly	Gamma Spectral
Soil	Quarterly	Gamma Spectral Strontium
Aquatic Monitoring		
Water	Monthly	Gross Beta Gamma Spectral
	Quarterly	Tritium Strontium
Fish	Biannually	Gamma Spectral
Sediment	Biannually	Gamma Spectral Strontium
Direct Radiation Monitoring		
Thermoluminescent Dosimeters	Quarterly	Gamma Dose
	Annually	Gamma Dose

Table 2: Analyses performed on REMP samples.

Samples often contain radioactivity that is below the lower limit of detection (LLD). The LLD is the smallest amount of activity that will show a positive result for which there can be confidence that radioactivity is present. When a measurement is reported as less than the LLD, it means that the radioactivity is so low it cannot be accurately measured with a high degree of confidence. The NRC, as part of the PNPP Operating License, has established values for the lower limit of detection for REMP sample analysis. The vendor laboratory was able to comply with those values in 1993. The NRC also requires special reporting if sample analysis results exceed set limits. No values exceeded these reporting levels in 1993.

1993 SAMPLING PROGRAM

The contribution of radionuclides from the operation of PNPP is assessed by comparing results from the 1993 program with preoperational data (i.e., data from before 1986), operational data from previous years, and control location data. The results for each sample type are discussed below and compared to historical data to determine if there are any observable trends. All results are expressed as concentration. Refer to Appendix B: 1993 Radiological Environmental Monitoring Program Data, for more detailed results.

Program Changes

There were several changes to the program in 1993. These changes include the addition and deletion of sample locations as follows:

January Water sampling location #68, at the Ohio-American Water Company, was dropped from the program due to difficulty obtaining samples. Equipment configuration resulted in unreliability. Location #28, at the CEI Ashtabula plant, was added to the program as a replacement.

June Milk sampling location #69 was dropped from the program. The farmer moved out of the area.

July Location #77 was added to the program for food product samples.

August Locations #78 and #79 were added to the program for food product samples. These locations were identified in the 1993 Land Use Census.

November Locations #29 and #30 were added as TLD locations. It was noted during a Quality Assurance audit of the REMP that the TLDs in in the SSE and SSW sectors (#17 and #19, respectively) were not located the proper distance from the plant, based on requirements of the PNPP Operating License. The two new locations are within the required distance.

As noted earlier, feed/silage was dropped from the program this year based on having established a baseline of data since 1982.

Missed Samples

On occasion, samples cannot be collected. This can be due to a variety of events, including equipment malfunction, animal husbandry practices, lost shipments, or vandalism. Table 3 provides a list of missed samples, the sample location, and the reason the sample was missed.

Table 3: Missed REMP samples, 1993

MEDIA	LOCATION NO.	DATE	REASON MISSED
Milk	47, 61	1/11	Drying period for goats(1)
Milk	47, 61	2/ 8	Drying period for goats(1)
Milk	47, 61	3/ 9	Drying period for goats(1)
Milk	69	4/26	Sample not provided
Milk	69	5/10	Sample not provided
Milk	47	10/18	Goat unable to produce
Milk	47	11/ 8	Drying period for goats(1)
Milk	47, 61	12/ 6	Drying period for goats(1)
Lake water	59, 60	2/23	Lake ice covered
Lake water	59, 60	3/31	Lake ice covered
TLD	54	1st Qtr.	Lost in field(2)
TLD	56	2nd Qtr.	Lost in field(2)
TLD(3)	1	3rd Qtr.	Lost in field(2)
TLD	23	4th Qtr.	Lost in field(2)
TLD(3)(4)	1, 56	Annual	Lost in field(2)

(1) The drying period for goats is an annual occurrence. Goats, unlike cows, cannot produce milk all year.

(2) Missing TLDs can be the result of vandalism. At locations where vandalism has been identified as a recurring problem, the TLD is relocated. Loss of the TLD's listed above was unusual; they were not relocated as a result of this single event.

(3) Location #1 second quarter and annual TLDs were determined to be missing in early August. They were replaced on 8/19, resulting in a 50 day sample period for the third quarter and 140 day sample period for the annual.

(4) Location 56 annual TLD was replaced on 7/14, resulting in a 176 day sample period.

In addition to the missed samples listed in the table, grass samples were not collected for the months of January to April and November to December due to lack of growth and snow cover. A major construction project at location #44 prevented any sample collection there in 1993. If the completed project results in permanent loss of the grassy area, the location will

be dropped from the program in 1994.

Similarly, food product samples were available only during the months of July through October. Every effort was made to collect samples from the locations nearest the plant in areas of high predicted deposition. For the first three months of the growing season, this required visiting over 30 produce growers. The PNPP Operating License requires collection of three types of food products from each of two indicator locations and similar food products from a control location. These requirements were met only during the peak of the harvest season in August and September. In 1994, contracts with the two local produce growers nearest the plant in areas of high predicted deposition will be established in order to facilitate consistent sample collection. A contract will also be established with a control location.

Events may also occur which prevent a sample from being collected in the normal way, or prevent a complete sample from being collected. The following is a discussion of these events for 1993.

AIR

- On February 6, 1993, Painesville City Power, which provides electrical service for the air sampler at location #7, had a power outage for approximately two hours, disrupting service to the sampling equipment.
- The air sample pump at location #1 was found not running at 1100 on March 10, 1993, due to a motor seizure. Based on timer and gas meter readings, the seizure occurred shortly prior to sample collection at 1100 that day. It was repaired and recalibrated, and restarted that day from at 1600.
- From July 14 to 15, the air sample pump at location 35 was out of service for approximately 24 hours due to a power outage caused by road construction in the area.

WATER

On March 30, the power supply to the water sample pump at location #28 was found to be disconnected; a grab sample was collected in lieu of the composite sample. This sampler is located in the intake pumphouse at the Ashtabula CEI plant; the power was most likely disconnected inadvertently by a worker in the area.

- In August, the automatic sampler at location #36 did not collect a sufficient volume of water for a sample; a grab sample was collected on August 26 in lieu of the composite sample. It was later determined (see below) that the sampler had a faulty solenoid valve.
- In October, the automatic samplers at locations #28 and #36 did not collect a sufficient volume of water for a sample. The intake hose at location #28 was severed, and the timer at location #36 was diagnosed to have a failed solenoid valve. Grab samples were collected on October 28 in lieu of the composite samples.
- In November, the automatic sampler at location #36 was found empty; a grab sample was collected on November 30 in lieu of the composite sample. Although the faulty solenoid valve had been replaced, water plant personnel had inadvertently disposed of the sample.

Atmospheric Monitoring

AIR

Air sampling is conducted to detect any increase in the concentration of airborne radionuclides. Five locations (four indicator and one control), are required by the PNPP Operating License. Air sampling pumps are used to draw continuous samples at a rate of approximately one cubic foot per minute, which is roughly the same rate as human respiration. The air is

drawn through glass fiber filters, to collect particulates, and charcoal cartridges, to trap iodine. The samples are collected on a weekly basis, 52 weeks a year, from each of seven air sampling stations. Six of the locations are within four miles of the plant site; the seventh is used as a control location and is eleven miles from PNPP.

Air samples are analyzed for gross beta, iodine, and by gamma spectral analysis (quarterly). A total of 364 of each type of air sample (particulate and iodine) was collected in 1993.

Gross beta activity was detected in all air samples and ranged from 8.00 - 36.00 pCi/m^3. The annual average concentration of gross beta was 19.54 pCi/m^3 at the indicator locations and 19.63 pCi/m^3 at the control location. Historically, the concentration of gross beta in air has been essentially identical at indicator and control locations, as shown in Figure 5.

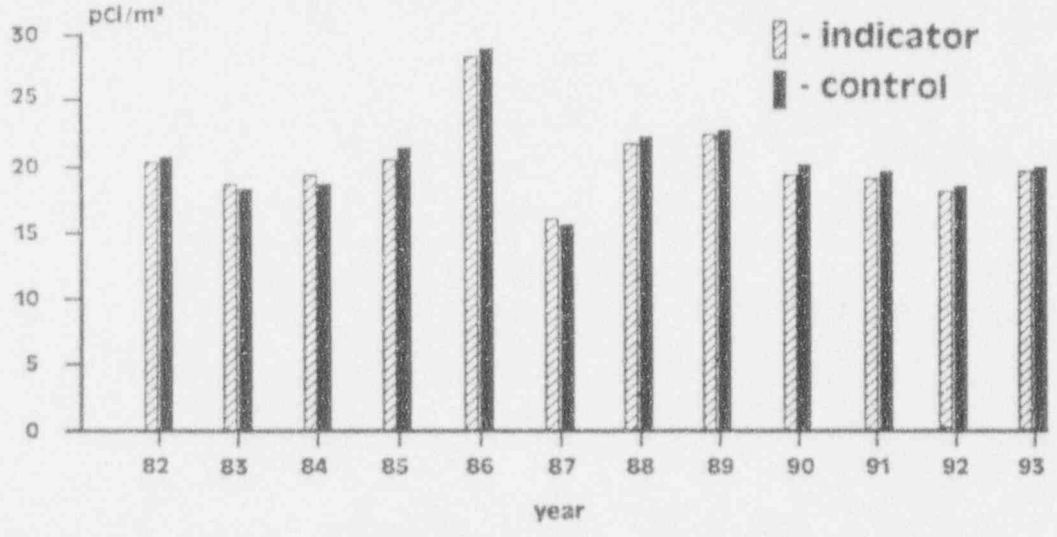


Figure 5: Annual average concentration of gross beta in air.

Except for naturally occuring beryllium-7, no radionuclide was identified in the gamma spectral analysis above the LLD. Iodine-131 was not detected in any sample above the LLD of 0.05 pCi/m^3.

PRECIPITATION

Precipitation provides a mechanism to sample for radionuclide deposition from the atmosphere. Precipitation in the form of rain, snow, sleet or hail provides a surface on which airborne radionuclides can be deposited. Although not required by the PNPP Operating License, samples are collected from six locations using passive collection containers. Containers are removed monthly or when full, strained to remove debris, and shipped to the laboratory for analysis. There are five indicator locations and one control location, which is located eleven miles from PNPP.

Precipitation samples are analyzed for tritium, gross beta, and by gamma spectral analysis. A total of 72 precipitation samples were collected in 1993. Tritium was not detected above the LLD of 1500 pCi/l in any of the samples. The results of gamma spectral analysis were all below LLDs as well.

Gross beta activity was detected in all samples and ranged from 0.80 pCi/l to 66.40 pCi/l. The annual average concentration of gross beta was 7.00 pCi/l at the indicator locations and 4.97 pCi/l at the control locations. The annual average concentrations were within the range of previous years (from 2.71 pCi/l to 11.79 pCi/l).

Terrestrial Monitoring

Collecting and analyzing samples of milk, food products and vegetation provides data to assess the buildup of radionuclides that may be ingested by humans. The data from soil samples provides information on the deposition of radionuclides from the atmosphere. Neither vegetation nor soil samples are required by the PNPP Operating License.

MILK

Samples of milk are collected once each month from November through April, and twice each month from April through October. Sampling is increased during the summer because animals are usually outside on pasture and not on stored feed. The PNPP REMP is required to include four milk locations (three within eight kilometers of the plant, and one control). If there are no milk locations that are within this distance, food product sampling must be performed. None of the milk locations included in the 1993 REMP fall within the distance required by the Operating License; food product sampling (discussed below) was performed. Milk was collected from the available locations even though they did not meet the Operating License requirements. If new locations that meet the Operating License requirements are identified in the future, they will be added to the program.

Milk samples are analyzed for iodine, strontium (quarterly), and by gamma spectral analysis. A total of 70 milk samples were collected in 1993. Iodine was not detected above the LLD of 1 pCi/l in any of the samples. Strontium-90 activity was detected in all of the eighteen samples analyzed and ranged from 1.30 - 5.70 pCi/l. The annual average concentration of Sr-90 was 3.38 pCi/l at the indicator locations and 2.55 pCi/l at the control locations. The annual average concentration was similar to those measured in previous years which have ranged from 0.96 pCi/l to 3.5 pCi/l.

The concentrations of all radionuclides except naturally occurring potassium-40 were below LLDs in all samples collected. The results for potassium-40 were similar at indicator and control locations, as expected.

FOOD PRODUCTS

Food products can provide a direct pathway to humans by ingestion. They can absorb radionuclides from atmospheric deposition from airborne sources or irrigation water drawn from a lake or pond receiving airborne or liquid effluents. Also, radionuclides in the soil may be absorbed by the roots of the plants and become incorporated into the edible portions. Because the current milk sampling locations do not meet the requirements of the Operating License, the PNPP REMP is required to include two indicator food product locations and one control location. Food products are collected monthly during the growing season from several farms in the vicinity of PNPP. The control location for food products is 16.2 miles from PNPP.

A total of forty food product samples were collected in 1993 and analyzed by gamma spectral analysis. Eight food products were collected, including several varieties of cabbage, broccoli, cauliflower, dill, basil, and turnip greens. Beryllium-7 and potassium-40, naturally occurring radionuclides, were found in several samples, as expected. No other radionuclides were detected above the LLDs.

VEGETATION

Vegetation (grass) is collected monthly during the growing season from four locations (three indicator and one control). Grass is clipped from open areas using standard lawn trimming equipment. The control location for vegetation is eleven miles away. A total of eighteen grass samples were collected in 1993 and analyzed by gamma spectral analysis. Two naturally occurring radionuclides were detected: beryllium-7 and potassium-40.

Cesium-137 was detected in three of the samples and ranged from 25.30 - 30.80 pCi/kg. The annual average concentration of cesium-137 was 27.37 pCi/kg at the indicator locations; none was detected at the control location. In 1992, none was detected at indicator locations; the annual average concentration was 17.90 pCi/kg at the control location. Historically, cesium-137 was found in preoperational samples collected in 1985. Since then, it has not been detected at both indicator and control locations in the same year.

SOIL

Soil samples are collected quarterly from seven locations (six locations and one control). The control location is eleven miles away. Only the top inch of soil is sampled in an effort to identify possible trends in the local environmental radionuclide concentrations.

Fourteen soil samples were collected in 1993 and analyzed by gamma spectral analysis and for strontium. Two naturally occurring radionuclides, potassium-40 and Radium-226 were detected in the samples, as expected. Cesium-137 activity was detected in twelve samples and ranged from 66.00 - 508.00 pCi/kg. The annual average concentration of cesium-137 was 316.70 pCi/kg at the indicator locations and 208.50 pCi/kg at the control location. For all sample sites, the annual average concentrations were similar to those measured in previous years (Figure 6). The downward trend apparent in the figure represents the decrease in cesium-137 deposition since atmospheric weapons testing in the 1960's and '70's.

Strontium-90 activity was detected in eleven samples and ranged from 13.00 - 46.20 pCi/kg. The annual average concentration of Sr-90 was 34.19 pCi/kg at indicator locations; none was detected at the control location.

The difference between indicator and control location results is not surprising since the presence of radionuclides in soil is so dependent on site-specific factors such as soil type and drainage. These factors determine the ability of the soil to attract ions. In this case, the soil type at the indicator locations is primarily sand (sand consists primarily of quartz grains that range in size from 0.05 millimeters to 2 millimeters in diameter). At the control location, the soil type is silty loam (silty loam consists of a mixture of silt, clay and sand; the most predominant grain size is less than 0.05 millimeters). Drainage in sandy soil is generally very good; the silty loam is somewhat poorly drained.

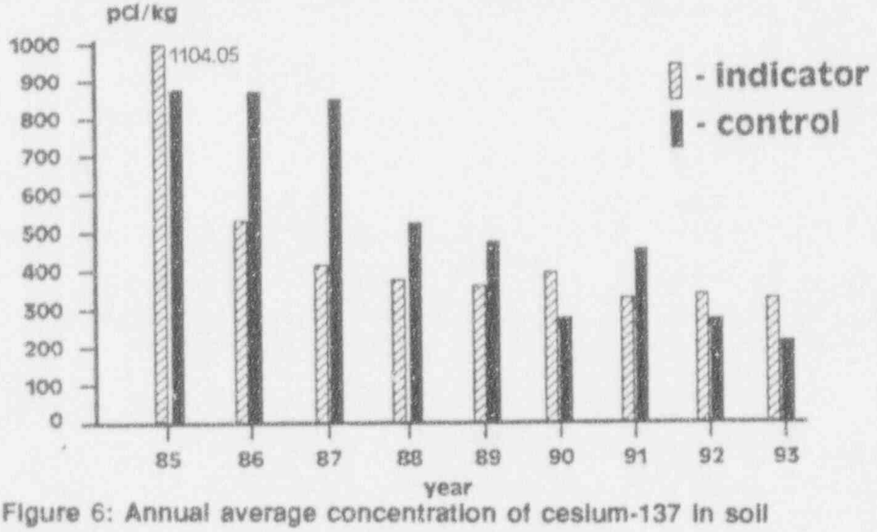


Figure 6: Annual average concentration of cesium-137 in soil

Aquatic Monitoring

Radionuclides may be present in Lake Erie from many sources including atmospheric deposition, run-off/soil erosion, and releases of radioactivity in liquid effluents from hospitals, universities or other industrial facilities. These sources provide two forms of potential radiation exposure, external and internal. External exposure can occur from contact with water or shoreline sediments. Internal exposure can occur from ingestion of radionuclides, either directly from drinking the water, or as a result of the transfer of radionuclides through the aquatic food chain to the eventual consumption of aquatic organisms, such as fish. To monitor these pathways, PNPP samples water, shoreline sediments, and fish.

WATER

Water is sampled from five locations along Lake Erie in the vicinity of the PNPP as required by the PNPP Operating License. Samples from three locations are collected using composite sample pumps. The pumps are designed to collect water at regular intervals and composite it in a sample container. The containers are removed monthly and the samples shipped to the laboratory for analysis. Samples from two locations are collected weekly and combined. Each month the combined sample is shipped for analysis.

Fifty-six water samples were collected and analyzed for gross beta activity and by gamma spectral analysis in 1993. From these, three monthly samples were composited into quarterly samples and analyzed for tritium, and one sample was analyzed each quarter for strontium.

Gross beta activity was detected in all samples collected and ranged from 1.80 - 4.00 pCi/l. The annual average concentration of gross beta was 2.47 pCi/l at the indicator locations and 2.82 pCi/l at the control location. For all sample locations, the annual average concentrations were similar to those measured in previous years (Figure 7).

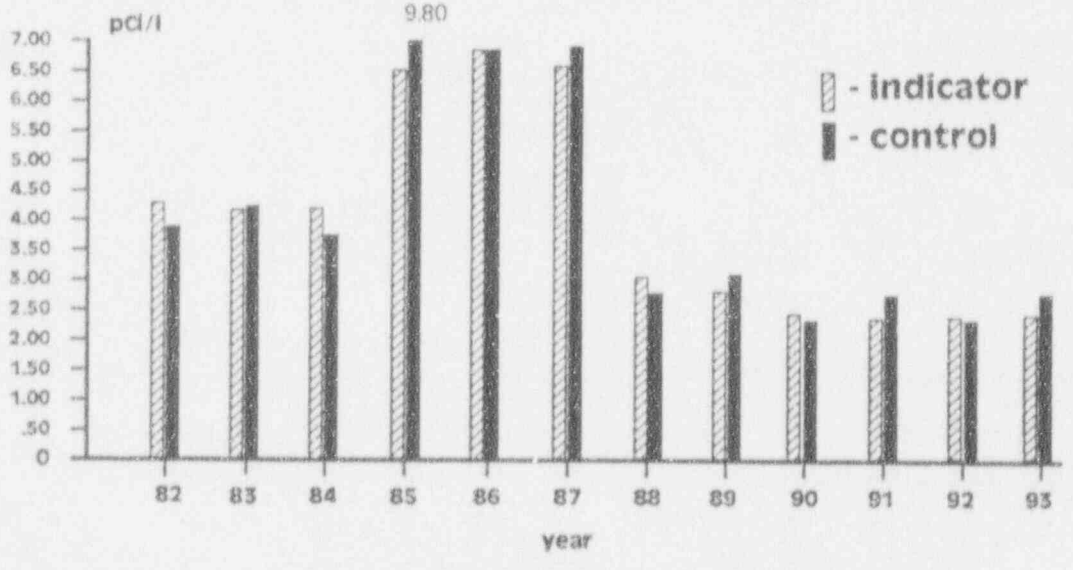


Figure 7: Annual average concentration of gross beta in water

The significant difference between pre-1988 data and post-1988 data has been attributed to a change in vendor laboratories in 1987/1988. A comprehensive explanation is provided in the 1987 Annual Environmental Operating Report.

No radionuclides were detected by gamma spectral analysis above the LLD. Tritium was detected in four samples and ranged from 193.00 - 233.00 pCi/l. The annual average concentration of tritium was 211.00 pCi/l at the indicator locations; none was detected at the control location. These results are well within the range fo those measured in previous years which have ranged from below the lower limit of detection to 2,200 pCi/l.

Strontium-90 activity was detected in thirteen samples and ranged from 0.50 - 1.80 pCi/l. The annual average concentration of strontium-90 was 0.68 pCi/l at the indicator locations and 1.03 pCi/l at the control location. For all sample locations, the annual average concenatrations were similar to those measured in previous years.

SEDIMENT

Sampling lake bottom sediments can provide an indication of the accumulation of undissolved radionuclides which may lead to internal exposure to humans through the ingestion of fish, through resuspension into drinking water, or as an external radiation source from shoreline exposure to fisherman and swimmers. Although only one location is required by the PNPP Operating License, sediment is sampled twice each year from eight locations, two of which are also fish sampling locations. Sediment samples from offshore are collected using a hand dredge. Near shore and stream bed samples are collected using a scoop.

Sixteen sediment samples were collected in 1993 and analyzed for strontium and by gamma spectrometry. Strontium-90 activity was detected in thirteen samples and ranged from 5.50 - 34.70 pCi/kg. The annual average concenatration was 13.44 pCi/kg at the indicator locations and 23.15 pCi/kg at the control location. These concentrations fall well within the range of those measured in previous years (<LLD to 1,030 pCi/kg).

The predominant radionuclide detected by gamma spectral analysis was potassium-40, which is naturally occurring. Potassium-40 has been detected in all samples since the program began in 1981. Cesium-137 was detected in eight samples and ranged from 68.00 - 757.00 pCi/kg. The annual average concentration was 161.50 pCi/kg at the indicator locations and 560.50 pCi/kg at the control location. These are within the range of concentrations measured in previous years (Figure 8).

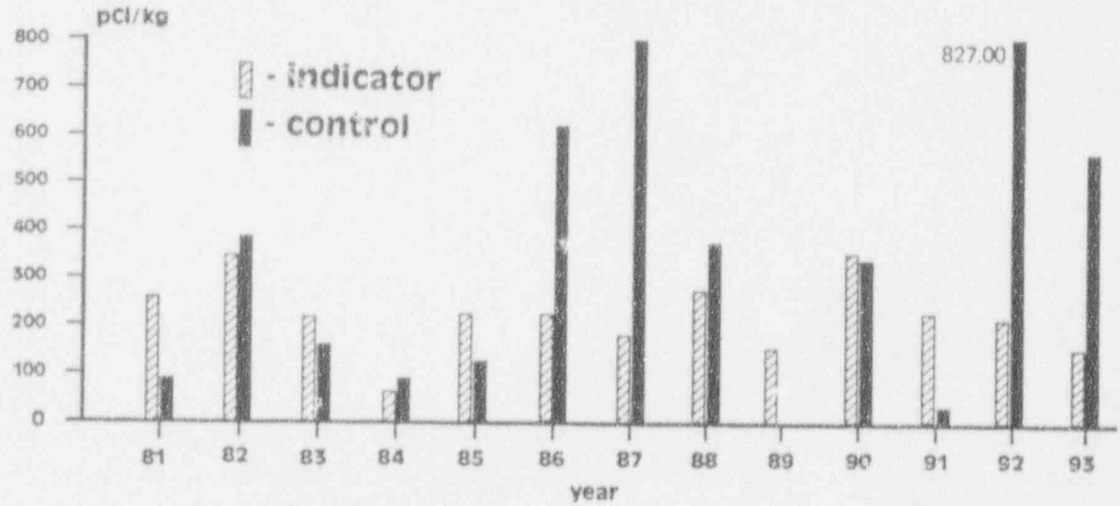


Figure 8: Annual average concentration of cesium-137 in sediment

The changes in cesium-137 concentration from year to year may be related to the movement of sediment on the lake bottom. Wave action and currents can cause significant sediment movement between sample collections. For this reason, it is unlikely the same bed of sediment is sampled at each collection. This would contribute to inconsistent data, as the Figure demonstrates.

Cobalt-60 was detected at one location in 1993. Positive results for cobalt-60 were expected at this location; it was identified during an investigation in 1992 and added to the REMP (See the 1992 Annual Environmental Monitoring Report for more information). In 1994, this location will be deleted from the REMP but will be monitored and tracked per the requirements of 10CFR50.75(g), the decommissioning rule. In 1993, the concentration ranged from 96.00 - 230.00 pCi/kg.

FISH

Fish are analyzed primarily to quantify the dietary radionuclide intake by humans, and secondarily to serve as indicators of radioactivity in the aquatic ecosystem. Fish are collected from two locations, twice each year as required by the Operating License. Important sport and commercial species are targeted, and only the fillets are sent to the laboratory for analysis. A scientific collecting permit is obtained annually from the Ohio Department of Natural Resources for fish sampling.

Twenty-five fish samples were collected in 1993 and analyzed by gamma spectral analysis. Eleven species of fish were represented, including walleye, freshwater drum, catfish, smallmouth bass, carp, white sucker, white perch, yellow perch, red horse, lake trout and rockbass. As expected, naturally occurring potassium-40 was found in all samples. Cesium-137 was detected in three samples and ranged from 13.60 - 20.90 pCi/kg. The annual average concentration of cesium-137 was 20.90 at the indicator location and 14.65 at the control location. These values are within the range of those measured in previous years which range from <LLD to 73.0 pCi/kg. No other radionuclides were detected above the LLD.

Direct Radiation Monitoring

THERMOLUMINESCENT DOSIMETERS

Environmental radiation is measured directly at thirty-seven locations around the PNPP site (the REMP is required to include 28 locations, two of which are control locations). The locations are positioned in two rings around the plant as well as at the site boundary. The inner ring is within a one mile radius of the plant site; the outer ring is four to five miles from the plant. Control locations are over ten miles from the plant in the two least prevalent wind directions. Each location is equipped with three thermoluminescent dosimeters (TLDs). Two are changed quarterly and one is changed annually.

A total of 310 thermoluminescent dosimeters (TLDs) were collected and analyzed in 1993. This includes 275 collected on a quarterly basis, and 35 collected annually. In 1993, the annual average dose for all indicator locations was 53.46 mR, and for all control locations was 55.90 mR. Figure 9 shows historical TLD data.

The TLD results are higher prior to 1988 due to a change in vendor laboratory services. A comprehensive explanation of the difference is provided in the 1988 Annual Environmental Operating Report.

It was noted during a Quality Assurrance audit of the REMP that the results for annual and duplicate quarterly TLDs had not been included in past annual reports. All TLD results have

been included in this report; it is summarized in Appendix A. Complete data can be found in Appendix B.

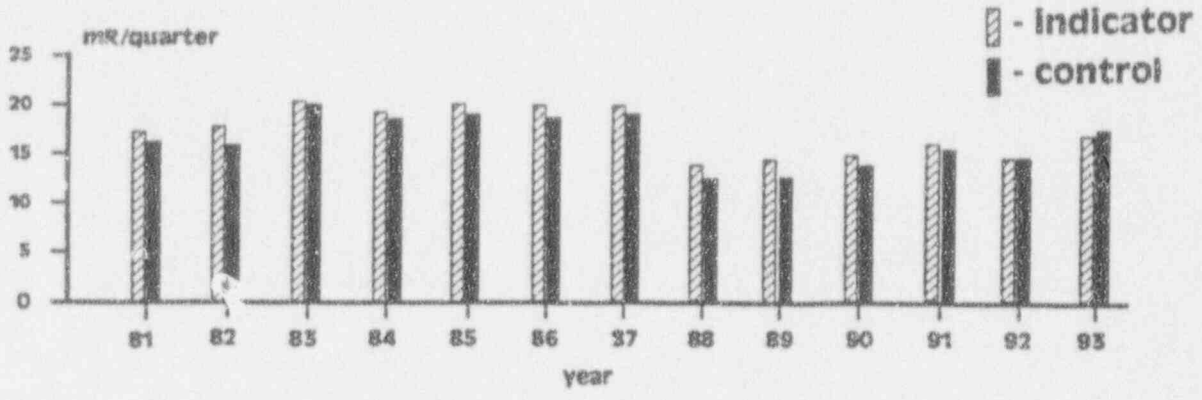


Figure 9: Average dose per quarter

INTERLABORATORY COMPARISON PROGRAM

The purpose of the Interlaboratory Cross-Check comparison program is to provide an independent check on the vendor laboratory's analytical procedures and to point out any possible problems. Samples with a known concentration of specific radionuclides are provided to the vendor laboratory. The vendor laboratory measures and reports the concentration of specified radionuclides. The known values (EPA values) are then compared to the vendor results. Results consistently outside established acceptance criteria indicates a need to check instruments or procedures.

In 1993, the vendor laboratory analyzed sixteen samples of milk, water, or air filters, performing 62 analyses, for this program. Four (6.4%) results were outside the acceptable range. The results of this program are shown in Table 4. Results are expressed in pCi/l for liquid samples, pCi/filter for filter samples, and mg/l for potassium results. Results shown in **BOLD** were outside the control limits and discussed in the footnotes below.

Table 4: 1993 EPA Cross-Check Intercomparison Program results.

DATE	SAMPLE TYPE	ANALYSIS	VENDOR RESULT	EPA VALUE	ACCEPTABLE RANGE
Jan.	Water	Sr-89	15.0	15.0	6.3 - 23.7
		Sr-90	10.3	10.0	1.3 - 18.7
Jan.	Water	Pu-239	17.5	20.0	16.5 - 23.5
Jan.	Water	**Alpha**	**17.1**	**34.0**	**18.4 - 49.6**(1)
		Beta	46.7	44.0	35.3 - 52.7
Feb.	Water	I-131	106.0	100.0	82.7 - 117.3
Feb.	Water	Uranium	7.2	7.6	2.4 - 12.8
Mar.	Water	Ra-226	9.3	9.8	7.2 - 12.4
		Ra-228	20.8	18.5	10.[illegible] - 26.5
Apr.	Water A	Alpha	88.3	95.0	[illegible] - 136.6
		Ra-226	25.4	24.9	[illegible] - 31.3
		Ra-228	17.4	19.0	[illegible].7 - 27.3
		Uranium	27.8	28.9	23.7 - 34.1

	Water B	Beta	141.7	177.0	130.2 - 223.8
		Sr-89	**28.7**	**41.0**	**32.3 - 49.7**[2]
		Sr-90	28.0	29.0	20.3 - 37.7
		Co-60	41.3	39.0	30.3 - 47.7
		Cs-134	24.7	27.0	18.3 - 35.7
		Cs-137	30.0	32.0	23.3 - 40.7
Jun.	Water	H-3	9613.3	9844.0	8136.8 - 11551.2
		Co-60	17.3	15.0	6.3 - 23.7
		Zn-65	114.0	103.0	85.7 - 120.3
		Ru-106	108.0	119.0	98.2 - 139.8
		Cs-134	5.7	5.0	0.0 - 13.7
		Cs-137	6.0	5.0	0.0 - 13.7
		Ba-133	101.7	99.0	81.7 - 116.3
Jul.	Water	Sr-89	28.3	34.0	25.3 - 42.7
		Sr-90	25.0	25.0	16.3 - 33.7
		Alpha	15.0	15.0	6.3 - 23.7
		Beta	41.3	43.0	31.0 - 55.0
Aug.	Water	Uranium	24.9	25.3	20.1 - 30.5
	Air filter	Alpha	17.0	19.0	10.3 - 27.7
		Beta	47.3	47.0	38.3 - 55.7
		Sr-90	19.3	19.0	10.3 - 27.7
		Cs-137	10.0	9.0	0.3 - 17.7
Sep.	Water	Ra-226	15.9	14.9	11.1 - 18.7
		Ra-228	21.0	20.4	11.6 - 29.2
	Milk	I-131	125.3	120.0	99.2 - 140.8
		Sr-89	**19.3**	**30.0**	**21.3 - 38.7**[3]
		Sr-90	22.0	25.0	16.3 - 33.7
		Cs-137	49.0	49.0	40.3 - 57.7
		K	1616.7	1679.0	1533.3 - 1824.7
Oct.	Water	I-131	116.7	117.0	96.2 - 137.8
		Gr. Alpha	39.7	40.0	22.7 - 57.3
		Ra-226	10.6	9.9	7.3 - 12.5
		Ra-228	13.2	12.5	7.1 - 17.9
		Uranium	15.3	15.1	9.9 - 20.3
		Beta	52.0	58.0	40.7 - 75.3
		Sr-89	11.3	15.0	6.3 - 23.7
		Sr-90	11.0	10.0	1.3 - 18.7
		Co-60	10.7	10.0	1.3 - 18.7
		Cs-134	10.0	12.0	3.3 - 20.7
		Cs-137	12.3	10.0	1.3 - 18.7
		Alpha	18.3	20.0	11.3 - 28.7
		Beta	13.7	15.0	6.3 - 23.7
Nov.	Water	H-3	7310.0	7398.0	6114.1 - 8681.9
		Ba-133	75.7	79.0	65.1 - 92.9
		Co-60	30.7	30.0	21.3 - 38.7
		Cs-134	51.3	59.0	50.3 - 67.7
		Cs-137	41.7	40.0	31.3 - 48.7
		Ru-106	**163.3**	**201.0**	**166.3 - 235.7**[4]
		Zn-65	157.0	150.0	124.0 - 176.0

(1) *Gross alpha analysis was repeated with similar results. An investigation of possible causes for the deviation from the EPA was conducted by the vendor laboratory; no cause was discovered. An analysis specifically for the radionuclide used in spiking (thorium-230) was performed in triplicate. Results of 15.5 pCi/L, 13.4 pCi/L, and 14.8 pCi/L were obtained. It should be noted that 66% of all participants failed this test with the grand average of 17.1pCi/L. No further investigation was conducted. It should be noted that on the next gross alpha check, the vendor lab reported results that were exactly the known value.*

(2) *No cause for the low strontium-89 was found. The analyst was observed performing this procedure with no noted discrepancies. The vendor will continue to monitor this procedure in the future.*

(3) *There is no apparent cause of the low strontium-89 results. The analyst has been observed performing this procedure with no discrepancies noted. No further action is planned.*

(4) *The cause of the low Ru-106 is not known. It should be noted that the grand average of all participants in this analysis was 175.3 pCi/l, with 54% of all participants outside of limits.*

In addition to their participation in the EPA Interlaboratory Comparison Program, the vendor laboratory participates in an International Intercomparison of Environmental Dosimeters and conducts an internal crosscheck program for dosimeters. Table 5 shows the results of the International Intercomparison program for 1993; Table 6 shows the results of the internal crosscheck program.

Table 5: 1993 International Intercomparison of Environmental Dosimeters

DATE	SAMPLE TYPE	VENDOR RESULT	KNOWN VALUE	ACCEPTABLE RANGE
Aug.	TLD-1	25.7	27.0	16.2 - 36.6
		22.7	25.9	15.6 - 34.4
		62.7	72.7	49.5 - 90.1
Aug.	TLD-2	26.0	27.0	16.2 - 36.6
		24.1	25.9	15.6 - 34.4
		69.2	72.7	49.5 - 90.1

Table 6: 1993 Vendor Internal crosscheck program for dosimeters

DATE	SAMPLE TYPE	VENDOR RESULT	KNOWN VALUE
Mar.	TLD	10.0	10.2
		25.5	25.5
		42.7	45.9

The vendor laboratory routinely monitors it's own quality by analyzing "spiked" samples (samples with a known quantity of radioactive material present in them). Table 7 shows the results of this program for 1993.

Table 7: 1993 Vendor laboratory "spiked" sample results

DATE	SAMPLE	ANALYSIS TYPE	VENDOR RESULT	EPA RESULT	ACCEPTABLE RANGE
Jan.	Milk	Sr-89	6.7	8.7	0.0 - 18.7
		Sr-90	20.0	19.2	9.2 - 29.2
		Cs-134	17.1	21.3	11.3 - 31.3
		Cs-137	21.4	23.8	13.8 - 33.8
Feb.	Milk	I-131	72.5	71.5	57.2 - 85.8
	Vegetation	I-131	994.5	953.7	763.0 - 1144.4
	Charcoal	I-131	95.2	95.4	76.3 - 114.5
Apr.	Water	Gr. alpha	10.4	10.4	0.4 - 20.4
		Gr. beta	22.0	20.6	10.6 - 30.6
		Sr-89	18.2	22.2	12.2 - 32.2
		Sr-90	20.1	17.0	7.0 - 27.0
		H-3	5464.0	5428.0	4342.4 - 6513.6
		I-131	149.8	145.0	116.0 - 174.0
		Co-60	24.8	21.5	11.5 - 31.5
		Cs-134	26.4	26.4	16.4 - 36.4
		Cs-137	33.9	31.7	21.7 - 41.7
	Milk	I-131	139.8	145.0	116.0 - 174.0
		Cs-134	48.8	52.8	42.8 - 62.8
		Cs-137	65.2	63.4	53.4 - 73.4
May	Fish	Cs-137	68.2	67.6	57.6 - 77.6
Jun.	Water	Th-230	4.2	4.5	2.7 - 6.3
		Alpha	8.9	12.9	7.7 - 18.1
		Beta	22.0	31.9	19.1 - 44.7
Aug.	Water	Fe-55	1684.0	1420.0	1136.0 - 1704.0
		Sr-90	32.2	30.4	24.3 - 36.5
		H-3	9910.0	10430.0	8344.0 - 12516.0
		Co-60	247.0	247.7	222.9 - 272.5
		Cs-134	141.6	141.1	127.0 - 155.2
		Cs-137	**283.5**	**247.2**	**222.5 - 271.9**(1)
	Milk	Sr-89	29.1	35.4	25.4 - 45.4
		Sr-90	18.3	19.2	9.2 - 29.2
	Fish	Cs-134	68.8	75.3	65.3 - 85.3
		Cs-137	203.6	198.1	178.3 - 217.9
	Sediment	Cs-134	74.1	71.0	61.0 - 81.0
		Cs-137	212.4	197.8	178.0 - 217.6
Sep.	Water	I-131	39.0	42.1	30.1 - 54.1
		Sr-89	21.9	28.8	18.8 - 38.8
		Sr-90	19.5	19.0	9.0 - 29.0
		I-129	18.1	18.6	6.6 - 30.6
	Milk	I-131	44.5	42.1	30.1 - 54.1
	Charcoal	I-131	90.3	84.3	67.4 - 101.2
	Vegetation	I-131	193.2	170.2	136.2 - 204.2
Oct.	Water	H-3	16900.0	17380.0	13904.0 - 20856.0
		Co-60	19.3	18.3	8.3 - 28.3
		Cs-134	31.5	33.5	23.5 - 43.5

	Cs-137	44.4	43.2	33.2 - 53.2
	I-131	95.2	88.9	71.1 - 106.7
Milk	I-131	49.7	44.5	32.5 - 56.5
	Cs-134	30.8	33.0	23.0 - 43.0
	Cs-137	43.4	43.2	33.2 - 53.2

(1) The cause of the high Cs-137 data is unknown. All data was reviewed; no errors were found in the calculations. The employee was observed performing this analysis and no deviations from the procedure were observed. The employee's results have been good in the past; no further action is planned.

CONCLUSION

No unusual radionuclide concentrations or exposure levels were detected during 1993. Atmospheric monitoring results were consistent with past results. The prevalent radionuclide in air was beryllium-7, which is naturally occurring.

Naturally occurring potassium-40 was detected in all terrestrial samples, as expected. Strontium-90 was detected in milk and soil; cesium-137 was detected in grass and soil. The concentrations were similar to those measured in previous years.

There was no significant change in radionuclide concentrations at indicator locations for aquatic samples in 1993. Strontium-90 was detected in water and sediment. Cesium-137 was detected in sediment and fish. Results were within the range of past data.

Finally, direct radiation measurements are relatively consistent with past data.

LAND USE CENSUS

INTRODUCTION

Each year a land use census is conducted to identify the locations of the nearest milk animal, garden (of greater than 500 ft^2), and residence in each of the meteorological sectors. The Land Use Census is required by the PNPP Technical Specifications, Section 3/4.12.2. The information gathered during the Land Use Census is used for off-site dose assessment and to update sampling locations for the Radiological Environmental Monitoring Program.

The Land Use Census is conducted by traveling all roads within a five-mile radius of the plant site, and recording and mapping the location of the nearest resident, milk animal, and vegetable garden in each of the meteorological sectors around the plant that are over land. The 1993 Census was conducted on July 14 and 15. The location of the nearest residences, vegetable gardens (larger than 500 square feet), and milk producing animals were recorded in addition to agricultural growers in the area, recreation areas, and public drinking water supplies.

The information has been tabulated below; all locations are plotted on the map in Figure 1. Note that the W, WNW, NW, N, and NNE sectors extend over Lake Erie and therefore were not included in the survey.

DISCUSSION AND RESULTS

There were no changes in nearest residences or in milk producing animals within five miles of the plant. The following changes in nearest gardens were recorded in the 1993 census:

- ENE Sector - A new garden was identified at 4591 Lockwood Road.
- SE Sector - A new garden was identified at 4551 Middle Ridge Road.
- WSW Sector - A new garden was identified at 3422 Parmly Road.

Table 1 lists the nearest residence by sector. The residence with the highest X/Q (highest dispersion factor and therefore highest possible calculated dose) is located at 3121 Center Road, in the south sector, approximately 0.9 miles from the plant. This is the same residence identified in the 1992 Land Use Survey.

Table 1: Nearest residence by sector

Sector	*Location Address*	*Miles from PNPP*	*X/Q Value (Sec/m^3)*	*Map Locator*
NE	4385 Lockwood Rd	0.8	2.17E-6	2
ENE	4602 Lockwood Rd	1.0	1.13E-6	5
E	2684 Antioch Rd	1.1	6.67E-7	17
ESE	2774 Antioch Rd	1.2	4.44E-7	25
SE	4495 N. Ridge Rd	1.2	3.89E-7	32
SSE	3119 Parmly Rd	0.9	1.89E-6	34
S	3121 Center Rd	0.9	2.25E-6	37
SSW	3850 Clark Rd	0.9	1.11E-6	41
SW	3440 Clark Rd	1.2	4.98E-7	45
WSW	2815 Perry Park	1.0	1.72E-6	49

This year there were no milk animals within a five mile radius of the plant. There have been no milk animals since 1991.

Table 2 lists the nearest gardens that occupy at least 500 square feet. The location with the highest D/Q (highest calculated deposition) value was 3121 Center Road in the south sector. This is the same garden identified in the 1992 Land Use Survey. Three new gardens were identified in the survey this year. They are at 4591 Lockwood Road, 4551 Middle Ridge Road, and 3422 Parmly Road.

Table 2: Nearest garden by sector

Sector	*Location Address*	*Miles from PNPP*	*D/Q Value per m_2*	*Map Locator*
NE	4398 Lockwood Rd	0.8	1.09E-8	3
ENE*	4591 Lockwood Rd	1.0	8.16E-9	4
E	2684 Antioch Rd	1.1	5.29E-9	17
ESE	2774 Antioch Rd	1.2	3.41E-9	25
SE*	4551 Middle Ridge Rd	1.7	1.58E-9	33
SSE	3119 Parmly Rd	0.9	1.23E-8	34
S	3121 Center Rd	0.9	1.31E-8	37
SSW	3735 N. Ridge Rd	1.6	1.32E-9	42
SW	3440 Clark Rd	1.2	2.24E-9	45
WSW*	3422 Parmly Rd	0.9	6.51E-9	50

* Indicates a new location for 1993.

Produce growers are listed in Table 3; recreational areas and drinking water facilities are listed in Table 4. These were compiled to provide information for use in emergency planning.

Table 3: Produce growers within the vicinity of PNPP

Sector	*Name and Address of Facility*	*Miles from PNPP*	*Map Locator*
ENE	Shreve Farm, 2431 Antioch Rd	1.2	6
ENE	Resident, 4762 Lockwood Rd	1.4	7
ENE	Gerlica Farm, 4860 Lockwood Rd	1.5	8
ENE	Rainbow Farms, Townline Rd	1.9	9
ENE*	Ruland Farm, 2210 Townline	2.0	10
ENE	Twins Creek Farm, 2299 Haines Rd	3.2	14
E	Orosz Farm, 2674 Antioch Rd	1.2	18
E	Sabo Farm, 5674 N. Ridge Rd	2.9	19
E*	Resident, 6325 Middle Ridge Rd	3.9	20
E	Woodworth Farm, Middle Ridge Rd	4.6	21
E	Wayman Farm, Across from 2605 Hubbard Rd	4.8	22
E	Hub Ridge Market, Rt. 528 & Middle Ridge	4.8	24
ESE	Secor Nursery, N. Ridge Rd	1.8	26
ESE	Resident, 5674 Middle Ridge Rd	3.2	27
ESE*	Resident, 5936 Middle Ridge Rd	3.3	28
ESE	Resident, 6030 Middle Ridge Rd	3.9	29
ESE	Resident, 5964 S. Ridge Rd	4.1	30
ESE	Hart's Acres, Rt 528	5.0	31
SSE	Leekala Farm, 4830 Davis Rd	3.0	35
SSE	Peg's Produce, Rt 84	3.2	36
S*	Resident, 4030 Middle Ridge Rd	1.5	38
S	Brookside Farm, Middle Ridge Rd	1.7	39
SSW	Champion Nursery, North Ridge Rd	1.8	43
SSW	Golding Farm, North Ridge Rd	1.7	44
SW	Perry Park Rd	1.5	
SW	Resident, 3191 N. Ridge Rd	2.4	45
SW	West Orchard & Fruit Market, N. Ridge Rd	2.7	46
SW	Perry Park/Clark	1.6	
SW	Garden Center, Corner Narrows Rd & North Ridge Rd	3.6	47

* Indicates a new location for 1993.

Table 4: Recreational areas & public drinking water facilities

Sector	*Name and Address of Facility*	*Miles from PNPP*	*Map Locator*
NE	North Perry Pk, Lockwood Rd	0.7	1
ENE	N. Townline Pk, Townline Rd	2.3	11
ENE	Lake Metro Pk, Lockwood Rd	1.7	12
ENE	Chapel Cove Pk, Chapel Rd	3.2	13
ENE	Tuttle Pk, Tuttle Park Rd	3.7	15
ENE	Madison C.C., Chapel/Green Rd	4.0	16
E	Madison Village Water Plant, 2934 Hubbard Rd	4.8	23
S	Lake County YMCA Outdoor Center, 4540 River Rd	4.6	40
SW	Fairway Pines Golf Course, Corner of Blase Nemeth and Bacon Rd	4.8	48
WSW	Perry Township Pk, Perry Park Rd	1.1	51
WSW	Camp Roosevelt, Perry Park Rd	1.4	52
WSW	Lake County Water Treatment Plant, Bacon Rd	3.9	53

LAND USE CENSUS MAP

GS15-4

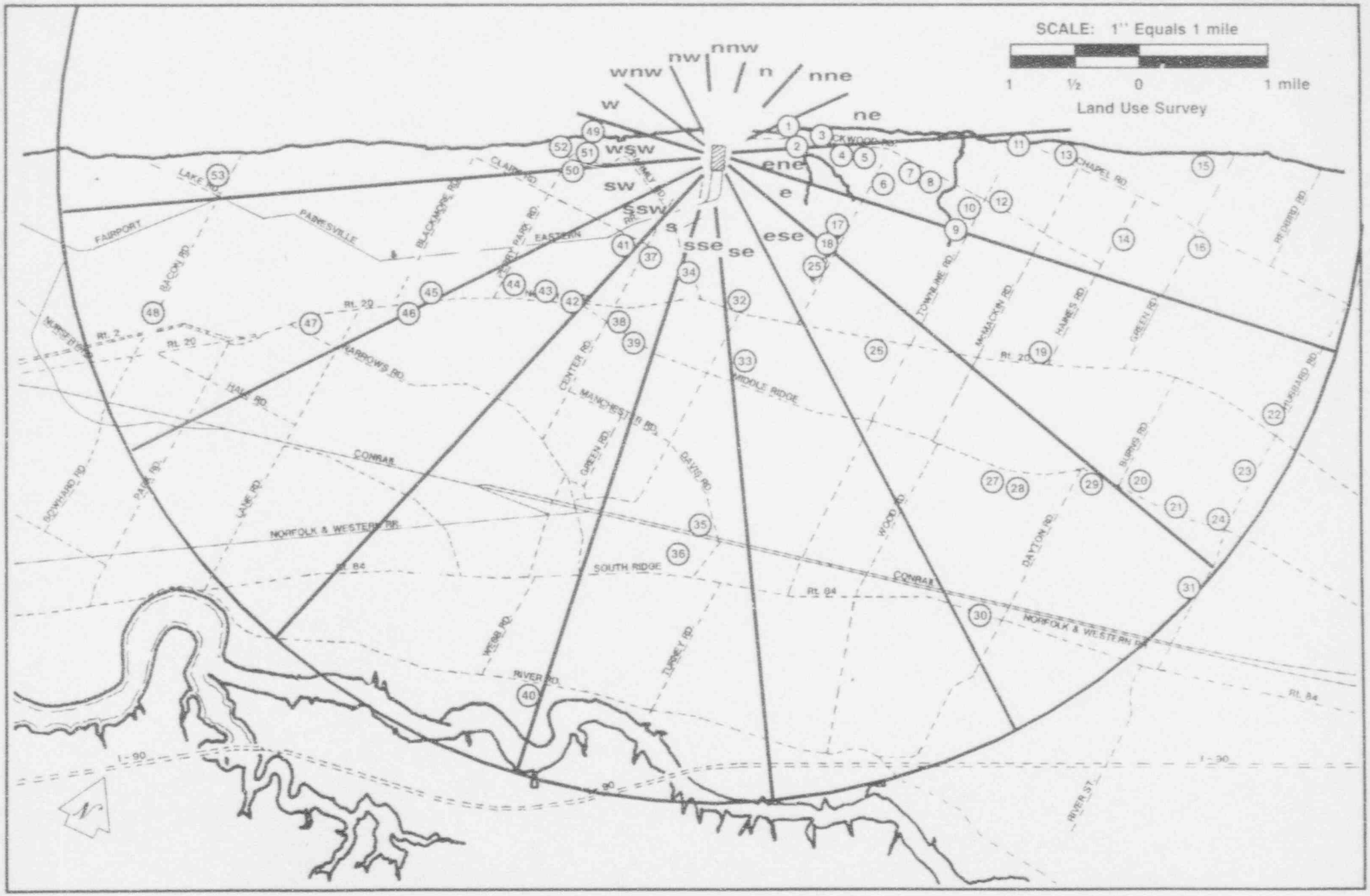


Figure 1: 1993 Land Use Census Map

CLAM/MUSSEL MONITORING

INTRODUCTION

Sampling for benthic macroinvertebrates has been conducted in Lake Erie in the vicinity of the Perry Nuclear Power Plant (PNPP) since 1971. The clam/mussel program currently focuses on two species: *Corbicula fluminea* (Asiatic clam) and *Dreissena polymorpha* (zebra mussel).

CORBICULA PROGRAM

The initial monitoring program specifically for *Corbicula* was developed by NUS Corporation for PNPP in response to an NRC bulletin and concerns of the Atomic Safety and Licensing Board. The current monitoring program was developed in conjunction with Aquatic Systems Corporation and incorporated into the Environmental Protection Plan (Operating License Appendix B) in July, 1988 by License Amendment 15. The program consists of periodic sampling of areas at both the PNPP and Eastlake Power Plants. Its purpose is to detect *Corbicula*, should it appear in the study area.

No *Corbicula* have ever been found in any sample collected from PNPP or from Lake Erie in the vicinity of PNPP. Two *Corbicula* were found in a sample collected from the Eastlake plant in June, 1987. No *Corbicula* have been found in any other sample collected since that time. A more detailed program history can be found in the 1986 and 1987 PNPP Annual Environmental Operating Reports.

Monitoring

Samples were collected quarterly in 1993 from in-plant locations at PNPP shown in Figure 1, and semiannually from the vicinity of the Eastlake Power Plant at locations shown in Figure 2. Sample collection dates are listed in Table 1.

Table 1 - 1993 Corbicula Sampling Dates and Locations

Date	Sample Location
1/7	Service water (SW) and Emergency Service Water (ESW) forebays
4/1	SW and ESW forebays and trash baskets
6/22	Lake Erie in the vicinity of the Eastlake Plant
7/9	SW and ESW forebays and trash baskets
9/17	Lake Erie in the vicinity of the Eastlake Plant
10/14	SW and ESW forebays and trash baskets
Weekly	Inspections of PNPP property shoreline, weather permitting

All samples were collected by Ponar hand dredge, hand scoop, or scraper. They were examined for bivalve shells and fragments, which were then identified to the lowest possible taxon.

In addition to sample collections, plant components that use raw water are inspected whenever open for maintenance or repair. Also, active communications were maintained with other agencies involved in benthic macroinvertebrate monitoring on Lake Erie. Several publications developed and distributed specifically for the purpose of providing information on bivalves are used as resources.

Results

No Corbicula were found in any sample collected during the 1993 monitoring program. All bivalves collected are listed in Table 2.

Table 2 - Bivalves Collected During the 1993 Corbicula Monitoring Program

	PNPP	EASTLAKE
Dreissena polymorpha	X	X
Dreissena bugensis	X	
Pisidium caeseratinum	X	
Pisidium compressum	X	X
Sphaerium striatinum	X	X
Sphaerium transversum	X	
Unionidae		X
Pisidium ferrungneum	X	
Pisidium spp.	X	X
Sphaerium corneum	X	
Sphaerium spp.	X	

Conclusions

The collection in June 1987 was the first indication that *Corbicula* are slowly spreading into the Central Basin of Lake Erie. However, it has not been demonstrated that the presence of these clams is creating any operational problems at the Eastlake Power Plant or at PNPP.

DREISSENA PROGRAM

Zebra mussels were first discovered at PNPP in September 1988. The initial collection of 19 mussels was made as part of the *Corbicula* monitoring program. The *Dreissena* program began in 1989 with monitoring and testing. The current control program was designed and implemented in 1990.

Monitoring

In addition to visually inspecting plant raw water systems when they are opened for maintenance or repair, monitoring methods include the use of commercial divers, artificial substrates, sidestream monitors, and plankton nets.

Commercial divers monitor mussel infestation when they are inspecting forebays, basins, and the intake and discharge structures. They have also been used to take underwater videotapes of the water basins and intake tunnel. Artificial substrates include concrete blocks suspended by rope into the plant service water basin. The substrate is removed weekly for inspection for settlement.

Sidestream monitors are flow-through containers that receive water diverted from plant systems. PNPP used them in three in-plant locations during the mussel season, May through October. They are fitted with slides and inspected weekly for veliger settlement. Vertical tows with a plankton net are used to obtain weekly samples of incoming service water that are subsequently examined for veligers.

Results of the veliger monitoring program for 1993 are shown in Table 3. Samples were collected from the service water basin using vertical tows with an 80 micron mesh plankton net.

Treatment

Chemicals used for mussel control in 1993 included chlorine and a commercial molluscicide. The system provides chlorine to plant service water, emergency service water, and circulating water systems. Sodium sulfite is added to plant discharge water to dechlorinate it before discharge to Lake Erie.

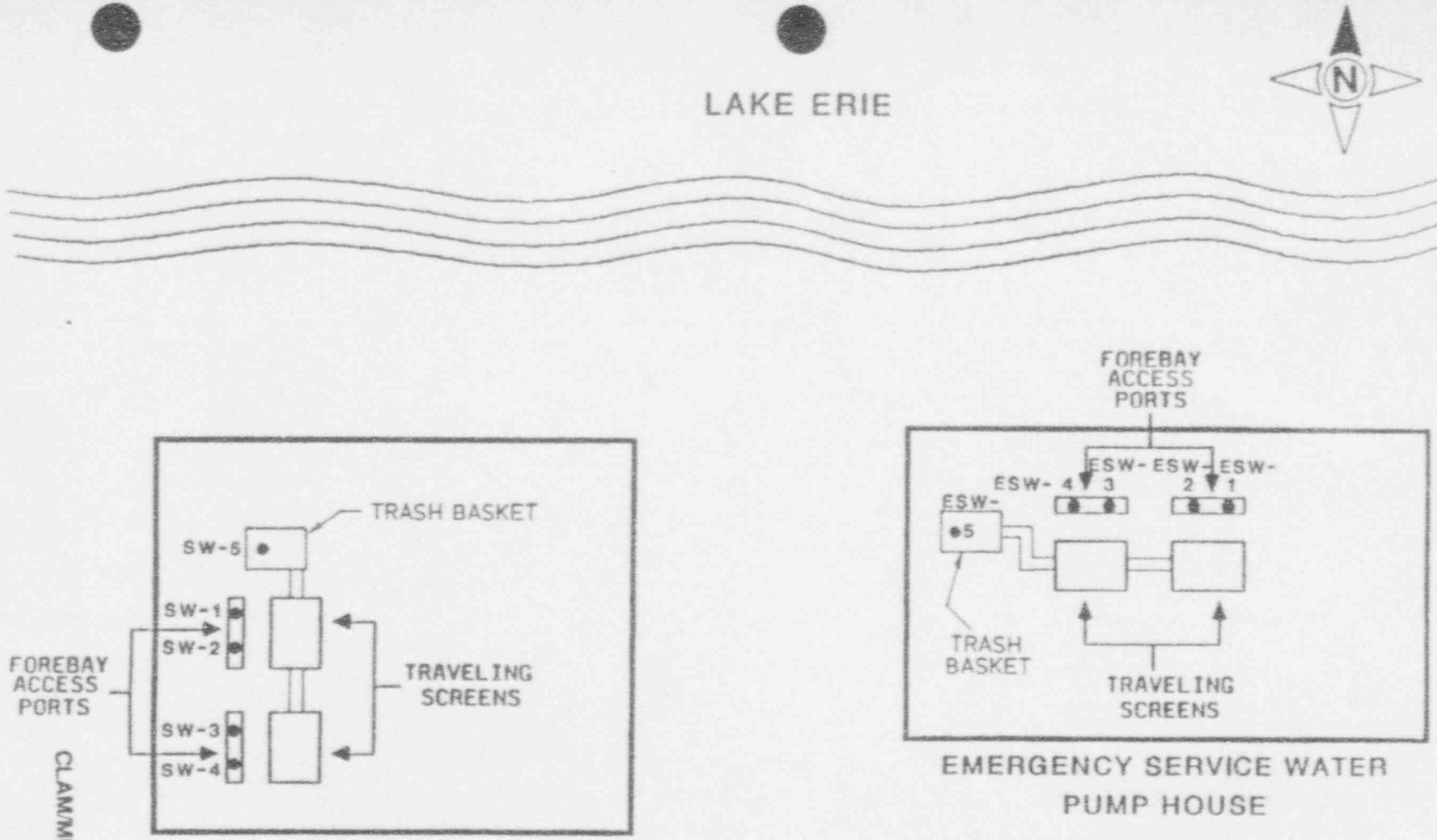
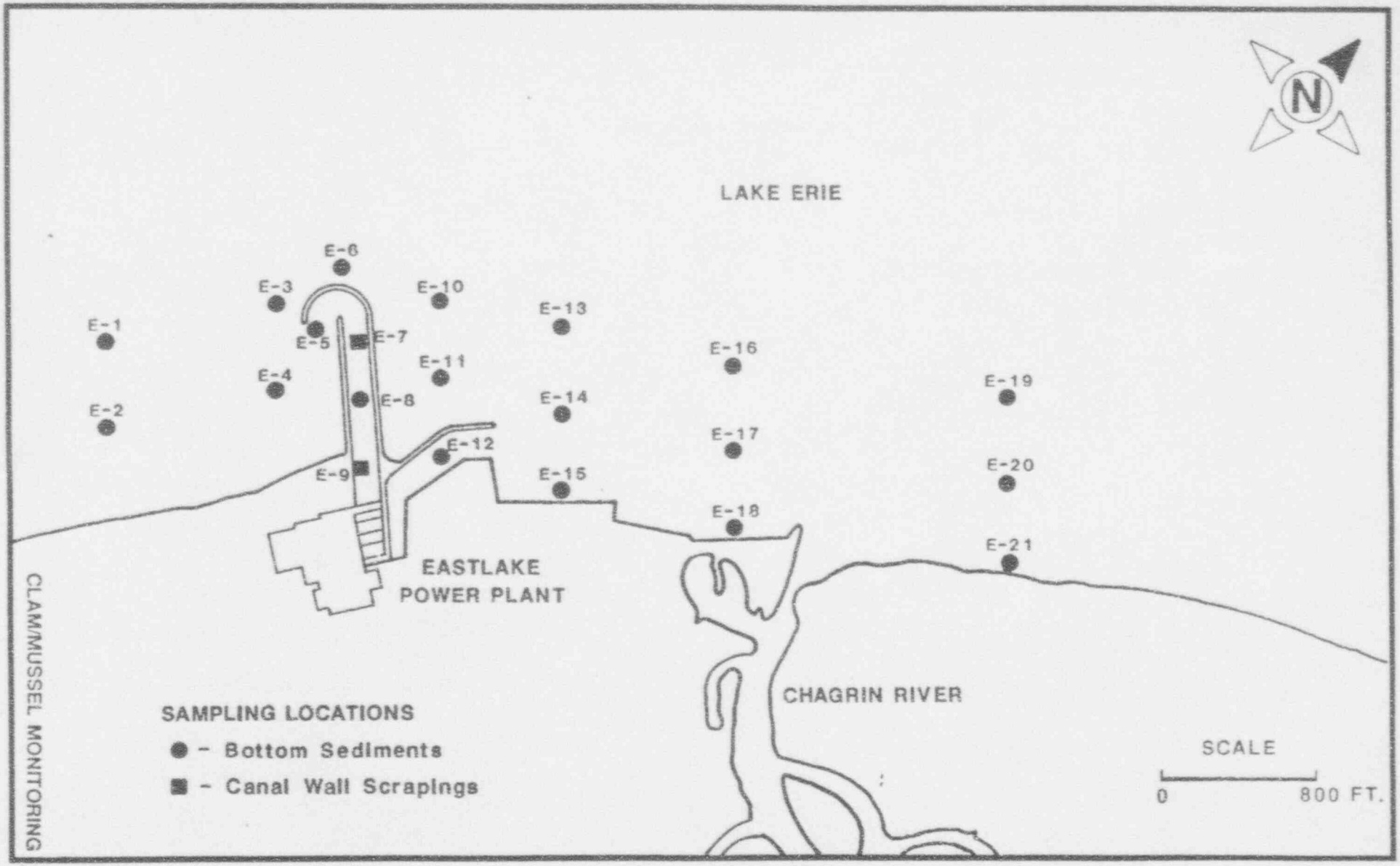


Figure 1 : PNPP in-plant sampling locations.

GS16-4



GS16-2

Figure 2: Lake Erie sampling locations in the vicinity of the Eastlake Plant.

Table 3 - Results of the 1993 Perry Nuclear Power Plant veliger sampling program.

Date	*#/liter*	*Temp (F)*
5/20	<1.0	53
5/27	0.0	58
6/ 3	<1.0	59
6/10	0.0	61
6/17	0.0	63
6/24	0.0	61
7/ 1	0.0	53
7/8	14.1	72
7/15	39.1	77
7/22	38.1	74
7/29	18.1	77
8/5	13.0	73
8/12	1.3	73
8/20	77.0	74
8/26	46.3	75
9/2	24.2	66
9/ 9	1.5	71
9/16	4.5	67
9/24	0.0	64
9/30	1.3	60
10/8	0.0	57

The use of commercial molluscicides requires approval of the Ohio Environmental Protection Agency (EPA). The chemical selected for use at Perry Nuclear Power Plant in 1993 was didecyl dimethyl ammonium chloride. A treatment was applied on Sept. 2, 1993 near the end of the settlement period. The active ingredients were detoxified by adsorption onto bentonite clay prior to discharge into Lake Erie.

Results

The effectiveness of the intermittent chlorination treatment has been determined in several ways. First, seven visual inspections of raw water system components were conducted in 1993. In addition, settlement monitors were inspected weekly for new settlement. No live settlement has been found in any plant component or in the settlement monitors to date.

The effectiveness of the application of the commercial molluscicide was measured by observing mortality of mussels placed in a flow-through container placed in plant service water and subjected to the chemical treatment. Two to three weeks after the treatment, divers inspected the service water basins and intake tunnel. Mortality observed both in the flow-through containers and in the system was 100%. To date, PNPP has had no problems related to zebra mussels.

Conclusions

Perry Nuclear Power Plant has taken the approach that the best method for avoiding problems with zebra mussels is early detection followed by preventative treatment of plant water systems. The current program of monitoring and chemical treatments will be continued to minimize the possibility that PNPP will experience problems due to zebra mussels in the future.

HERBICIDE USAGE

Because the PNPP site is home to several special habitat areas, like that for the spotted turtle, herbicides are used sparingly on site. An application must be made to the PNPP Environmental Monitoring Element prior to spraying to ensure that only approved chemicals are being used, and only in approved areas.

Table 1 provides a compilation of herbicide usage at the PNPP for 1993. All usage was in compliance with Ohio Environmental Protection Agency regulations. No adverse environmental impacts as a result of this usage were noted during weekly site environmental inspections. Surflan AS and Round Up were used in equal portions to make up the total quantity except where noted.

Table 1 - Herbicide Usage

Date Applied	*Location*	*Total Acres*	*Gallons*
5/21	E-field and outer perimeter	3.86	7.72
6/14	Unit 1 gravelled areas	5.30	10.60
6/16	Parmly Rd. pipe laydown area	12.78	25.56

SPECIAL REPORTS

NONCOMPLIANCES

NPDES Permit Noncompliances

The National Pollutant Discharge Elimination System, or NPDES permit, is issued by the Ohio Environmental Protection Agency (OEPA). It establishes monitoring requirements and limits for discharges from the plant. It also specifies the locations from which the plant is allowed to discharge. There were two notifications made to the OEPA in 1993.

On March 26, 1993, a 30-inch diameter pipe carrying plant service water ruptured, resulting in a discharge of approximately 700,000 gallons to the ground. The discharge was stopped by shutting down the service water system. This event was reported to the Ohio Environmental Protection Agency by phone on March 26, 1993, and was followed with a confirmation letter on March 31, 1992 (PY-CEI/OEPA-0176L).

On April 8, 1993, approximately 35 gallons of oil were discharged through the plant site storm drain system to a small, unnamed stream on the east side of the site. The oil was contained behind a skimmer wall; it did not enter Lake Erie. Clean up activities were completed by April 9, 1993. This event was reported to the OEPA by phone on April 8, 1993 and was followed with a confirmation letter on April 12, 1993 (PY-CEI/OEPA-0178L).

EPP Noncompliances

The Environmental Protection Plan, or EPP, is a part of the PNPP Operating License. It requires non-radiological environmental monitoring programs and reporting. There were no EPP noncompliances in 1993.

UNREVIEWED ENVIRONMENTAL QUESTIONS

All proposed changes in plant design or operation, as well as tests or experiments conducted during 1993 were reviewed for potential environmental impact in accordance with the EPP and administrative quality assurance procedures. The reviews ensured that no changes were performed which could cause an adverse environmental impact. Therefore, there were no potentially significant unreviewed environmental questions in 1993.

NONROUTINE REPORTS

There were no nonroutine reports in 1993.

APPENDIX A: 1993 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY

Name of Facility: PERRY NUCLEAR POWEP PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Air

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
APTB E-03 PCI/CU.M	G-BETA 364		19.55 (0364/0364) 8.00-36.00	19.54 (0312/0312) 8.00-36.00	5 00.6 SW	19.96 (0052/0052) 10.00-34.00	19.63 (0052/0052) 9.00-33.00

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Air

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean		All Control Locations Mean (1) (Range)
					Dist. Direct	Mean (1) (Range)	
AI PCI/CU.M.	I-131 364		LLD	-	-	-	-

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Air

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
APTG E-03 PCI/CU.M	BE-7 28		63.96 (0028/0028) 45.00-96.00	63.58 (0024/0024) 45.00-93.00	4 00.7 S	69.75 (0004/0004) 53.00-93.00	66.25 (0004/0004) 54.00-96.00
	CO-58 28		LLD	-	-	-	-
	CO-60 28		LLD	-	-	-	-
	CS-134 28	.005	LLD	-	-	-	-
	CS-137 28	.006	LLD	-	-	-	-

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Precipitation

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
TRITIUM PCI/L	H3 72		LLD	-	-	-	-

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Precipitation

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
PRB PCI/L	G-BETA 72		6.66 (0072/0072) 0.80-66.40	7.00 (0060/0060) 0.80-66.40	12 00.6 WSW	9.68 (0012/0012) 1.60-66.40	4.97 (0012/0012) 0.80-19.40

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Precipitation

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean: Dist. Direct	Location with Highest Annual Mean: Mean (1) (Range)	All Control Locations Mean (1) (Range)
PRG PCI/L	BA-140 72		LLD	-	-	-	-
	CO-58 72		LLD	-	-	-	-
	CO-60 72		LLD	-	-	-	-
	CS-134 72		LLD	-	-	-	-
	CS-137 72		LLD	-	-	-	-
	FE-59 72		LLD	-	-	-	-
	LA-140 72		LLD	-	-	-	-

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

P24001

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Precipitation

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
PRG PCI/L	MN-54 72		LLD	-	-	-	-
	NB-95 72		LLD	-	-	-	-
	ZN-65 72		LLD	-	-	-	-
	ZR-95 72		LLD	-	-	-	-

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Milk

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean: Dist. Direct	Location with Highest Annual Mean: Mean (1) (Range)	All Control Locations Mean (1) (Range)
MLKI PCI/L	I-131 70	1	LLD	-	-	-	-

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Milk

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
STRONTIUM PCI/L	SR-89 18		LLD	-	-	-	-
	SR-90 18		3.11 (0018/0018) 1.30-5.70	3.38 (0012/0012) 1.30-5.70	71 07.9 SE	4.58 (0005/0005) 3.50-5.70	2.55 (0006/0006) 1.90-3.70

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Milk

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean: Dist. Direct	Location with Highest Annual Mean: Mean (1) (Range)	All Control Locations Mean (1) (Range)
MLKG PCI/L	BA-140 70	60	LLD	-	-	-	-
	CS-134 70	15	LLD	-	-	-	-
	CS-137 70	18	LLD	-	-	-	-
	K-40 70		1482.00 (0070/0070) 1060.00-1990.00	1550.64 (0047/0047) 1060.00-1990.00	61 07.4 SE	1782.00 (0015/0015) 1510.00-1990.00	1341.74 (0023/0023) 1080.00-1610.00
	LA-140 70	15	LLD	-	-	-	-

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PE!RY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Food Products

Medium and Measurement	Type and Tot. (n) An[illegible]sis Pe[illegible]rmed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
FP PCI/KG	BE-7 40		379.52 (0006/0040) 46.70-884.00	379.52 (0006/0032) 46.70-884.00	77 01.2 E	800.00 (0002/0006) 716.00-884.00	0.00 (0000/0008) 0.00-0.00
	CO-58 40		LLD	-	-	-	-
	CO-60 40		LLD	-	-	-	-
	CS-134 40	60	LLD	-	-	-	-
	CS-137 40	80	LLD	-	-	-	-
	I-131 40	60	LLD	-	-	-	-
	K-40 40		3632.60 (0040/0040) 1532.00-6943.00	3873.41 (0032/0032) 1532.00-6943.00	77 01.2 E	5594.83 (0006/0006) 4078.00-6316.00	2669.38 (0008/0008) 1694.00-3665.00

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

P24001 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY PAGE: 001

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Grass

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean: Dist. Direct	Location with Highest Annual Mean: Mean (1) (Range)	All Control Locations Mean (1) (Range)
PP	BE-7		2653.33	2613.67	7	3161.50	2732.67
PCI/KG	18		(0018/0018)	(0012/0012)	00.6	(0006/0006)	(0006/0006)
			651.00-5268.00	651.00-4980.00	NE	1670.00-4980.00	730.00-5268.00
	CO-58						
	18		LLD	-	-	-	-
	CO-60						
	18		LLD	-	-	-	-
	CS-134	60					
	18		LLD	-	-	-	-
	CS-137	80	27.37	27.37	7	28.40	0.00
	18		(0003/0018)	(0003/0012)	00.6	(0002/0006)	(0000/0006)
			25.30-30.80	25.30-30.80	NE	26.00-30.80	0.00-0.00
	I-131	60					
	18		LLD	-	-	-	-
	K-40		6694.94	6680.67	7	8595.17	6723.50
	18		(0018/0018)	(0012/0012)	00.6	(0006/0006)	(0006/0006)
			3315.00-15400.00	3315.00-15400.00	NE	4015.00-15400.00	3352.00-13720.00

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Soil

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
SOIL PCI/KG(DRY)	CO-58 14		LLD	-	-	-	-
	CO-60 15		LLD	-	-	-	-
	CS-134 14		LLD	-	-	-	-
	CS-137 14		298.67 (0012/0014) 66.00-508.00	316.70 (0010/0012) 66.00-508.00	9 00.7 ESE	429.00 (0002/0002) 350.00-508.00	208.50 (0002/0002) 200.00-217.00
	K-40 14		10781.71 (0014/0014) 4280.00-15440.00	10101.17 (0012/0012) 4280.00-13151.00	6 11.0 SSW	14865.00 (0002/0002) 14290.00-15440.00	14865.00 (0002/0002) 14290.00-15440.00
	RA-226 14		1470.29 (0014/0014) 1084.00-2521.00	1330.75 (0012/0012) 1084.00-1620.00	6 11.0 SSW	2307.50 (0002/0002) 2094.00-2521.00	2307.50 (0002/0002) 2094.00-2521.00

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Soil

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Mean (1) (Range)	All Control Locations Mean (1) (Range)
STRONTIUM PCI/KG(DRY)	SR-89 14		LLD	-	-	-	-
	SR-90 14		34.19 (0011/0014) 13.00-46.20	34.19 (0011/0012) 13.00-46.20	12 00.6 WSW	41.25 (0002/0002) 36.30-46.20	0.00 (0000/0002) 0.00-0.00

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Water

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean: Dist. Direct	Location with Highest Annual Mean: Mean (1) (Range)	All Control Locations Mean (1) (Range)
WTRB PCI/L	G-BETA 56		2.54 (0056/0056) 1.80-4.00	2.47 (0044/0044) 1.80-4.00	28 22.0 ENE	2.82 (0012/0012) 1.90-3.50	2.82 (0012/0012) 1.90-3.50

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Water

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
WTRG PCI/L	BA-140 56	60	LLD	-	-	-	-
	CO-58 56	15	LLD	-	-	-	-
	CO-60 56	15	LLD	-	-	-	-
	CS-134 56	15	LLD	-	-	-	-
	CS-137 56	18	LLD	-	-	-	-
	FE-59 56	30	LLD	-	-	-	-
	LA-140 56	15	LLD	-	-	-	-

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Water

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
WTRG PCI/L	MN-54 56	15	LLD	-	-	-	-
	NB-95 56	15	LLD	-	-	-	-
	ZN-65 56	30	LLD	-	-	-	-
	ZR-95 56	30	LLD	-	-	-	-

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Water

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
TRITIUM PCI/L	H3 20		211.00 (0004/0020) 193.00-233.00	211.00 (0004/0016) 193.00-233.00	34 00.7 NW	224.00 (0001/0004) 224.00-224.00	0.00 (0000/0004) 0.00-0.00

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Water

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean: Dist. Direct	Location with Highest Annual Mean: Mean (1) (Range)	All Control Locations Mean (1) (Range)
STRONTIUM PCI/L	SR-89 20		LLD	-	-	-	-
	SR-90 20		0.76 (0013/0020) 0.50-1.80	0.68 (0010/0016) 0.50-0.90	28 22.0 ENE	1.03 (0003/0004) 0.60-1.80	1.03 (0003/0004) 0.60-1.80

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Sediment

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean: Dist. Direct	Location with Highest Annual Mean: Mean (1) (Range)	All Control Locations Mean (1) (Range)
STRONTIUM PCI/KG(DRY)	SR-89 16		LLD	-	-	-	-
	SR-90 16		14.93 (0013/0016) 5.50-34.70	13.44 (0011/0014) 5.50-28.80	32 15.8 WSW	23.15 (0002/0002) 11.60-34.70	23.15 (0002/0002) 11.60-34.70

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Sediment

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
SED PCI/KG(DRY)	CO-58 16		LLD	-	-	-	-
	CO-60 16		163.00 (0002/0016) 96.00-230.00	163.00 (0002/0014) 96.00-230.00	76 00.1 NNE	163.00 (0002/0002) 96.00-230.00	0.00 (0000/0002) 0.00-0.00
	CS-134 16	150	LLD	-	-	-	-
	CS-137 16	180	261.25 (0008/0016) 68.00-757.00	161.50 (0006/0014) 68.00-294.00	32 15.8 WSW	560.50 (0002/0002) 364.00-757.00	560.50 (0002/0002) 364.00-757.00
	K-40 16		11021.44 (0016/0016) 3181.00-17272.00	10419.29 (0014/0014) 3181.00-17272.00	27 07.9 WSW	16000.50 (0002/0002) 14729.00-17272.00	15236.50 (0002/0002) 14899.00-15574.00

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Fish

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
FSH PCI/KG(WET)	CO-58 25	130	LLD	-	-	-	-
	CO-60 25	130	LLD	-	-	-	-
	CS-134 25	130	LLD	-	-	-	-
	CS-137 25	150	16.73 (0003/0025) 13.60-20.90	20.90 (0001/0013) 20.90-20.90	25 00.6 NNW	20.90 (0001/0013) 20.90-20.90	14.65 (0002/0012) 13.60-15.70
	FE-59 25	260	LLD	-	-	-	-
	K-40 25		2605.16 (0025/0025) 1800.00-3251.00	2593.08 (0013/0013) 1800.00-3220.00	32 15.8 WSW	2618.25 (0012/0012) 2125.00-3251.00	2618.25 (0012/0012) 2125.00-3251.00
	MN-54 25	130	LLD	-	-	-	-

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Fish

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean: Dist. Direct	Location with Highest Annual Mean: Mean (1) (Range)	All Control Locations Mean (1) (Range)
FSH PCI/KG(WET)	ZN-65 25	260	LLD	-	-	-	-

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Direct Radiation

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
TLD MR/STD.QTR	DIRECT 137		17.51 (0137/0137) 11.50-28.00	17.49 (0129/0129) 11.50-28.00	18 05.0 S	25.93 (0004/0004) 23.40-28.00	17.88 (0008/0008) 14.80-20.50

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Direct Radiation

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean Dist. Direct	Location with Highest Annual Mean Mean (1) (Range)	All Control Locations Mean (1) (Range)
TLD MR/STD.QTR	DIRECT 138		14.77 (0138/0138) 9.40-24.60	14.74 (0130/0130) 9.40-24.60	18 05.0 S	22.50 (0004/0004) 19.80-24.60	15.28 (0008/0008) 13.60-16.50

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

Name of Facility: PERRY NUCLEAR POWER PLANT Docket no. : 50-440/50-441

Location of Facility : Lake County Ohio Reporting period : 9300

Direct Radiation

Medium and Measurement	Type and Tot. (n) Analysis Performed	Lower Limit (LLD)	All Locations (Indicator & Control) Mean (1) (Range)	All Indicator Locations Mean (1) (Range)	Location with Highest Annual Mean: Dist. Direct	Location with Highest Annual Mean: Mean (1) (Range)	All Control Locations Mean (1) (Range)
TLD MR/ YEAR	DIRECT 35		53.60 (0035/0035) 39.90-84.50	53.46 (0033/0033) 39.90-84.50	18 05.0 S	84.50 (0001/0001) 84.50-84.50	55.90 (0002/0002) 55.10-56.70

1 - The ratio of positive results to the number of samples analyzed for the parameter of interest.
LLD - Lower Limit of Detection.

APPENDIX B: 1993 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA

G-BETA AIR REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN E-03 PCI/CU.M. +/- 2 SIGMA

Air

COLLECTION PERIOD	STATION LOCATIONS			
	01	03	04	05
JAN 921230 TO 930106	018.00+/-4.00	019.00+/-4.00	020.00+/-4.00	019.00+/-4.00
930106 TO 930113	029.00+/-4.00	029.00+/-5.00	035.00+/-5.00	034.00+/-5.00
930113 TO 930120	022.00+/-4.00	022.00+/-5.00	024.00+/-5.00	024.00+/-4.00
930120 TO 930127	022.00+/-4.00	018.00+/-5.00	023.00+/-5.00	017.00+/-4.00
FEB 930127 TO 930203	024.00+/-5.00	021.00+/-4.00	024.00+/-5.00	024.00+/-5.00
930203 TO 930210	022.00+/-4.00	020.00+/-5.00	015.00+/-5.00	022.00+/-4.00
930210 TO 930217	022.00+/-4.00	024.00+/-5.00	023.00+/-5.00	024.00+/-5.00
930217 TO 930224	025.00+/-3.00	025.00+/-4.00	027.00+/-4.00	026.00+/-3.00
MAR 930224 TO 930303	027.00+/-5.00	025.00+/-5.00	026.00+/-5.00	030.00+/-5.00
930303 TO 930310	021.00+/-5.00	025.00+/-5.00	027.00+/-6.00	027.00+/-5.00
930310 TO 930317	022.00+/-4.00	024.00+/-5.00	020.00+/-5.00	025.00+/-5.00
930317 TO 930324	019.00+/-4.00	015.00+/-4.00	020.00+/-5.00	023.00+/-5.00
930324 TO 930331	009.00+/-4.00	011.00+/-1.00	009.00+/-5.00	011.00+/-4.00
APR 930331 TO 930407	012.00+/-4.00	017.00+/-5.00	016.00+/-5.00	016.00+/-4.00
930407 TO 930414	013.00+/-4.00	012.00+/-4.00	016.00+/-4.00	012.00+/-3.00
930414 TO 930421	013.00+/-4.00	013.00+/-4.00	014.00+/-4.00	012.00+/-3.00
930421 TO 930428	018.00+/-4.00	016.00+/-4.00	017.00+/-4.00	015.00+/-3.00
MAY 930428 TO 930505	017.00+/-4.00	020.00+/-4.00	014.00+/-4.00	017.00+/-4.00
930505 TO 930512	017.00+/-4.00	016.00+/-4.00	016.00+/-4.00	016.00+/-4.00
930512 TO 930519	010.00+/-4.00	009.00+/-4.00	009.00+/-4.00	010.00+/-3.00
930519 TO 930526	013.00+/-4.00	012.00+/-4.00	012.00+/-4.00	011.00+/-3.00
JUN 930526 TO 930602	010.00+/-4.00	011.00+/-4.00	010.00+/-4.00	011.00+/-3.00
930602 TO 930609	013.00+/-4.00	010.00+/-4.00	013.00+/-4.00	013.00+/-3.00
930609 TO 930616	013.00+/-3.00	019.00+/-4.00	017.00+/-4.00	016.00+/-3.00
930616 TO 930623	018.00+/-4.00	015.00+/-4.00	019.00+/-4.00	018.00+/-4.00
930623 TO 930630	016.00+/-4.00	013.00+/-4.00	013.00+/-4.00	018.00+/-4.00
JUL 930630 TO 930707	017.00+/-4.00	018.00+/-4.00	016.00+/-4.00	019.00+/-4.00
930707 TO 930714	017.00+/-4.00	017.00+/-4.00	016.00+/-4.00	018.00+/-4.00
930714 TO 930721	015.00+/-4.00	013.00+/-4.00	013.00+/-4.00	010.00+/-3.00
930721 TO 930728	016.00+/-4.00	018.00+/-4.00	015.00+/-4.00	016.00+/-4.00
AUG 930728 TO 930804	016.00+/-4.00	021.00+/-4.00	018.00+/-4.00	018.00+/-4.00
930804 TO 930811	017.00+/-4.00	020.00+/-4.00	017.00+/-4.00	016.00+/-4.00

G-BETA AIR REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN E-03 PCI/CU.M. +/- 2 SIGMA

Air

	COLLECTION PERIOD	STATION LOCATIONS			
		01	03	04	05
	930811 TO 930818	035.00+/-4.00	029.00+/-4.00	036.00+/-5.00	032.00+/-4.00
	930818 TO 930825	023.00+/-4.00	022.00+/-4.00	020.00+/-4.00	023.00+/-4.00
SEP	930825 TO 930901	027.00+/-4.00	024.00+/-4.00	028.00+/-5.00	027.00+/-5.00
	930901 TO 930908	017.00+/-4.00	019.00+/-4.00	018.00+/-4.00	017.00+/-4.00
	930908 TO 930915	022.00+/-4.00	022.00+/-4.00	021.00+/-4.00	025.00+/-4.00
	930915 TO 930922	016.00+/-4.00	017.00+/-4.00	015.00+/-4.00	017.00+/-4.00
	930922 TO 930929	014.00+/-4.00	013.00+/-4.00	014.00+/-4.00	014.00+/-4.00
OCT	930929 TO 931006	017.00+/-4.00	015.00+/-4.00	015.00+/-4.00	018.00+/-4.00
	931006 TO 931013	024.00+/-4.00	027.00+/-5.00	027.00+/-4.00	023.00+/-4.00
	931013 TO 931020	025.00+/-5.00	024.00+/-5.00	030.00+/-5.00	025.00+/-5.00
	931020 TO 931027	029.00+/-4.00	027.00+/-4.00	026.00+/-4.00	028.00+/-4.00
NOV	931027 TO 931103	010.00+/-4.00	009.00+/-4.00	012.00+/-4.00	012.00+/-4.00
	931103 TO 931110	022.00+/-5.00	022.00+/-5.00	023.00+/-5.00	020.00+/-5.00
	931110 TO 931117	029.00+/-5.00	029.00+/-5.00	029.00+/-5.00	032.00+/-5.00
	931117 TO 931124	023.00+/-5.00	026.00+/-5.00	024.00+/-5.00	025.00+/-5.00
DEC	931124 TO 931201	028.00+/-5.00	026.00+/-5.00	024.00+/-4.00	029.00+/-5.00
	931201 TO 931208	026.00+/-3.00	030.30+/-3.00	027.00+/-3.00	027.00+/-4.00
	931208 TO 931215	021.00+/-5.00	023.00+/-5.00	022.00+/-5.00	021.00+/-5.00
	931215 TO 931222	017.00+/-5.00	019.00+/-5.00	018.00+/-5.00	016.00+/-5.00
	931222 TO 931229	021.00+/-5.00	021.00+/-5.00	018.00+/-5.00	019.00+/-5.00

G-BETA AIR REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN E-03 PCI/CU.M. +/- 2 SIGMA

Air

	COLLECTION PERIOD	STATION LOCATIONS		
		06	07	35
JAN	921230 TO 930106	019.00+/-4.00	019.00+/-4.00	022.00+/-4.00
	930106 TO 930113	032.00+/-5.00	030.00+/-5.00	030.00+/-5.00
	930113 TO 930120	026.00+/-5.00	024.00+/-5.00	023.00+/-5.00
	930120 TO 930127	017.00+/-4.00	018.00+/-4.00	020.00+/-4.00
FEB	930127 TO 930203	022.00+/-5.00	023.00+/-5.00	026.00+/-5.00
	930203 TO 930210	022.00+/-5.00	020.00+/-5.00	024.00+/-5.00
	930210 TO 930217	020.00+/-5.00	023.00+/-5.00	021.00+/-5.00
	930217 TO 930224	024.00+/-4.00	024.00+/-3.00	024.00+/-3.00
MAR	930224 TO 930303	025.00+/-5.00	025.00+/-5.00	025.00+/-5.00
	930303 TO 930310	025.00+/-5.00	025.00+/-5.00	022.00+/-5.00
	930310 TO 930317	023.00+/-5.00	022.00+/-5.00	021.00+/-5.00
	930317 TO 930324	018.00+/-4.00	017.00+/-4.00	019.00+/-5.00
	930324 TO 930331	011.00+/-4.00	011.00+/-4.00	009.00+/-4.00
APR	930331 TO 930407	015.00+/-4.00	011.00+/-4.00	012.00+/-4.00
	930407 TO 930414	014.00+/-4.00	014.00+/-4.00	017.00+/-4.00
	930414 TO 930421	015.00+/-4.00	015.00+/-4.00	015.00+/-4.00
	930421 TO 930428	015.00+/-4.00	018.00+/-4.00	018.00+/-4.00
MAY	930428 TO 930505	018.00+/-4.00	018.00+/-4.00	019.00+/-4.00
	930505 TO 930512	015.00+/-4.00	017.00+/-4.00	015.00+/-4.00
	930512 TO 930519	012.00+/-4.00	011.00+/-4.00	011.00+/-4.00
	930519 TO 930526	009.00+/-4.00	011.00+/-4.00	012.00+/-4.00
JUN	930526 TO 930602	013.00+/-4.00	009.00+/-4.00	008.00+/-4.00
	930602 TO 930609	011.00+/-4.00	013.00+/-4.00	011.00+/-4.00
	930609 TO 930616	017.00+/-4.00	018.00+/-4.00	016.00+/-4.00
	930616 TO 930623	016.00+/-4.00	020.00+/-4.00	019.00+/-4.00
	930623 TO 930630	014.00+/-4.00	015.00+/-3.00	013.00+/-4.00
JUL	930630 TO 930707	019.00+/-4.00	021.00+/-4.00	017.00+/-4.00
	930707 TO 930714	017.00+/-4.00	016.00+/-4.00	021.00+/-4.00
	930714 TO 930721	016.00+/-4.00	010.00+/-4.00	010.00+/-4.00
	930721 TO 930728	022.00+/-4.00	018.00+/-4.00	017.00+/-4.00
AUG	930728 TO 930804	019.00+/-4.00	018.00+/-4.00	016.00+/-4.00
	930804 TO 930811	017.00+/-4.00	014.00+/-4.00	018.00+/-4.00

G-BETA AIR REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN E-03 PCI/CU.M. +/- 2 SIGMA

Air

	COLLECTION PERIOD	STATION LOCATIONS		
		06	07	35
	930811 TO 930818	033.00+/-5.00	032.00+/-4.00	035.00+/-4.00
	930818 TO 930825	024.00+/-4.00	021.00+/-4.00	024.00+/-4.00
SEP	930825 TO 930901	031.00+/-5.00	024.00+/-4.00	025.00+/-4.00
	930901 TO 930908	018.00+/-4.00	020.00+/-4.00	018.00+/-4.00
	930908 TO 930915	019.00+/-4.00	019.00+/-4.00	022.00+/-4.00
	930915 TO 930922	015.00+/-4.00	018.00+/-4.00	017.00+/-4.00
	930922 TO 930929	011.00+/-4.00	015.00+/-4.00	013.00+/-4.00
OCT	930929 TO 931006	021.00+/-4.00	014.00+/-4.00	015.00+/-4.00
	931006 TO 931013	026.00+/-4.00	024.00+/-4.00	023.00+/-4.00
	931013 TO 931020	022.00+/-4.00	022.00+/-5.00	029.00+/-5.00
	931020 TO 931027	028.00+/-4.00	027.00+/-4.00	026.00+/-4.00
NOV	931027 TO 931103	013.00+/-4.00	011.00+/-4.00	010.00+/-4.00
	931103 TO 931110	020.00+/-4.00	022.00+/-4.00	023.00+/-4.00
	931110 TO 931117	028.00+/-5.00	029.00+/-5.00	032.00+/-5.00
	931117 TO 931124	024.00+/-4.00	026.00+/-5.00	022.00+/-4.00
DEC	931124 TO 931201	023.00+/-4.00	024.00+/-4.00	025.00+/-4.00
	931201 TO 931208	025.00+/-3.00	027.00+/-3.00	028.00+/-3.00
	931208 TO 931215	018.00+/-5.00	022.00+/-5.00	023.00+/-5.00
	931215 TO 931222	019.00+/-5.00	014.00+/-5.00	014.00+/-5.00
	931222 TO 931229	025.00+/-5.00	024.00+/-5.00	019.00+/-4.00

I-131 REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN PCI/CU.M. +/- 2 SIGMA

AIR

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	I-131
01	AIR	921230/930106	LT .03
01	AIR	930106/930113	LT .02
01	AIR	930113/930120	LT .02
01	AIR	930120/930127	LT .02
01	AIR	930127/930203	LT .02
01	AIR	930203/930210	LT .03
01	AIR	930210/930217	LT .02
01	AIR	930217/930224	LT .02
01	AIR	930224/930303	LT .02
01	AIR	930303/930310	LT .02
01	AIR	930310/930317	LT .03
01	AIR	930317/930324	LT .03
01	AIR	930324/930331	LT .04
01	AIR	930331/930407	LT .02
01	AIR	930407/930414	LT .02
01	AIR	930414/930421	LT .02
01	AIR	930421/930428	LT .02
01	AIR	930428/930505	LT .02
01	AIR	930505/930512	LT .02
01	AIR	930512/930519	LT .01
01	AIR	930519/930526	LT .03
01	AIR	930526/930602	LT .04
01	AIR	930602/930609	LT .02
01	AIR	930609/930616	LT .01
01	AIR	930616/930623	LT .02
01	AIR	930623/930630	LT .02
01	AIR	930630/930707	LT .01
01	AIR	930707/930714	LT .02
01	AIR	930714/930721	LT .02
01	AIR	930721/930728	LT .02
01	AIR	930728/930804	LT .02
01	AIR	930804/930811	LT .02
01	AIR	930811/930818	LT .02
01	AIR	930818/930825	LT .02
01	AIR	930825/930901	LT .02
01	AIR	930901/930908	LT .02
01	AIR	930908/930915	LT .02
01	AIR	930915/930922	LT .03
01	AIR	930922/930929	LT .02

I-131 REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN PCI/CU.M. +/- 2 SIGMA

Air

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	I-131
01	AIR	930929/931006	LT .02
01	AIR	931006/931013	LT .02
01	AIR	931013/931020	LT .02
01	AIR	931020/931027	LT .02
01	AIR	931027/931103	LT .03
01	AIR	931103/931110	LT .02
01	AIR	931110/931117	LT .02
01	AIR	931117/931124	LT .03
01	AIR	931124/931201	LT .02
01	AIR	931201/931208	LT .02
01	AIR	931208/931215	LT .02
01	AIR	931215/931222	LT .03
01	AIR	931222/931229	LT .02
03	AIR	921230/930106	LT .03
03	AIR	930106/930113	LT .02
03	AIR	930113/930120	LT .02
03	AIR	930120/930127	LT .02
03	AIR	930127/930203	LT .02
03	AIR	930203/930210	LT .03
03	AIR	930210/930217	LT .02
03	AIR	930217/930224	LT .02
03	AIR	930224/930303	LT .02
03	AIR	930303/930310	LT .02
03	AIR	930310/930317	LT .03
03	AIR	930317/930324	LT .02
03	AIR	930324/930331	LT .03
03	AIR	930331/930407	LT .02
03	AIR	930407/930414	LT .02
03	AIR	930414/930421	LT .02
03	AIR	930421/930428	LT .02
03	AIR	930428/930505	LT .02
03	AIR	930505/930512	LT .02
03	AIR	930512/930519	LT .01
03	AIR	930519/930526	LT .03
03	AIR	930526/930602	LT .03
03	AIR	930602/930609	LT .02
03	AIR	930609/930616	LT .01

I-131 REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN PCI/CU.M. +/- 2 SIGMA

Air

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	I-131
03	AIR	930616/930623	LT .02
03	AIR	930623/930630	LT .02
03	AIR	930630/930707	LT .01
03	AIR	930707/930714	LT .02
03	AIR	930714/930721	LT .02
03	AIR	930721/930728	LT .02
03	AIR	930728/930804	LT .02
03	AIR	930804/930811	LT .02
03	AIR	930811/930818	LT .02
03	AIR	930818/930825	LT .02
03	AIR	930825/930901	LT .02
03	AIR	930901/930908	LT .02
03	AIR	930908/930915	LT .02
03	AIR	930915/930922	LT .02
03	AIR	930922/930929	LT .02
03	AIR	930929/931006	LT .02
03	AIR	931006/931013	LT .02
03	AIR	931013/931020	LT .02
03	AIR	931020/931027	LT .02
03	AIR	931027/931103	LT .02
03	AIR	931103/931110	LT .02
03	AIR	931110/931117	LT .02
03	AIR	931117/931124	LT .03
03	AIR	931124/931201	LT .02
03	AIR	931201/931208	LT .02
03	AIR	931208/931215	LT .02
03	AIR	931215/931222	LT .03
03	AIR	931222/931229	LT .02
04	AIR	921230/930106	LT .03
04	AIR	930106/930113	LT .02
04	AIR	930113/930120	LT .02
04	AIR	930120/930127	LT .02
04	AIR	930127/930203	LT .02
04	AIR	930203/930210	LT .03
04	AIR	930210/930217	LT .02
04	AIR	930217/930224	LT .01
04	AIR	930224/930303	LT .02

I-131 REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN PCI/CU.M. +/- 2 SIGMA

Air

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	I-131
04	AIR	930303/930310	LT .02
04	AIR	930310/930317	LT .02
04	AIR	930317/930324	LT .02
04	AIR	930324/930331	LT .03
04	AIR	930331/930407	LT .02
04	AIR	930407/930414	LT .02
04	AIR	930414/930421	LT .02
04	AIR	930421/930428	LT .02
04	AIR	930428/930505	LT .02
04	AIR	930505/930512	LT .02
04	AIR	930512/930519	LT .02
04	AIR	930519/930526	LT .03
04	AIR	930526/930602	LT .03
04	AIR	930602/930609	LT .02
04	AIR	930609/930616	LT .01
04	AIR	930616/930623	LT .02
04	AIR	930623/930630	LT .02
04	AIR	930630/930707	LT .01
04	AIR	930707/930714	LT .02
04	AIR	930714/930721	LT .02
04	AIR	930721/930728	LT .01
04	AIR	930728/930804	LT .02
04	AIR	930804/930811	LT .02
04	AIR	930811/930818	LT .02
04	AIR	930818/930825	LT .02
04	AIR	930825/930901	LT .02
04	AIR	930901/930908	LT .01
04	AIR	930908/930915	LT .02
04	AIR	930915/930922	LT .03
04	AIR	930922/930929	LT .02
04	AIR	930929/931006	LT .02
04	AIR	931006/931013	LT .02
04	AIR	931013/931020	LT .02
04	AIR	931020/931027	LT .02
04	AIR	931027/931103	LT .03
04	AIR	931103/931110	LT .02
04	AIR	931110/931117	LT .02
04	AIR	931117/931124	LT .03
04	AIR	931124/931201	LT .02

I-131 REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN PCI/CU.M. +/- 2 SIGMA

Air

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	I-131
04	AIR	931201/931208	LT .02
04	AIR	931208/931215	LT .02
04	AIR	931215/931222	LT .03
04	AIR	931222/931229	LT .02
05	AIR	921230/930106	LT .03
05	AIR	930106/930113	LT .02
05	AIR	930113/930120	LT .02
05	AIR	930120/930127	LT .02
05	AIR	930127/930203	LT .02
05	AIR	930203/930210	LT .03
05	AIR	930210/930217	LT .02
05	AIR	930217/930224	LT .02
05	AIR	930224/930303	LT .02
05	AIR	930303/930310	LT .02
05	AIR	930310/930317	LT .03
05	AIR	930317/930324	LT .02
05	AIR	930324/930331	LT .03
05	AIR	930331/930407	LT .02
05	AIR	930407/930414	LT .02
05	AIR	930414/930421	LT .02
05	AIR	930421/930428	LT .03
05	AIR	930428/930505	LT .02
05	AIR	930505/930512	LT .02
05	AIR	930512/930519	LT .02
05	AIR	930519/930526	LT .03
05	AIR	930526/930602	LT .04
05	AIR	930602/930609	LT .02
05	AIR	930609/930616	LT .01
05	AIR	930616/930623	LT .02
05	AIR	930623/930630	LT .02
05	AIR	930630/930707	LT .01
05	AIR	930707/930714	LT .02
05	AIR	930714/930721	LT .02
05	AIR	930721/930728	LT .02
05	AIR	930728/930804	LT .02
05	AIR	930804/930811	LT .02
05	AIR	930811/930818	LT .02

I-131 REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN PCI/CU.M. +/- 2 SIGMA

Air

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	I-131
05	AIR	930818/930825	LT .02
05	AIR	930825/930901	LT .02
05	AIR	930901/930908	LT .02
05	AIR	930908/930915	LT .02
05	AIR	930915/930922	LT .03
05	AIR	930922/930929	LT .02
05	AIR	930929/931006	LT .02
05	AIR	931006/931013	LT .02
05	AIR	931013/931020	LT .02
05	AIR	931020/931027	LT .02
05	AIR	931027/931103	LT .03
05	AIR	931103/931110	LT .02
05	AIR	931110/931117	LT .02
05	AIR	931117/931124	LT .03
05	AIR	931124/931201	LT .02
05	AIR	931201/931208	LT .02
05	AIR	931208/931215	LT .02
05	AIR	931215/931222	LT .03
05	AIR	931222/931229	LT .02
06	AIR	921230/930106	LT .03
06	AIR	930106/930113	LT .02
06	AIR	930113/930120	LT .02
06	AIR	930120/930127	LT .02
06	AIR	930127/930203	LT .02
06	AIR	930203/930210	LT .03
06	AIR	930210/930217	LT .02
06	AIR	930217/930224	LT .02
06	AIR	930224/930303	LT .02
06	AIR	930303/930310	LT .02
06	AIR	930310/930317	LT .03
06	AIR	930317/930324	LT .02
06	AIR	930324/930331	LT .03
06	AIR	930331/930407	LT .02
06	AIR	930407/930414	LT .02
06	AIR	930414/930421	LT .02
06	AIR	930421/930428	LT .02
06	AIR	930428/930505	LT .02

I-131 REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN PCI/CU.M. +/- 2 SIGMA

Air

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	I-131
06	AIR	930505/930512	LT .02
06	AIR	930512/930519	LT .02
06	AIR	930519/930526	LT .03
06	AIR	930526/930602	LT .03
06	AIR	930602/930609	LT .02
06	AIR	930609/930616	LT .01
06	AIR	930616/930623	LT .02
06	AIR	930623/930630	LT .02
06	AIR	930630/930707	LT .01
06	AIR	930707/930714	LT .02
06	AIR	930714/930721	LT .02
06	AIR	930721/930728	LT .01
06	AIR	930728/930804	LT .02
06	AIR	930804/930811	LT .02
06	AIR	930811/930818	LT .02
06	AIR	930818/930825	LT .02
06	AIR	930825/930901	LT .02
06	AIR	930901/930908	LT .01
06	AIR	930908/930915	LT .02
06	AIR	930915/930922	LT .03
06	AIR	930922/930929	LT .02
06	AIR	930929/931006	LT .02
06	AIR	931006/931013	LT .02
06	AIR	931013/931020	LT .02
06	AIR	931020/931027	LT .02
06	AIR	931027/931103	LT .03
06	AIR	931103/931110	LT .02
06	AIR	931110/931117	LT .02
06	AIR	931117/931124	LT .03
06	AIR	931124/931201	LT .02
06	AIR	931201/931208	LT .02
06	AIR	931208/931215	LT .02
06	AIR	931215/931222	LT .03
06	AIR	931222/931229	LT .02
07	AIR	921230/930106	LT .03
07	AIR	930106/930113	LT .02
07	AIR	930113/930120	LT .02

I-131 REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN PCI/CU.M. +/- 2 SIGMA

Air

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	I-131
07	AIR	930120/930127	LT .02
07	AIR	930127/930203	LT .02
07	AIR	930203/930210	LT .03
07	AIR	930210/930217	LT .02
07	AIR	930217/930224	LT .02
07	AIR	930224/930303	LT .02
07	AIR	930303/930310	LT .02
07	AIR	930310/930317	LT .03
07	AIR	930317/930324	LT .02
07	AIR	930324/930331	LT .03
07	AIR	930331/930407	LT .02
07	AIR	930407/930414	LT .02
07	AIR	930414/930421	LT .02
07	AIR	930421/930428	LT .02
07	AIR	930428/930505	LT .02
07	AIR	930505/930512	LT .02
07	AIR	930512/930519	LT .02
07	AIR	930519/930526	LT .03
07	AIR	930526/930602	LT .04
07	AIR	930602/930609	LT .02
07	AIR	930609/930616	LT .01
07	AIR	930616/930623	LT .02
07	AIR	930623/930630	LT .02
07	AIR	930630/930707	LT .01
07	AIR	930707/930714	LT .02
07	AIR	930714/930721	LT .02
07	AIR	930721/930728	LT .01
07	AIR	930728/930804	LT .02
07	AIR	930804/930811	LT .02
07	AIR	930811/930818	LT .02
07	AIR	930818/930825	LT .02
07	AIR	930825/930901	LT .02
07	AIR	930901/930908	LT .01
07	AIR	930908/930915	LT .02
07	AIR	930915/930922	LT .03
07	AIR	930922/930929	LT .02
07	AIR	930929/931006	LT .02
07	AIR	931006/931013	LT .02
07	AIR	931013/931020	LT .02

I-131 REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN PCI/CU.M. +/- 2 SIGMA

Air

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	I-131
07	AIR	931020/931027	LT .02
07	AIR	931027/931103	LT .03
07	AIR	931103/931110	LT .02
07	AIR	931110/931117	LT .02
07	AIR	931117/931124	LT .03
07	AIR	931124/931201	LT .02
07	AIR	931201/931208	LT .02
07	AIR	931208/931215	LT .02
07	AIR	931215/931222	LT .03
07	AIR	931222/931229	LT .02
35	AIR	921230/930106	LT .02
35	AIR	930106/930113	LT .02
35	AIR	930113/930120	LT .02
35	AIR	930120/930127	LT .02
35	AIR	930127/930203	LT .02
35	AIR	930203/930210	LT .02
35	AIR	930210/930217	LT .02
35	AIR	930217/930224	LT .02
35	AIR	930224/930303	LT .02
35	AIR	930303/930310	LT .02
35	AIR	930310/930317	LT .02
35	AIR	930317/930324	LT .02
35	AIR	^30324/930331	LT .02
35	AIR	930331/930407	LT .02
35	AIR	930407/930414	LT .02
35	AIR	930414/930421	LT .02
35	AIR	930421/930428	LT .02
35	AIR	930428/930505	LT .02
35	AIR	930505/930512	LT .02
35	AIR	930512/930519	LT .02
35	AIR	930519/930526	LT .02
35	AIR	930526/930602	LT .02
35	AIR	930602/930609	LT .02
35	AIR	930609/930616	LT .01
35	AIR	930616/930623	LT .02
35	AIR	930623/930630	LT .02
35	AIR	930630/930707	LT .01

I-131 REPORT
SAMPLE FREQUENCY IS : WEEKLY
RESULTS IN PCI/CU.M. +/- 2 SIGMA

Air

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	I-131
35	AIR	930707/930714	LT .02
35	AIR	930714/930721	LT .02
35	AIR	930721/930728	LT .02
35	AIR	930728/930804	LT .02
35	AIR	930804/930811	LT .02
35	AIR	930811/930818	LT .02
35	AIR	930818/930825	LT .02
35	AIR	930825/930901	LT .01
35	AIR	930901/930908	LT .02
35	AIR	930908/930915	LT .02
35	AIR	930915/930922	LT .02
35	AIR	930922/930929	LT .02
35	AIR	930929/931006	LT .02
35	AIR	931006/931013	LT .02
35	AIR	931013/931020	LT .02
35	AIR	931020/931027	LT .02
35	AIR	931027/931103	LT .02
35	AIR	931103/931110	LT .02
35	AIR	931110/931117	LT .01
35	AIR	931117/931124	LT .03
35	AIR	931124/931201	LT .02
35	AIR	931201/931208	LT .03
35	AIR	931208/931215	LT .02
35	AIR	931215/931222	LT .02
35	AIR	931222/931229	LT .03

GAMMA SPEC REPORT OF APTG
SAMPLE FREQUENCY IS : QUARTERLY
RESULTS IN E-03 PCI/CU.M. +/- 2 SIGMA

Air

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	BE-7	CS-134	CS-137	CO-60	CO-58
01	AIR	921230/930331	45.00+/-8.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
01	AIR	930331/930630	72.00+/-17.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
01	AIR	930630/930929	77.00+/-18.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
01	AIR	930929/931229	60.00+/-19.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
03	AIR	921230/930331	66.00+/-16.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
03	AIR	930331/930630	64.00+/-18.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
03	AIR	930630/930929	80.00+/-18.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
03	AIR	930929/931229	56.00+/-17.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
04	AIR	921230/930331	53.00+/-11.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
04	AIR	930331/930630	60.00+/-19.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
04	AIR	930630/930929	93.00+/-21.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
04	AIR	930929/931229	73.00+/-18.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
05	AIR	921230/930331	56.00+/-11.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
05	AIR	930331/930630	63.00+/-16.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
05	AIR	930630/930929	74.00+/-18.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
05	AIR	930929/931229	73.00+/-16.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
06	AIR	921230/930331	57.00+/-11.00	LT 1.00	LT 1.00	LT 2.00	LT 1.00
06	AIR	930331/930630	96.00+/-20.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
06	AIR	930630/930929	54.00+/-17.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
06	AIR	930929/931229	58.00+/-14.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
07	AIR	921230/930331	52.00+/-19.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
07	AIR	930331/930630	65.00+/-19.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
07	AIR	930630/930929	54.00+/-15.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
07	AIR	930929/931229	52.00+/-16.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
35	AIR	921230/930331	48.00+/-12.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
35	AIR	930331/930630	54.00+/-17.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
35	AIR	930630/930929	73.00+/-19.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00
35	AIR	930929/931229	63.00+/-15.00	LT 1.00	LT 1.00	LT 1.00	LT 1.00

TRITIUM REPORT
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/KG +/- 2 SIGMA

Precipitation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	H3
03	PR	921230/930127	LT 165.00
03	PR	930127/930224	LT 171.00
03	PR	930224/930324	LT 174.00
03	PR	930324/930428	LT 175.00
03	PR	930428/930526	LT 181.00
03	PR	930526/930701	LT 198.00
03	PR	930701/930728	LT 200.00
03	PR	930728/930825	LT 194.00
03	PR	930825/930929	LT 177.00
03	PR	930929/931027	LT 184.00
03	PR	931027/931124	LT 184.00
03	PR	931124/931229	LT 189.00
04	PR	921230/930127	LT 165.00
04	PR	930127/930224	LT 171.00
04	PR	930224/930324	LT 174.00
04	PR	930324/930428	LT 175.00
04	PR	930428/930526	LT 181.00
04	PR	930526/930701	LT 198.00
04	PR	930701/930728	LT 200.00
04	PR	930728/930825	LT 194.00
04	PR	930825/930929	LT 177.00
04	PR	930929/931027	LT 184.00
04	PR	931027/931124	LT 184.00
04	PR	931124/931229	LT 189.00
06	PR	921230/930127	LT 165.00
06	PR	930127/930224	LT 171.00
06	PR	930224/930324	LT 178.00
06	PR	930324/930428	LT 175.00
06	PR	930428/930526	LT 177.00
06	PR	930526/930701	LT 198.00
06	PR	930701/930728	LT 200.00
06	PR	930728/930825	LT 194.00
06	PR	930825/930929	LT 177.00
06	PR	930929/931027	LT 184.00
06	PR	931027/931124	LT 184.00

TRITIUM REPORT
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/KG +/- 2 SIGMA

Precipitation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	H3
06	PR	931124/931229	LT 189.00
07	PR	921230/930127	LT 165.00
07	PR	930127/930224	LT 171.00
07	PR	930224/930324	LT 178.00
07	PR	930324/930428	LT 175.00
07	PR	930428/930526	LT 181.00
07	PR	930526/930701	LT 193.00
07	PR	930701/930728	LT 200.00
07	PR	930728/930825	LT 194.00
07	PR	930825/930929	LT 182.00
07	PR	930929/931027	LT 184.00
07	PR	931027/931124	LT 184.00
07	PR	931124/931229	LT 189.00
12	PR	921230/930127	LT 165.00
12	PR	930127/930224	LT 171.00
12	PR	930224/930324	LT 178.00
12	PR	930324/930428	LT 175.00
12	PR	930428/930526	LT 181.00
12	PR	930526/930701	LT 198.00
12	PR	930701/930728	LT 200.00
12	PR	930728/930825	LT 194.00
12	PR	930825/930929	LT 177.00
12	PR	930929/931027	LT 184.00
12	PR	931027/931124	LT 187.00
12	PR	931124/931229	LT 189.00
35	PR	921230/930127	LT 165.00
35	PR	930127/930224	LT 171.00
35	PR	930224/930324	LT 179.00
35	PR	930324/930428	LT 175.00
35	PR	930428/930526	LT 181.00
35	PR	930526/930701	LT 193.00
35	PR	930701/930728	LT 200.00
35	PR	930728/930825	LT 194.00

TRITIUM REPORT
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/KG +/- 2 SIGMA

Precipitation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	H3
35	PR	930825/930929	LT 182.00
35	PR	930929/931027	LT 184.00
35	PR	931027/931124	LT 187.00
35	PR	931124/931229	LT 189.00

G-BETA PR REPORT
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Precipitation

COLLECTION PERIOD	STATION LOCATIONS					
	03	04	06	07	12	35
JAN 921230 TO 930127	01.60+/-.20	01.90+/-.20	01.70+/-.20	02.00+/-.30	01.90+/-.20	01.20+/-.20
FEB 930127 TO 930224	03.80+/-.40	03.70+/-.30	04.20+/-.40	01.60+/-.30	01.90+/-.30	03.60+/-.30
MAR 930224 TO 930324	02.30+/-.30	01.60+/-.40	00.80+/-.40	01.20+/-.40	04.10+/-.40	01.50+/-.40
APR 930324 TO 930428	14.20+/-.90	08.10+/-.70	08.20+/-.70	06.30+/-.60	11.60+/-.80	06.80+/-.60
MAY 930428 TO 930526	23.40+/-1.90	16.10+/-1.20	19.40+/-2.60	09.60+/-.90	66.40+/-3.00	33.40+/-1.50
JUN 930526 TO 930701	01.20+/-.20	01.70+/-.30	02.40+/-.30	01.90+/-.30	01.60+/-.30	01.90+/-.30
JUL 930701 TO 930728	10.70+/-.80	07.20+/-.70	02.10+/-.50	08.80+/-.70	12.10+/-.80	08.70+/-.70
AUG 930728 TO 930825	03.00+/-.50	01.10+/-.70	01.00+/-.20	01.30+/-.20	01.90+/-.40	00.80+/-.40
SEP 930825 TO 930929	04.00+/-.60	01.20+/-.20	03.10+/-.30	02.60+/-.50	02.70+/-.30	01.10+/-.20
OCT 930929 TO 931027	33.50+/-1.40	10.80+/-.80	09.30+/-.50	10.20+/-.60	04.40+/-.40	12.70+/-.60
NOV 931027 TO 931124	04.10+/-.60	02.30+/-.50	04.90+/-.60	03.30+/-.60	02.50+/-.50	05.50+/-.60
DEC 931124 TO 931229	08.10+/-.50	04.20+/-.40	02.50+/-1.00	01.40+/-.30	05.10+/-.40	06.30+/-.40

GAMMA SPEC REPORT OF PRG
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Precipitation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	BA-140 FE-59 ZR-95	CO-58 LA-140	CO-60 MN-54	CS-134 NB-95	CS-137 ZN-65
03	PR	921230/930127	LT 29.20 LT 11.10 LT 9.70	LT 6.10 LT 11.00	LT 5.80 LT 5.40	LT 5.80 LT 5.80	LT 4.90 LT 13.40
03	PR	930127/930224	LT 21.70 LT 7.70 LT 8.10	LT 4.00 LT 6.90	LT 4.40 LT 4.10	LT 3.80 LT 4.50	LT 4.00 LT 8.50
03	PR	930224/930324	LT 22.40 LT 8.30 LT 8.00	LT 4.20 LT 7.00	LT 4.00 LT 4.10	LT 3.80 LT 4.30	LT 4.20 LT 8.20
03	PR	930324/930428	LT 18.20 LT 8.20 LT 6.50	LT 2.20 LT 2.60	LT 2.40 LT 4.60	LT 3.00 LT 4.50	LT 3.70 LT 2.40
03	PR	930428/930526	LT 11.30 LT 6.90 LT 10.70	LT 6.60 LT 4.30	LT 3.80 LT 6.60	LT 3.40 LT 5.80	LT 7.40 LT 7.00
03	PR	930526/930701	LT 39.60 LT 9.50 LT 5.20	LT 6.50 LT 4.10	LT 3.60 LT 2.80	LT 5.20 LT 6.50	LT 5.30 LT 3.90
03	PR	930701/930728	LT 12.90 LT 3.40 LT 3.50	LT 3.30 LT 2.30	LT 2.40 LT 2.60	LT 4.00 LT 5.80	LT 5.10 LT 5.90
03	PR	930728/930825	LT 14.50 LT 4.80 LT 7.00	LT 3.00 LT 3.10	LT 4.20 LT 2.70	LT 3.80 LT 2.70	LT 4.60 LT 5.50
03	PR	930825/930929	LT 28.90 LT 7.80 LT 6.00	LT 3.90 LT 7.70	LT 3.70 LT 2.90	LT 3.20 LT 4.40	LT 3.00 LT 7.30
03	PR	930929/931027	LT 33.80 LT 5.20 LT 11.70	LT 7.70 LT 6.80	LT 7.70 LT 5.40	LT 8.20 LT 4.10	LT 9.50 LT 4.60
03	PR	931027/931124	LT 11.90 LT 5.60 LT 3.60	LT 2.40 LT 3.70	LT 4.20 LT 2.70	LT 4.10 LT 3.80	LT 3.30 LT 6.80
03	PR	931124/931229	LT 24.50 LT 10.00 LT 6.50	LT 4.40 LT 4.30	LT 3.20 LT 4.40	LT 3.00 LT 3.10	LT 3.90 LT 5.30

GAMMA SPEC REPORT OF PRG
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Precipitation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	BA-140 FE-59 ZR-95	CO-58 LA-140	CO-60 MN-54	CS-134 NB-95	CS-137 ZN-65
04	PR	921230/930127	LT 23.90 LT 9.20 LT 7.70	LT 4.40 LT 7.10	LT 3.80 LT 4.30	LT 4.30 LT 4.80	LT 4.40 LT 9.30
04	PR	930127/930224	LT 20.10 LT 11.80 LT 8.80	LT 4.80 LT 8.60	LT 5.90 LT 4.70	LT 4.80 LT 4.90	LT 5.10 LT 10.40
04	PR	930224/930324	LT 21.00 LT 8.80 LT 6.30	LT 4.10 LT 4.70	LT 4.00 LT 3.60	LT 3.50 LT 4.50	LT 4.20 LT 7.50
04	PR	930324/930428	LT 9.60 LT 6.40 LT 4.30	LT 1.30 LT 1.60	LT 3.60 LT 3.10	LT 2.10 LT 4.80	LT 2.70 LT 3.90
04	PR	930428/930526	LT 26.40 LT 10.10 LT 7.70	LT 5.70 LT 4.20	LT 4.40 LT 6.10	LT 4.10 LT 7.20	LT 3.50 LT 6.70
04	PR	930526/930701	LT 32.80 LT 6.20 LT 7.20	LT 4.70 LT 5.00	LT 2.10 LT 3.50	LT 2.70 LT 6.20	LT 5.20 LT 5.60
04	PR	930701/930728	LT 29.60 LT 6.00 LT 8.70	LT 5.10 LT 8.00	LT 4.00 LT 7.10	LT 4.40 LT 7.30	LT 8.40 LT 12.50
04	PR	930728/930825	LT 20.80 LT 7.30 LT 5.10	LT 4.20 LT 3.60	LT 5.20 LT 2.80	LT 3.90 LT 4.10	LT 2.10 LT 6.30
04	PR	930825/930929	LT 38.10 LT 8.60 LT 7.50	LT 8.00 LT 6.10	LT 2.10 LT 2.10	LT 5.70 LT 3.60	LT 3.90 LT 4.60
04	PR	930929/931027	LT 16.90 LT 11.80 LT 9.00	LT 10.00 LT 7.90	LT 6.50 LT 4.70	LT 3.30 LT 10.30	LT 5.40 LT 11.50
04	PR	931027/931124	LT 11.00 LT 2.30 LT 4.50	LT 5.00 LT 2.70	LT 4.00 LT 2.60	LT 2.40 LT 2.10	LT 4.40 LT 5.70
04	PR	931124/931229	LT 28.20 LT 8.70 LT 6.20	LT 3.10 LT 3.90	LT 3.70 LT 2.50	LT 1.50 LT 2.20	LT 3.90 LT 3.80

GAMMA SPEC REPORT OF PRG
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Precipitation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	BA-140 FE-59 ZR-95	CO-58 LA-140	CO-60 MN-54	CS-134 NB-95	CS-137 ZN-65
06	PR	921230/930127	LT 26.80 LT 12.70 LT 8.50	LT 5.70 LT 10.50	LT 7.20 LT 5.30	LT 4.70 LT 5.80	LT 5.00 LT 11.20
06	PR	930127/930224	LT 26.30 LT 13.40 LT 9.10	LT 5.70 LT 10.80	LT 6.10 LT 4.90	LT 5.00 LT 5.20	LT 4.10 LT 13.40
06	PR	930224/930324	LT 20.60 LT 8.70 LT 7.30	LT 4.30 LT 4.80	LT 3.20 LT 3.50	LT 3.40 LT 4.60	LT 3.70 LT 8.50
06	PR	930324/930428	LT 7.90 LT 5.30 LT 4.30	LT 2.90 LT 1.80	LT 2.80 LT 3.10	LT 2.40 LT 3.60	LT 2.10 LT 4.50
06	PR	930428/930526	LT 13.40 LT 6.20 LT 4.20	LT 2.30 LT 3.50	LT 3.00 LT 2.40	LT 2.30 LT 2.50	LT 2.40 LT 5.30
06	PR	930526/930701	LT 20.30 LT 2.90 LT 4.00	LT 2.20 LT 2.60	LT .90 LT .90	LT 2.00 LT 1.90	LT 2.30 LT 4.00
06	PR	930701/930728	LT 31.70 LT 6.10 LT 2.40	LT 4.30 LT 2.10	LT 3.40 LT 4.20	LT 4.10 LT 5.40	LT 2.90 LT 5.00
06	PR	930728/930825	LT 22.00 LT 8.20 LT 7.70	LT 5.30 LT 3.80	LT 2.10 LT 1.90	LT 4.60 LT 6.50	LT 4.40 LT 9.00
06	PR	930825/930929	LT 24.30 LT 4.20 LT 11.50	LT 7.00 LT 6.40	LT 3.80 LT 3.40	LT 1.80 LT 7.80	LT 3.00 LT 6.80
06	PR	930929/931027	LT 19.60 LT 2.50 LT 2.30	LT 1.30 LT 3.10	LT [illegible].90 LT 1.40	LT 1.10 LT 3.10	LT 2.10 LT 4.00
06	PR	931027/931124	LT 21.70 LT 4.70 LT 11.70	LT 4.10 LT 4.10	LT 3.40 LT 4.50	LT 5.20 LT 3.80	LT 3.30 LT 6.50
06	PR	931124/931229	LT 26.80 LT 11.70 LT 10.80	LT 6.50 LT 4.20	LT 6.90 LT 6.20	LT 6.10 LT 8.30	LT 6.30 LT 10.00

GAMMA SPEC REPORT OF PRG
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Precipitation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	BA-140 FE-59 ZR-95	CO-58 LA-140	CO-60 MN-54	CS-134 NB-95	CS-137 ZN-65
07	PR	921230/930127	LT 23.80	LT 5.10	LT 6.20	LT 4.80	LT 4.20
			LT 11.90	LT 10.90	LT 5.30	LT 5.60	LT 12.50
			LT 8.40				
07	PR	930127/930224	LT 22.60	LT 3.10	LT 4.50	LT 4.30	LT 4.10
			LT 10.10	LT 7.40	LT 4.70	LT 4.50	LT 10.40
			LT 7.40				
07	PR	930224/930324	LT 23.30	LT 4.60	LT 4.90	LT 4.20	LT 4.60
			LT 10.00	LT 8.20	LT 4.80	LT 5.30	LT 11.00
			LT 8.60				
07	PR	930324/930428	LT 26.00	LT 5.70	LT 5.50	LT 5.00	LT 5.00
			LT 11.00	LT 10.50	LT 4.70	LT 5.30	LT 11.80
			LT 9.40				
07	PR	930428/930526	LT 12.70	LT 4.60	LT 4.00	LT 3.00	LT 5.00
			LT 4.60	LT 8.00	LT 5.00	LT 4.10	LT 2.70
			LT 6.80				
07	PR	930526/930701	LT 26.20	LT 5.20	LT 1.80	LT 2.20	LT 3.60
			LT 3.90	LT 7.10	LT 4.10	LT 6.10	LT 5.10
			LT 6.20				
07	PR	930701/930728	LT 41.30	LT 6.40	LT 7.70	LT 6.60	LT 4.80
			LT 11.20	LT 5.20	LT 4.10	LT 9.70	LT 10.80
			LT 11.70				
07	PR	930728/930825	LT 30.80	LT 3.50	LT 3.30	LT 7.30	LT 3.60
			LT 7.90	LT 3.40	LT 3.40	LT 3.10	LT 8.20
			LT 8.50				
07	PR	930825/930929	LT 19.50	LT 8.70	LT 2.30	LT 4.50	LT 4.80
			LT 6.30	LT 6.70	LT 4.80	LT 3.80	LT 4.50
			LT 7.30				
07	PR	930929/931027	LT 38.50	LT 3.10	LT 4.00	LT 3.50	LT 4.40
			LT 7.90	LT 6.00	LT 3.40	LT 5.50	LT 6.20
			LT 7.60				
07	PR	931027/931124	LT 12.60	LT 5.60	LT 3.50	LT 3.00	LT 4.00
			LT 7.80	LT 3.40	LT 2.80	LT 5.30	LT 7.60
			LT 13.20				
07	PR	931124/931229	LT 13.50	LT 5.40	LT 3.30	LT 3.20	LT 4.00
			LT 5.20	LT 1.80	LT 3.30	LT 3.80	LT 3.10
			LT 7.40				

GAMMA SPEC REPORT OF PRG
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Precipitation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	BA-140 FE-59 ZR-95	CO-58 LA-140	CO-60 MN-54	CS-134 NB-95	CS-137 ZN-65
12	PR	921230/930127	LT 22.40 LT 9.90 LT 8.00	LT 4.40 LT 8.20	LT 4.60 LT 3.80	LT 4.60 LT 4.70	LT 4.10 LT 10.40
12	PR	930127/930224	LT 17.30 LT 7.00 LT 6.40	LT 3.70 LT 5.90	LT 2.70 LT 5.90	LT 3.10 LT 3.20	LT 3.90 LT 7.20
12	PR	930224/930324	LT 19.80 LT 9.30 LT 7.30	LT 4.50 LT 8.80	LT 5.10 LT 4.10	LT 3.80 LT 4.40	LT 4.00 LT 9.30
12	PR	930324/930428	LT 29.40 LT 11.90 LT 10.70	LT 6.20 LT 10.80	LT 5.80 LT 5.40	LT 5.40 LT 5.90	LT 5.80 LT 14.20
12	PR	930428/930526	LT 30.90 LT 11.90 LT 9.80	LT 5.80 LT 5.30	LT 3.60 LT 5.80	LT 6.80 LT 4.80	LT 2.20 LT 7.60
12	PR	930526/930701	LT 30.40 LT 7.70 LT 7.10	LT 3.90 LT 6.90	LT 2.70 LT 4.70	LT 2.40 LT 4.80	LT 4.90 LT 5.50
12	PR	930701/930728	LT 32.20 LT 6.40 LT 8.10	LT 2.50 LT 3.60	LT 5.40 LT 5.30	LT 4.60 LT 4.10	LT 6.20 LT 9.40
12	PR	930728/930825	LT 24.00 LT 8.00 LT 3.40	LT 2.00 LT 3.10	LT 2.00 LT 4.40	LT 7.40 LT 4.20	LT 3.30 LT 8.80
12	PR	930825/930929	LT 28.40 LT 9.50 LT 5.50	LT 3.50 LT 8.50	LT 2.80 LT 3.20	LT 3.50 LT 4.10	LT 3.70 LT 6.50
12	PR	930929/931027	LT 37.60 LT 6.30 LT 4.50	LT 3.10 LT 8.80	LT 2.00 LT 3.90	LT 4.40 LT 4.40	LT 3.70 LT 7.60
12	PR	931027/931124	LT 31.20 LT 5.80 LT 8.00	LT 6.60 LT 3.80	LT 3.10 LT 1.40	LT 3.20 LT 4.80	LT 4.50 LT 7.80
12	PR	931124/931229	LT 14.90 LT 6.40 LT 4.60	LT 5.10 LT 3.30	LT 3.10 LT 2.00	LT 3.00 LT 3.90	LT 4.40 LT 9.00

GAMMA SPEC REPORT OF PRG
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Precipitation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	BA-140 FE-59 ZR-95	CO-58 LA-140	CO-60 MN-54	CS-134 NB-95	CS-137 ZN-65
35	PR	921230/930127	LT 30.90 LT 15.20 LT 11.80	LT 6.70 LT 10.60	LT 7.20 LT 6.10	LT 6.40 LT 6.70	LT 7.40 LT 14.90
35	PR	930127/930224	LT 19.20 LT 8.20 LT 5.50	LT 3.80 LT 4.60	LT 3.60 LT 3.70	LT 3.10 LT 3.70	LT 3.40 LT 6.60
35	PR	930224/930324	LT 24.30 LT 10.60 LT 8.50	LT 6.30 LT 9.90	LT 6.70 LT 6.10	LT 4.90 LT 5.20	LT 5.40 LT 13.60
35	PR	930324/930428	LT 20.70 LT 10.70 LT 7.90	LT 4.70 LT 6.50	LT 4.40 LT 4.60	LT 3.20 LT 5.10	LT 4.00 LT 8.60
35	PR	930428/930526	LT 30.40 LT 6.40 LT 8.30	LT 5.40 LT 5.00	LT 4.30 LT 3.70	LT 3.00 LT 3.70	LT 4.30 LT 5.90
35	PR	930526/930701	LT 17.60 LT 8.80 LT 5.00	LT 2.60 LT 3.20	LT 5.00 LT 4.30	LT 3.80 LT 7.10	LT 3.70 LT 5.20
35	PR	930701/930728	LT 39.60 LT 12.90 LT 5.70	LT 3.80 LT 6.00	LT 5.00 LT 7.20	LT 2.90 LT 2.90	LT 7.80 LT 11.10
35	PR	930728/930825	LT 13.60 LT 9.10 LT 5.00	LT 5.60 LT 4.00	LT 3.80 LT 4.10	LT 3.10 LT 2.90	LT 5.20 LT 4.80
35	PR	930825/930929	LT 44.70 LT 5.20 LT 5.80	LT 5.80 LT 5.80	LT 2.90 LT 2.20	LT 5.30 LT 2.50	LT 2.20 LT 6.60
35	PR	930929/931027	LT 44.20 LT 12.00 LT 7.60	LT 4.60 LT 10.70	LT 4.80 LT 4.30	LT 4.00 LT 5.30	LT 4.60 LT 8.60
35	PR	931027/931124	LT 21.90 LT 10.90 LT 6.80	LT 4.20 LT 4.30	LT 1.90 LT 2.80	LT 4.10 LT 3.40	LT 4.30 LT 5.30
35	PR	931124/931229	LT 12.60 LT 4.40 LT 3.70	LT 3.70 LT 5.00	LT 4.30 LT 3.90	LT 4.80 LT 3.40	LT 4.90 LT 4.40

GAMMA SPEC REPORT OF MLKI
SAMPLE FREQUENCY IS : BI-MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Milk

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	I-131
47	MILK	930402/930405	LT .50
47	MILK	930423/930426	LT .40
47	MILK	930507/930510	LT .40
47	MILK	930521/930524	LT .40
47	MILK	930604/930607	LT .50
47	MILK	930618/930621	LT .30
47	MILK	930709/930712	LT .30
47	MILK	930723/930726	LT .30
47	MILK	930806/930809	LT .30
47	MILK	930820/930823	LT .40
47	MILK	930904/930907	LT .60
47	MILK	930917/930920	LT .30
47	MILK	931001/931004	LT .40
51	MILK	930108/930111	LT .20
51	MILK	930205/930208	LT .50
51	MILK	930305/930308	LT .50
51	MILK	930402/930405	LT .40
51	MILK	930423/930426	LT .30
51	MILK	930507/930510	LT .40
51	MILK	930521/930524	LT .40
51	MILK	930604/930607	LT .40
51	MILK	930618/930621	LT .30
51	MILK	930709/930712	LT .20
51	MILK	930723/930726	LT .30
51	MILK	930806/930809	LT .20
51	MILK	930820/930823	LT .40
51	MILK	930904/930907	LT .30
51	MILK	930917/930920	LT .30
51	MILK	931001/931004	LT .40
51	MILK	931015/931018	LT .30
51	MILK	931105/931108	LT .40
51	MILK	931203/931206	LT .40
61	MILK	930402/930405	LT .30
61	MILK	930423/930426	LT .30
61	MILK	930507/930510	LT .40
61	MILK	930521/930524	LT .40
61	MILK	930604/930607	LT .30

GAMMA SPEC REPORT OF MLKI
SAMPLE FREQUENCY IS : BI-MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Milk

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	I-131
61	MILK	930618/930621	LT .30
61	MILK	930709/930712	LT .30
61	MILK	930723/930726	LT .30
61	MILK	930806/930809	LT .20
61	MILK	930820/930823	LT .30
61	MILK	930904/930907	LT .40
61	MILK	930917/930920	LT .30
61	MILK	931001/931004	LT .30
61	MILK	931015/931018	LT .30
61	MILK	931105/931108	LT .40
69	MILK	930108/930111	LT .20
69	MILK	930205/930208	LT .30
69	MILK	930305/930308	LT .40
69	MILK	930402/930405	LT .30
71	MILK	930108/930111	LT .30
71	MILK	930205/930208	LT .30
71	MILK	930305/930308	LT .40
71	MILK	930402/930405	LT .30
71	MILK	930423/930426	LT .40
71	MILK	930507/930510	LT .40
71	MILK	930521/930524	LT .30
71	MILK	930604/930607	LT .30
71	MILK	930618/930621	LT .40
71	MILK	930709/930712	LT .30
71	MILK	930723/930726	LT .30
71	MILK	930806/930809	LT .30
71	MILK	930820/930823	LT .30
71	MILK	930904/930907	LT .30
71	MILK	930917/930920	LT .30
71	MILK	931001/931004	LT .60
71	MILK	931015/931018	LT .30
71	MILK	931105/931108	LT .30
71	MILK	931203/931206	LT .40

GAMMA SPEC REPORT OF STRG
SAMPLE FREQUENCY IS : BI-MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Milk

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	SR-89	SR-90
47	MILK	930507/930510	LT .6	5.40+/-.90
47	MILK	930521/930524	LT .6	2.00+/-.50
47	MILK	930820/930823	LT .9	2.80+/-.60
51	MILK	930205/930208	LT .7	2.10+/-.50
51	MILK	930507/930510	LT .5	2.90+/-.60
51	MILK	930521/930524	LT .6	2.10+/-.60
51	MILK	930820/930823	LT .7	2.60+/-.50
51	MILK	931105/931108	LT .6	3.70+/-.60
61	MILK	930507/930510	LT .6	2.20+/-.60
61	MILK	930521/930524	LT .6	2.50+/-.60
61	MILK	930820/930823	LT .8	1.30+/-.40
61	MILK	931105/931108	LT .5	1.50+/-.40
69	MILK	930205/930208	LT .5	1.90+/-.30
71	MILK	930205/930208	LT .5	4.20+/-.50
71	MILK	930507/930510	LT .5	4.80+/-.60
71	MILK	930521/930524	LT .6	5.70+/-.80
71	MILK	930820/930823	LT .9	3.50+/-.60
71	MILK	931105/931108	LT .7	4.70+/-.60

GAMMA SPEC REPORT OF MLKG
SAMPLE FREQUENCY IS : BI-MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Milk

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	BA-140	CS-134	CS-137	K-40	LA-140
47	MILK	930402/930405	LT 20.0	LT 4.5	LT 5.0	1560.0+/-90.0	LT 6.7
47	MILK	930423/930426	LT 23.0	LT 1.5	LT 2.6	1470.0+/-60.0	LT 6.0
47	MILK	930507/930510	LT 26.2	LT 6.0	LT 6.3	1640.0+/-130.0	LT 9.2
47	MILK	930521/930524	LT 14.6	LT 2.2	LT 4.4	1710.0+/-150.0	LT 3.7
47	MILK	930604/930607	LT 25.0	LT 2.9	LT 6.6	1620.0+/-170.0	LT 4.1
47	MILK	930618/930621	LT 31.8	LT 2.8	LT 8.7	1680.0+/-190.0	LT 3.7
47	MILK	930709/930712	LT 15.5	LT 3.2	LT 5.0	1600.0+/-160.0	LT 6.0
47	MILK	930723/930726	LT 19.5	LT 4.2	LT 3.4	1740.0+/-190.0	LT 3.9
47	MILK	930806/930809	LT 23.3	LT 7.7	LT 6.0	1680.0+/-160.0	LT 5.0
47	MILK	930820/930823	LT 35.5	LT 3.7	LT 7.4	1510.0+/-170.0	LT 4.1
47	MILK	930904/930907	LT 25.6	LT 4.1	LT 4.9	1770.0+/-140.0	LT 7.1
47	MILK	930917/930920	LT 16.3	LT 6.7	LT 5.9	1720.0+/-190.0	LT 4.0
47	MILK	931001/931004	LT 16.5	LT 3.6	LT 5.0	1800.0+/-200.0	LT 3.3
51	MILK	930108/930111	LT 24.8	LT 4.2	LT 4.7	1610.0+/-140.0	LT 6.4
51	MILK	930205/930208	LT 29.0	LT 6.2	LT 6.7	1380.0+/-160.0	LT 9.3
51	MILK	930305/930308	LT 23.7	LT 6.0	LT 6.4	1200.0+/-150.0	LT 6.8
51	MILK	930402/930405	LT 23.5	LT 4.4	LT 4.9	1350.0+/-120.0	LT 9.9
51	MILK	930423/930426	LT 29.3	LT 2.2	LT 2.4	1350.0+/-70.0	LT 10.6
51	MILK	930507/930510	LT 29.7	LT 6.9	LT 7.4	1490.0+/-170.0	LT 10.8
51	MILK	930521/930524	LT 17.6	LT 3.2	LT 5.4	1410.0+/-160.0	LT 4.5
51	MILK	930604/930607	LT 31.9	LT 3.6	LT 6.1	1330.0+/-160.0	LT 3.6
51	MILK	930619/930622	LT 41.7	LT 4.8	LT 6.8	1330.0+/-170.0	LT 6.0
51	MILK	930709/930712	LT 22.6	LT 3.3	LT 4.1	1370.0+/-110.0	LT 5.7
51	MILK	930723/930726	LT 29.3	LT 2.9	LT 5.3	1380.0+/-170.0	LT 5.4
51	MILK	930806/930809	LT 21.1	LT 4.7	LT 3.8	1450.0+/-170.0	LT 4.2
51	MILK	930820/930823	LT 22.5	LT 4.4	LT 4.8	1350.0+/-110.0	LT 9.8
51	MILK	930904/930907	LT 19.5	LT 3.4	LT 3.3	1240.0+/-180.0	LT 5.1
51	MILK	930917/930920	LT 23.6	LT 8.4	LT 4.2	1390.0+/-170.0	LT 3.7
51	MILK	931001/931004	LT 14.3	LT 6.1	LT 3.2	1290.0+/-150.0	LT 6.8
51	MILK	931015/931018	LT 18.9	LT 4.0	LT 4.8	1210.0+/-120.0	LT 5.9
51	MILK	931105/931108	LT 17.8	LT 6.8	LT 4.8	1180.0+/-190.0	LT 3.7
51	MILK	931203/931206	LT 24.3	LT 3.2	LT 3.7	1080.0+/-150.0	LT 4.4
61	MILK	930402/930405	LT 36.8	LT 6.9	LT 6.9	1520.0+/-180.0	LT 8.6
61	MILK	930423/930426	LT 31.2	LT 2.4	LT 2.4	1780.0+/-60.0	LT 8.7
61	MILK	930507/930510	LT 13.3	LT 2.5	LT 2.7	1880.0+/-70.0	LT 3.8
61	MILK	930521/930524	LT 31.7	LT 5.1	LT 5.3	1510.0+/-140.0	LT 10.6
61	MILK	930604/930607	LT 35.4	LT 5.0	LT 8.8	1850.0+/-190.0	LT 3.7

GAMMA SPEC REPORT OF MLKG
SAMPLE FREQUENCY IS : BI-MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Milk

CATION OCATION	SAMPLE TYPE	COLLECTION DATE	BA-140	CS-134	CS-137	K-40	LA-140
61	MILK	930618/930621	LT 25.6	LT 2.4	LT 6.8	1970.0+/-140.0	LT 6.0
61	MILK	930709/930712	LT 19.2	LT 2.8	LT 5.0	1780.0+/-160.0	LT 2.8
61	MILK	930723/930726	LT 19.1	LT 5.6	LT 6.6	1770.0+/-170.0	LT 3.0
61	MILK	930806/930809	LT 27.3	LT 5.0	LT 6.7	1810.0+/-200.0	LT 6.3
61	MILK	930820/930823	LT 34.8	LT 7.5	LT 5.3	1990.0+/-190.0	LT 3.6
61	MILK	930904/930907	LT 41.9	LT 4.5	LT 7.4	1640.0+/-190.0	LT 3.8
61	MILK	930917/930920	LT 34.1	LT 4.4	LT 7.8	1860.0+/-200.0	LT 4.1
61	MILK	931001/931004	LT 14.5	LT 7.1	LT 7.1	1760.0+/-190.0	LT 2.9
61	MILK	931015/931018	LT 20.3	LT 7.8	LT 6.6	1800.0+/-190.0	LT 3.0
61	MILK	931105/931108	LT 28.1	LT 4.8	LT 7.1	1810.0+/-200.0	LT 3.4
69	MILK	930108/930111	LT 33.1	LT 4.0	LT 5.1	1520.0+/-170.0	LT 7.6
69	MILK	930205/930208	LT 28.2	LT 6.1	LT 6.2	1400.0+/-150.0	LT 7.8
69	MILK	930305/930308	LT 25.6	LT 7.0	LT 6.9	1290.0+/-160.0	LT 8.6
69	MILK	930402/930405	LT 32.3	LT 5.6	LT 5.5	1260.0+/-140.0	LT 8.8
71	MILK	930108/930111	LT 22.3	LT 4.1	LT 4.1	1370.0+/-120.0	LT 6.2
71	MILK	930205/930208	LT 20.8	LT 5.0	LT 5.0	1350.0+/-120.0	LT 8.0
71	MILK	930305/930308	LT 24.2	LT 6.8	LT 6.7	1060.0+/-150.0	LT 5.3
71	MILK	930402/930405	LT 28.0	LT 4.2	LT 5.0	1270.0+/-110.0	LT 5.6
71	MILK	930423/930426	LT 41.4	LT 2.8	LT 3.5	1370.0+/-90.0	LT 7.1
71	MILK	930507/930510	LT 22.8	LT 4.9	LT 5.5	1280.0+/-130.0	LT 10.3
71	MILK	930521/930524	LT 28.8	LT 5.1	LT 4.9	1370.0+/-130.0	LT 3.5
71	MILK	930604/930607	LT 15.8	LT 3.0	LT 5.7	1520.0+/-180.0	LT 4.4
71	MILK	930618/930621	LT 29.5	LT 4.5	LT 3.7	1320.0+/-140.0	LT 3.8
71	MILK	930709/930712	LT 44.8	LT 6.4	LT 8.0	1440.0+/-170.0	LT 5.7
71	MILK	930723/930726	LT 21.9	LT 3.1	LT 6.7	1430.0+/-150.0	LT 3.3
71	MILK	930806/930809	LT 29.6	LT 4.7	LT 5.4	1320.0+/-130.0	LT 6.9
71	MILK	930820/930823	LT 40.5	LT 5.5	LT 4.7	1190.0+/-180.0	LT 4.6
71	MILK	930904/930907	LT 23.8	LT 4.2	LT 4.6	1350.0+/-130.0	LT 6.4
71	MILK	930917/930920	LT 16.7	LT 3.8	LT 6.1	1090.0+/-140.0	LT 6.5
71	MILK	931001/931004	LT 17.9	LT 6.6	LT 6.0	1270.0+/-160.0	LT 3.4
71	MILK	931015/931018	LT 10.1	LT 4.8	LT 5.5	1250.0+/-150.0	LT 2.4
71	MILK	931105/931108	LT 11.3	LT 3.0	LT 4.9	1250.0+/-140.0	LT 2.5
71	MILK	931203/931206	LT 17.3	LT 6.0	LT 6.1	1150.0+/-160.0	LT 3.4

GAMMA SPEC REPORT OF FP
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/KG +/- 2 SIGMA

Food Products

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	CS-134 CO-60	CS 137 BE-7	I-131	K-40	CO-58
62	BROCCOLI	930827/930827	LT 10.90 LT 15.40	LT 12.70 LT 132.50	LT 22.20	4873.0+/-402.0	LT 14.90
62	CABBAGE	930827/930827	LT 21.70 LT 23.20	LT 19.80 LT 154.80	LT 32.40	2199.0+/-459.0	LT 22.10
62	CABBAGE	930923/930923	LT 4.30 LT 2.90	LT 3.40 LT 36.60	LT 9.00	1549.0+/-111.0	LT 4.70
62	BROCCOLI	930923/930923	LT 14.90 LT 4.80	LT 5.20 LT 16.90	LT 10.70	4136.0+/-252.0	LT 8.00
62	SAVOY CABBAGE	930923/930923	LT 19.00 LT 13.40	LT 16.60 LT 179.00	LT 41.10	3569.0+/-484.0	LT 17.40
62	CABBAGE	931019/931019	LT 5.60 LT 8.80	LT 7.10 LT 90.20	LT 21.60	1532.0+/-244.0	LT 10.10
67	DILL	930720/930720	LT 16.20 LT 12.10	LT 19.60 LT 37.60	LT 12.50	5669.0+/-810.0	LT 16.70
67	BASIL	930720/930720	LT 21.00 LT 10.50	LT 17.70 LT 88.70	LT 15.50	4450.0+/-460.0	LT 12.00
67	DILL	930827/930827	LT 35.00 LT 12.60	LT 22.50 340.0+/-174.0	LT 28.30	6943.0+/-633.0	LT 38.20
67	BASIL	930827/930827	LT 20.60 LT 23.50	LT 25.60 LT 238.10	LT 34.70	3646.0+/-536.0	LT 24.40
67	CABBAGE	930827/930827	LT 10.00 LT 12.40	LT 12.70 LT 114.80	LT 23.40	2763.0+/-300.0	LT 12.20
70	CABBAGE	930703/930703	LT 9.00 LT 12.60	LT 12.10 LT 99.20	LT 38.70	2587.0+/-321.0	LT 14.00
70	CABBAGE	930827/930827	LT 8.80 LT 7.00	LT 6.40 LT 80.40	LT 18.80	2060.0+/-260.0	LT 18.20
70	CABBAGE	930923/930923	LT 3.40 LT 3.90	LT 3.70 LT 39.20	LT 10.80	2843.0+/-110.0	LT 3.80
70	CAULIFLOWER	930923/930923	LT 3.50 LT 4.30	LT 4.30 LT 38.00	LT 7.90	2720.0+/-125.0	LT 4.50
70	BROCCOLI	930923/930923	LT 3.30 LT 4.80	LT 3.90 LT 39.00	LT 7.00	3665.0+/-128.0	LT 4.00
70	CABBAGE	931019/931019	LT 6.80 LT 5.40	LT 13.00 LT 108.00	LT 27.50	1694.0+/-263.0	LT 13.70
70	CAULIFLOWER	931019/931019	LT 12.30 LT 13.00	LT 12.90 LT 122.00	LT 22.90	2617.0+/-307.0	LT 16.10

GAMMA SPEC REPORT OF FP
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/KG +/- 2 SIGMA

Food Products

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	CS-134 CO-60	CS-137 BE-7	I-131	K-40	CO-58
70	BROCCOLI	931019/931019	LT 10.40 LT 13.60	LT 12.60 LT 114.70	LT 24.80	3169.0+/-311.0	LT 12.10
72	BROCCOLI	930720/930720	LT 13.90 LT 9.10	LT 4.90 LT 115.00	LT 33.10	4417.0+/-360.0	LT 10.10
72	CABBAGE	930720/930720	LT 12.20 LT 13.80	LT 16.70 LT 114.00	LT 40.90	2647.0+/-310.0	LT 12.60
72	CAULIFLOWER	930720/930720	LT 4.30 LT 3.60	LT 6.40 LT 61.70	LT 19.70	1782.0+/-200.0	LT 7.40
73	CABBAGE	930827/930827	LT 8.90 LT 12.00	LT 10.10 LT 95.30	LT 20.70	1714.0+/-313.0	LT 16.70
73	CABBAGE	930923/930923	LT 3.60 LT 4.60	LT 3.70 46.7+/-3.0	LT 9.60	2737.0+/-113.0	LT 4.30
77	DILL	930720/930720	LT 7.60 LT 25.10	LT 21.40 LT 200.00	LT 36.70	6240.0+/-600.0	LT 21.30
77	TURNIP GREENS	930720/930720	LT 9.60 LT 6.90	LT 20.80 LT 197.00	LT 31.70	5190.0+/-520.0	LT 8.60
77	DILL	930827/930827	LT 21.70 LT 29.90	LT 21.10 LT 209.20	LT 26.80	5584.0+/-688.0	LT 26.40
77	TURNIP GREENS	930827/930827	LT 13.90 LT 19.00	LT 24.00 LT 20.80	LT 30.90	6316.0+/-622.0	LT 24.80
77	DILL	931019/931019	LT 13.70 LT 17.60	LT 14.90 716.0+/-167.0	LT 39.20	6161.0+/-452.0	LT 19.70
77	TURNIP GREENS	931019/931019	LT 12.30 LT 17.70	LT 15.40 884.0+/-171.0	LT 26.30	4078.0+/-362.0	LT 17.00
78	CABBAGE	930827/930827	LT 25.70 LT 8.30	LT 17.00 LT 138.00	LT 17.00	2792.0+/-433.0	LT 15.30
78	CHINESE CABBAGE	930827/930827	LT 18.00 LT 14.10	LT 25.30 LT 148.00	LT 17.70	4114.0+/-629.0	LT 20.70
78	TURNIP GREENS	930827/930827	LT 13.90 LT 16.70	LT 18.80 LT 145.80	LT 30.60	5794.0+/-481.0	LT 16.20
78	BROCCOLI	930827/930827	LT 20.80 LT 12.70	LT 11.70 LT 157.00	LT 33.60	4258.0+/-432.0	LT 13.00

GAMMA SPEC REPORT OF PP
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/KG +/- 2 SIGMA

Food Products

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	CS-134 CO-60	CS-137 BE-7	I-131	K-40	CO-58
78	CHINESE CABBAGE	930923/930923	LT 5.10 LT 6.20	LT 5.30 LT 152.60	LT 6.20	3668.0+/-146.0	LT 7.60
78	BROCCOLI	930923/930923	LT 3.20 LT 3.40	LT 3.70 88.4+/-27.5	LT 8.50	3373.0+/-108.0	LT 3.20
78	CABBAGE	931019/931019	LT 7.60 LT 9.10	LT 9.60 LT 103.00	LT 15.30	2690.0+/-271.0	LT 7.40
78	BROCCOLI	931019/931019	LT 12.40 LT 13.00	LT 14.40 LT 146.00	LT 24.50	3697.0+/-421.0	LT 24.00
78	CHINESE CABBAGE	931019/931019	LT 6.50 LT 10.40	LT 12.50 202.0+/-103.0	LT 18.20	3474.0+/-363.0	LT 9.60
79	CABBAGE	930827/930827	LT 9.10 LT 17.30	LT 11.80 LT 94.20	LT 11.30	1894.0+/-99.0	LT 12.70

GAMMA SPEC REPORT OF FP
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/KG +/- 2 SIGMA

Grass

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	CS-134 CO-58	CS-137 CO-60	I-131	K-40	BE-7
06	GRASS	930518/930518	LT 22.50 LT 27.20	LT 26.20 LT 30.80	LT 43.60	6170.0+/-564.0	850.0+/-187.0
06	GRASS	930617/930617	LT 8.20 LT 16.10	LT 21.10 LT 8.90	LT 30.70	6312.0+/-470.0	1384.0+/-180.0
06	GRASS	930720/930720	LT 15.80 LT 27.80	LT 30.10 LT 17.40	LT 43.30	6624.0+/-830.0	730.0+/-310.0
06	GRASS	930817/930817	LT 12.40 LT 16.70	LT 14.90 LT 15.40	LT 42.00	4163.0+/-372.0	3822.0+/-263.0
06	GRASS	930922/930922	LT 13.30 LT 16.80	LT 16.40 LT 17.90	LT 43.90	13720.0+/-479.0	4342.0+/-238.0
06	GRASS	931019/931019	LT 20.70 LT 20.20	LT 21.80 LT 26.10	LT 43.50	3352.0+/-463.0	5268.0+/-414.0
07	GRASS	930518/930518	LT 16.70 LT 16.60	LT 15.80 LT 18.10	LT 29.10	12000.0+/-471.0	4980.0+/-210.0
07	GRASS	9_0617/930617	LT 12.60 LT 15.80	26.0+/-16.1 LT 15.80	LT 26.10	15400.0+/-468.0	1849.0+/-171.0
07	GRASS	930720/930720	LT 24.60 LT 31.20	LT 39.30 LT 19.50	LT 38.50	7828.0+/-830.0	1670.0+/-320.0
07	GRASS	930817/930817	LT 15.60 LT 18.00	30.8+/-16.6 LT 20.90	LT 25.70	6800.0-/-507.0	3861.0+/-279.0
07	GRASS	930922/930922	LT 7.90 LT 8.70	LT 9.30 LT 9.90	LT 30.20	5528.0+/-258.0	3691.0+/-157.0
07	GRASS	931019/931019	LT 12.10 LT 12.70	LT 12.60 LT 13.40	LT 35.90	4015.0+/-353.0	2918.0+/-264.0
35	GRASS	930518/930518	LT 9.10 LT 11.00	25.3+/-9.6 LT 10.10	LT 19.00	4647.0+/-288.0	4356.0+/-181.0
35	GRASS	930617/930617	LT 11.10 LT 14.4[illegible]	LT 16.60 LT 14.90	LT 28.20	5958.0+/-320.0	1134.0+/-150.0
35	GRASS	930720/930720	LT 11.[illegible]0 LT 13.60	LT 17.20 LT 7.20	LT 37.50	6090.0+/-360.0	651.0+/-130.0
35	GRASS	930817/930817	LT 13.70 LT 17.90	LT 17.10 LT 18.90	LT 44.60	4312.0+/-390.0	1465.0+/-221.0
35	GRASS	930922/930922	LT 12.50 LT 8.80	LT 14.20 LT 5.00	LT 28.80	4275.0+/-296.0	1493.0+/-145.0
35	GRASS	931019/931019	LT 15.10 LT 18.80	LT 18.90 LT 21.90	LT 36.90	3315.0+/-422.0	3296.0+/-319.0

GAMMA SPEC REPORT OF SOIL
SAMPLE FREQUENCY IS : QUARTERLY
RESULTS IN PCI/KG(DRY) +/- 2 SIGMA

Soil

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	K-40 CO-60	RA-226	CS-134	CS-137	CO-58
03	SOIL	930406/930406	7625.0+/-418.0 LT 35.7	1620.0+/-240.0	LT 34.7	LT 29.2	LT 27.7
03	SOIL	930922/930922	10340.0+/-486.0 LT 13.9	1261.0+/-262.0	LT 14.4	270.0+/-27.0	LT 15.2
04	SOIL	930406/930406	4280.0+/-380.0 LT 23.2	1600.0+/-2.5	LT 19.3	LT 15.8	LT 16.9
04	SOIL	930922/930922	10167.0+/-462.0 LT 14.7	1084.0+/-266.0	LT 6.1	362.0+/-27.0	LT 12.6
06	SOIL	930406/930406	14290.0+/-383.0 LT 16.3	2094.0+/-335.0	LT 11.2	200.0+/-17.0	LT 11.3
06	SOIL	930922/930922	15440.0+/-640.0 LT 26.9	2521.0+/-620.0	LT 21.1	217.0+/-26.0	LT 29.4
07	SOIL	930406/930406	11600.0+/-299.0 LT 18.0	1450.0+/-179.0	LT 17.8	381.0+/-14.0	LT 13.0
07	SOIL	930922/930922	13151.0+/-520.0 LT 15.7	1284.0+/-267.0	LT 15.5	66.0+/-21.0	LT 16.9
09	SOIL	930406/930406	10970.0+/-269.0 LT 11.0	1332.0+/-242.0	LT 7.8	350.0+/-15.0	LT 8.7
09	SOIL	930922/930922	10789.0+/-496.0 LT 13.6	1314.0+/-296.0	LT 15.3	508.0+/-33.0	LT 19.1
12	SOIL	930406/930406	10200.0+/-310.0 LT 15.1	1320.0+/-144.0	LT 16.6	505.0+/-18.0	LT 11.7
12	SOIL	930922/930922	11097.0+/-495.0 LT 14.2	1257.0+/-259.0	LT 6.2	213.0+/-26.0	LT 7.0
35	SOIL	930406/930406	10300.0+/-274.0 LT 15.7	1150.0+/-159.0	LT 14.6	182.0+/-10.0	LT 11.7
35	SOIL	930922/930922	10695.0+/-478.0 LT 16.8	1297.0+/-285.0	LT 14.3	330.0+/-33.0	LT 17.1

GAMMA SPEC REPORT OF STRG
SAMPLE FREQUENCY IS : QUARTERLY
RESULTS IN PCI/KG(DRY) +/- 2 SIGMA

Soil

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	SR-89	SR-90
03	SOIL	930406/930406	LT 18.6	32.50+/-7.10
03	SOIL	930922/930922	LT 23.3	31.10+/-9.00
04	SOIL	930406/930406	LT 14.7	LT 9.9
04	SOIL	930922/930922	LT 18.6	13.00+/-5.90
06	SOIL	930406/930406	LT 27.9	LT 20.1
06	SOIL	930922/930922	LT 32.4	LT 11.4
07	SOIL	930406/930406	LT 16.1	28.80+/-9.70
07	SOIL	930922/930922	LT 28.5	43.40+/-10.20
09	SOIL	930406/930406	LT 27.6	26.40+/-13.10
09	SOIL	930922/930922	LT 18.6	36.60+/-8.60
12	SOIL	930406/930406	LT 17.7	46.20+/-12.10
12	SOIL	930922/930922	LT 18.7	36.30+/-9.10
35	SOIL	930406/930406	LT 17.0	37.20+/-10.50
35	SOIL	930922/930922	LT 25.5	44.60+/-11.20

G-BETA WATER REPORT
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Water

COLLECTION PERIOD	STATION LOCATIONS				
	28	34	36	59	60
JAN 921228 TO 930128	02.10+/-.80	02.40+/-.50	02.60+/-.50	02.80+/-.50	02.50+/-.50
FEB 930128 TO 930225	03.50+/-.70	03.30+/-.60	02.50+/-.60		
MAR 930225 TO 930330	02.90+/-.60	02.70+/-.60	02.50+/-.40		
APR 930330 TO 930429	03.50+/-.60	02.60+/-.60	02.50+/-.60	02.40+/-.60	03.50+/-.70
MAY 930429 TO 930527	03.00+/-.60	02.30+/-.60	01.90+/-.60	02.20+/-.60	02.30+/-.60
JUN 930527 TO 930624	02.20+/-.50	01.90+/-.50	01.90+/-.50	02.20+/-.50	01.90+/-.50
JUL 930624 TO 930729	02.50+/-.50	02.20+/-.40	02.00+/-.50	02.60+/-.50	02.90+/-.50
AUG 930729 TO 930826	01.90+/-.60	02.00+/-.40	02.00+/-.60	02.20+/-.60	02.10+/-.60
SEP 930826 TO 930930	02.70+/-.50	02.00+/-.60	02.50+/-.60	02.40+/-.60	02.30+/-.60
OCT 930930 TO 931028	03.30+/-.70	01.80+/-.60	02.90+/-.60	02.90+/-.40	02.30+/-.60
NOV 931028 TO 931130	03.30+/-.70	02.40+/-.60	02.60+/-.60	02.90+/-.50	04.00+/-.70
DEC 931130 TO 931230	02.90+/-.70	02.60+/-.60	03.10+/-.70	02.50+/-.70	02.50+/-.70

GAMMA SPEC REPORT OF WTRG
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Water

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	BA-140 FE-59 ZR-95	CO-58 LA-140	CO-60 MN-54	CS-134 NB-95	CS-137 ZN-65
28	WATER	921228/930128	LT 24.40 LT 9.00 LT 8.40	LT 4.90 LT 7.70	LT 5.60 LT 4.70	LT 4.50 LT 5.60	LT 5.00 LT 9.90
28	WATER	930128/930225	LT 26.10 LT 11.60 LT 5.60	LT 5.50 LT 10.30	LT 6.30 LT 5.70	LT 5.80 LT 10.10	LT 6.40 LT 11.80
28	WATER	930330/930330	LT 22.50 LT 11.00 LT 10.00	LT 5.90 LT 10.60	LT 8.00 LT 5.80	LT 6.10 LT 5.30	LT 5.90 LT 15.10
28	WATER	930330/930429	LT 26.00 LT 8.30 LT 5.80	LT 3.40 LT 4.30	LT 3.00 LT 3.40	LT 3.10 LT 3.80	LT 2.90 LT 6.80
28	WATER	930429/930527	LT 32.10 LT 2.50 LT 6.20	LT 5.20 LT 5.30	LT 1.40 LT 4.00	LT 2.50 LT 4.60	LT 5.60 LT 8.00
28	WATER	930527/930624	LT 28.40 LT 7.10 LT 1.70	LT 3.60 LT 5.30	LT 2.20 LT 2.00	LT 3.60 LT 3.80	LT 1.60 LT 5.20
28	WATER	930624/930729	LT 14.00 LT 4.20 LT 8.60	LT 2.20 LT 5.30	LT 1.40 LT 1.70	LT 3.90 LT 2.30	LT 3.80 LT 7.00
28	WATER	930729/930826	LT 25.60 LT 8.10 LT 8.30	LT 5.90 LT 2.90	LT 1.80 LT 3.20	LT 4.50 LT 4.40	LT 4.90 LT 4.30
28	WATER	930826/930930	LT 28.50 LT 4.80 LT 2.90	LT 2.30 LT 3.90	LT 3.30 LT 4.60	LT 4.50 LT 4.20	LT 3.60 LT 7.60
28	WATER	930930/931028	LT 12.90 LT 7.60 LT 4.60	LT 2.30 LT 3.60	LT 3.50 LT 2.90	LT 2.80 LT 2.80	LT 5.10 LT 2.80
28	WATER	931104/931130	LT 13.30 LT 4.10 LT 5.50	LT 5.20 LT 2.60	LT 2.50 LT 2.60	LT 2.70 LT 2.30	LT 4.50 LT 4.30
28	WATER	931130/931230	LT 26.40 LT 2.00 LT 10.20	LT 4.20 LT 1.70	LT 4.00 LT 4.30	LT 3.90 LT 2.50	LT 4.20 LT 6.50

GAMMA SPEC REPORT OF WTRG
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Water

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	BA-140 FE-59 ZR-95	CO-58 LA-140	CO-60 MN-54	CS-134 NB-95	CS-137 ZN-65
34	WATER	921228/930128	LT 31.70 LT 10.90 LT 10.40	LT 5.20 LT 9.60	LT 6.20 LT 5.80	LT 5.70 LT 6.40	LT 6.00 LT 11.40
34	WATER	930128/930225	LT 20.70 LT 10.50 LT 4.90	LT 4.90 LT 9.60	LT 5.80 LT 4.60	LT 4.60 LT 8.80	LT 4.60 LT 10.80
34	WATER	930225/930330	LT 24.70 LT 12.40 LT 10.00	LT 6.00 LT 9.20	LT 6.10 LT 6.70	LT 6.00 LT 5.70	LT 6.60 LT 12.20
34	WATER	930330/930429	LT 27.50 LT 13.10 LT 10.90	LT 6.80 LT 10.00	LT 8.20 LT 7.60	LT 5.50 LT 7.40	LT 5.80 LT 11.60
34	WATER	930429/930527	LT 14.70 LT 10.00 LT 6.10	LT 1.90 LT 3.10	LT 1.60 LT 3.40	LT 2.90 LT 4.70	LT 5.20 LT 3.60
34	WATER	930527/930624	LT 34.70 LT 1.20 LT 10.00	LT 3.30 LT 5.90	LT 3.80 LT 4.80	LT 2.80 LT 5.00	LT 5.80 LT 10.80
34	WATER	930624/930729	LT 12.90 LT 5.80 LT 5.60	LT 3.70 LT 3.20	LT 3.60 LT 3.20	LT 4.60 LT 5.30	LT 3.60 LT 3.80
34	WATER	930729/930826	LT 31.20 LT 8.20 LT 7.40	LT 2.50 LT 3.50	LT 2.60 LT 2.40	LT 7.40 LT 3.60	LT 5.00 LT 6.90
34	WATER	930826/930930	LT 24.40 LT 7.60 LT 4.80	LT 2.10 LT 2.60	LT 4.00 LT 2.40	LT 4.80 LT 4.60	LT 2.20 LT 6.80
34	WATER	930930/931028	LT 34.40 LT 4.70 LT 3.60	LT 4.00 LT 4.70	LT 3.00 LT 4.70	LT 2.80 LT 5.60	LT 4.10 LT 8.10
34	WATER	931028/931130	LT 13.20 LT 3.30 LT 7.00	LT 3.80 LT 2.10	LT 4.20 LT 3.70	LT 1.70 LT 2.20	LT 4.10 LT 3.80
34	WATER	931130/931230	LT 19.70 LT 4.10 LT 6.80	LT 2.80 LT 1.70	LT 5.20 LT 2.20	LT 2.10 LT 4.20	LT 3.80 LT 2.80

GAMMA SPEC REPORT OF WTRG
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Water

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	BA-140 FE-59 ZR-95	CO-58 LA-140	CO-60 MN-54	CS-134 NB-95	CS-137 ZN-65
36	WATER	921228/930128	LT 24.80 LT 9.90 LT 7.80	LT 4.90 LT 8.20	LT 4.60 LT 4.90	LT 4.70 LT 4.70	LT 4.70 LT 9.60
36	WATER	930128/930225	LT 24.50 LT 10.30 LT 8.80	LT 4.90 LT 8.60	LT 4.90 LT 4.90	LT 5.20 LT 5.20	LT 4.30 LT 9.30
36	WATER	930225/930330	LT 15.10 LT 7.80 LT 5.40	LT 3.50 LT 4.20	LT 3.50 LT 3.70	LT 3.40 LT 3.90	LT 4.20 LT 7.80
36	WATER	930330/930429	LT 29.60 LT 11.30 LT 10.40	LT 5.10 LT 8.50	LT 6.00 LT 6.10	LT 5.80 LT 6.20	LT 6.00 LT 13.00
36	WATER	930429/930527	LT 13.40 LT 4.40 LT 6.10	LT 5.20 LT 4.40	LT 6.10 LT 5.20	LT 3.30 LT 4.80	LT 2.80 LT 8.60
36	WATER	930527/930624	LT 38.80 LT 4.80 LT 8.00	LT 5.30 LT 7.10	LT 3.00 LT 3.50	LT 1.40 LT 4.80	LT 4.70 LT 11.10
36	WATER	930624/930729	LT 14.10 LT 5.90 LT 4.00	LT 2.70 LT 6.80	LT 5.60 LT 3.70	LT 3.50 LT 2.60	LT 3.20 LT 4.40
36	WATER	930729/930826	LT 25.40 LT 11.60 LT 4.40	LT 2.70 LT 4.30	LT 3.40 LT 4.20	LT 3.50 LT 3.00	LT 4.00 LT 15.20
36	WATER	930826/930930	LT 28.10 LT 3.10 LT 4.30	LT 4.40 LT 2.60	LT 3.90 LT 3.50	LT 2.10 LT 3.60	LT 5.00 LT 5.80
36	WATER	930930/931028	LT 22.50 LT 3.50 LT 3.80	LT 4.40 LT 3.90	LT 2.20 LT 3.40	LT 3.80 LT 2.10	LT 3.00 LT 5.50
36	WATER	931104/931130	LT 21.10 LT 5.20 LT 6.10	LT 3.80 LT 3.90	LT 4.70 LT 3.30	LT 3.00 LT 3.40	LT 4.30 LT 3.20
36	WATER	931130/931230	LT 12.30 LT 4.40 LT 6.00	LT 1.80 LT 1.70	LT 3.60 LT 4.60	LT 3.00 LT 3.80	LT 4.00 LT 6.60

GAMMA SPEC REPORT OF WTRG
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Water

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	BA-140 FE-59 ZR-95	CO-58 LA-140	CO-60 MN-54	CS-134 NB-95	CS-137 ZN-65
59	WATER	930107/930128	LT 27.20 LT 11.00 LT 10.60	LT 5.80 LT 10.60	LT 7.10 LT 5.80	LT 5.40 LT 5.80	LT 5.90 LT 14.20
59	WATER	930415/930429	LT 23.70 LT 10.10 LT 9.00	LT 5.40 LT 10.30	LT 5.00 LT 4.40	LT 4.90 LT 6.00	LT 4.60 LT 9.80
59	WATER	930506/930527	LT 32.90 LT 10.00 LT 10.00	LT 5.10 LT 7.70	LT 4.20 LT 5.40	LT 3.90 LT 4.70	LT 3.20 LT 5.60
59	WATER	930603/930624	LT 34.70 LT 13.50 LT 7.30	LT 4.90 LT 10.50	LT 5.80 LT 3.80	LT 5.10 LT 5.60	LT 6.40 LT 8.50
59	WATER	930701/930729	LT 34.20 LT 4.00 LT 6.50	LT 3.50 LT 4.10	LT 2.90 LT 3.80	LT 4.20 LT 2.20	LT 4.40 LT 4.50
59	WATER	930805/930826	LT 16.50 LT 3.70 LT 4.90	LT 4.60 LT 2.60	LT 3.60 LT 3.40	LT 7.20 LT 2.60	LT 3.70 LT 5.50
59	WATER	930902/930930	LT 24.80 LT 8.40 LT 5.50	LT 3.40 LT 6.40	LT 3.70 LT 3.00	LT 2.30 LT 4.50	LT 3.50 LT 7.40
59	WATER	931007/931028	LT 29.90 LT 10.50 LT 8.50	LT 4.60 LT 7.90	LT 5.10 LT 3.60	LT 4.20 LT 6.20	LT 4.00 LT 10.00
59	WATER	931104/931130	LT 30.10 LT 3.60 LT 9.20	LT 3.10 LT 4.90	LT 1.80 LT 2.20	LT 2.00 LT 4.20	LT 4.20 LT 4.60
59	WATER	931209/931230	LT 16.40 LT 3.80 LT 8.30	LT 3.20 LT 2.80	LT 6.30 LT 3.80	LT 3.90 LT 3.30	LT 3.50 LT 3.40
60	WATER	930107/930128	LT 21.20 LT 9.40 LT 7.20	LT 4.80 LT 9.70	LT 6.10 LT 4.20	LT 4.20 LT 4.80	LT 4.50 LT 11.00
60	WATER	930415/930429	LT 23.00 LT 10.10 LT 7.50	LT 4.70 LT 8.30	LT 5.60 LT 4.70	LT 4.30 LT 5.60	LT 4.60 LT 10.30

GAMMA SPEC REPORT OF WTRG
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Water

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	BA-140 FE-59 ZR-95	CO-58 LA-140	CO-60 MN-54	CS-134 NB-95	CS-137 ZN-65
60	WATER	930506/930527	LT 34.90 LT 4.60 LT 10.00	LT 3.70 LT 4.80	LT 2.40 LT 5.40	LT 4.50 LT 7.30	LT 3.10 LT 5.70
60	WATER	930603/930624	LT 37.60 LT 12.20 LT 3.70	LT 4.90 LT 9.40	LT 5.40 LT 4.50	LT 3.60 LT 7.10	LT 5.20 LT 9.00
60	WATER	930701/930729	LT 24.90 LT 4.00 LT 6.30	LT 3.40 LT 3.40	LT 3.00 LT 1.50	LT 2.20 LT 4.60	LT 4.90 LT 4.70
60	WATER	930805/930826	LT 41.80 LT 11.60 LT 9.90	LT 10.60 LT 5.20	LT 4.80 LT 4.20	LT 4.80 LT 5.90	LT 3.70 LT 13.70
60	WATER	930902/930930	LT 24.50 LT 9.70 LT 6.30	LT 3.80 LT 6.30	LT 4.00 LT 3.20	LT 3.30 LT 4.60	LT 3.70 LT 6.80
60	WATER	931007/931028	LT 20.10 LT 4.60 LT 6.40	LT 1.70 LT 3.80	LT 3.80 LT 3.10	LT 3.60 LT 3.20	LT 4.10 LT 4.60
60	WATER	931104/931130	LT 16.70 LT 4.40 LT 5.00	LT 7.20 LT 3.70	LT 2.80 LT 2.80	LT 4.70 LT 5.90	LT 4.80 LT 3.80
60	WATER	931209/931230	LT 17.90 LT 7.80 LT 4.20	LT 1.60 LT 1.80	LT 1.90 LT 2.20	LT 3.30 LT 3.80	LT 4.00 LT 3.90

TRITIUM REPORT
SAMPLE FREQUENCY IS : QUARTERLY
RESULTS IN PCI/KG +/- 2 SIGMA

Water

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	H3
28	WATER	921228/930330	LT 178.00
28	WATER	930330/930624	LT 179.00
28	WATER	930624/930930	LT 186.00
28	WATER	930930/931230	LT 189.00
34	WATER	921228/930330	LT 179.00
34	WATER	930330/930624	224.00+/-98.00
34	WATER	930624/930930	LT 186.00
34	WATER	930930/931230	LT 189.00
36	WATER	921228/930330	LT 179.00
36	WATER	930330/930624	LT 179.00
36	WATER	930624/930930	LT 186.00
36	WATER	930930/931230	LT 193.00
59	WATER	930107/930128	LT 174.00
59	WATER	930415/930624	233.00+/-98.00
59	WATER	930701/930930	194.00+/-100.00
59	WATER	931007/931230	LT 194.00
60	WATER	930107/930128	LT 179.00
60	WATER	930415/930624	193.00+/-97.00
60	WATER	930701/930930	LT 186.00
60	WATER	931007/931230	LT 189.00

GAMMA SPEC REPORT OF STRG
SAMPLE FREQUENCY IS : MONTHLY
RESULTS IN PCI/L +/- 2 SIGMA

Water

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	SR-89	SR-90
28	WATER	930128/930225	LT .6	.70+/-.40
28	WATER	930429/930527	LT 1.2	LT .6
28	WATER	930729/930826	LT .9	1.80+/-.50
28	WATER	931028/931130	LT .8	.60+/-.30
34	WATER	930128/930225	LT .5	.60+/-.30
34	WATER	930429/930527	LT 1.3	LT .6
34	WATER	930729/930826	LT .9	.80+/-.30
34	WATER	931028/931130	LT .7	.50+/-.30
36	WATER	930128/930225	LT .6	.60+/-.40
36	WATER	930429/930527	LT 1.2	LT .6
36	WATER	930729/930826	LT .9	.90+/-.40
36	WATER	931104/931130	LT .7	.60+/-.30
59	WATER	930107/930128	LT 2.0	.70+/-.40
59	WATER	930506/930527	LT 1.2	LT .6
59	WATER	930805/930826	LT 1.0	.90+/-.50
59	WATER	931104/931130	LT .7	.60+/-.20
60	WATER	930107/930128	LT 1.9	.60+/-.30
60	WATER	930506/930527	LT 1.2	LT .6
60	WATER	930805/930826	LT 1.1	LT .6
60	WATER	931104/931130	LT .9	LT .6

GAMMA SPEC REPORT OF STRG
SAMPLE FREQUENCY IS : SEM-ANNUAL
RESULTS IN PCI/L +/- 2 SIGMA

Sediment

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	SR-89	SR-90
25	SEDIMENT	930506/930506	LT 19.3	11.90+/-6.10
25	SEDIMENT	931019/931019	LT 32.5	28.80+/-9.40
26	SEDIMENT	930506/930506	LT 20.3	14.20+/-6.70
26	SEDIMENT	931019/931019	LT 19.3	13.20+/-5.40
27	SEDIMENT	930506/930506	LT 18.8	12.60+/-6.90
27	SEDIMENT	931019/931019	LT 18.0	20.30+/-9.70
32	SEDIMENT	930506/930506	LT 32.7	34.70+/-12.80
32	SEDIMENT	931019/931019	LT 14.0	11.60+/-5.30
63	SEDIMENT	930510/930510	LT 10.1	5.50+/-3.20
63	SEDIMENT	931019/931019	LT 13.9	6.70+/-3.70
64	SEDIMENT	930510/930510	LT 7.9	LT 3.8
64	SEDIMENT	931019/931019	LT 18.5	LT 7.5
65	SEDIMENT	930510/930510	LT 10.8	6.60+/-3.50
65	SEDIMENT	931022/931022	LT 16.3	LT 8.1
76	SEDIMENT	930510/930510	LT 12.2	7.90+/-3.70
76	SEDIMENT	931022/931022	LT 28.4	20.10+/-8.90

GAMMA SPEC REPORT OF SED
SAMPLE FREQUENCY IS : SEM-ANNUAL
RESULTS IN PCI/KG(DRY) +/- 2 SIGMA

Sediment

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	CO-58	CO-60	CS-134	CS-137	K-40
25	SEDIMENT	930506/930506	LT 11.0	LT 17.3	LT 19.5	LT 23.3	12051.0+/-600.0
25	SEDIMENT	931019/931019	LT 26.7	LT 34.7	LT 21.4	180.0+/-27.0	15047.0+/-659.0
26	SEDIMENT	930506/930506	LT 16.9	LT 13.2	LT 17.5	LT 42.0	13080.0+/-620.0
26	SEDIMENT	931019/931019	LT 13.7	LT 28.2	LT 24.8	170.0+/-27.0	15464.0+/-648.0
27	SEDIMENT	930506/930506	LT 14.6	LT 19.7	LT 15.5	180.0+/-30.0	14729.0+/-670.0
27	SEDIMENT	931019/931019	LT 27.1	LT 30.2	LT 9.3	294.0+/-25.0	17272.0+/-582.0
32	SEDIMENT	930506/930506	LT 35.2	LT 33.9	LT 26.1	757.0+/-70.0	15574.0+/-720.0
32	SEDIMENT	931019/931019	LT 19.8	LT 27.8	LT 19.2	364.0+/-33.0	14899.0+/-662.0
63	SEDIMENT	930510/930510	LT 16.2	LT 14.3	LT 34.1	LT 20.5	5749.0+/-370.0
63	SEDIMENT	931019/931019	LT 17.0	LT 15.0	LT 12.6	LT 11.7	6273.0+/-358.0
64	SEDIMENT	930510/930510	LT 20.6	LT 15.7	LT 12.8	LT 19.1	5811.0+/-300.0
64	SEDIMENT	931019/931019	LT 31.1	LT 24.3	LT 40.9	LT 18.9	9414.0+/-466.0
65	SEDIMENT	930510/930510	LT 14.6	LT 1[illegible].9	LT 12.8	LT 11.0	6467.0+/-370.0
65	SEDIMENT	931022/931022	LT 12.8	LT 1[illegible].2	LT 5.1	LT 11.4	8616.0+/-416.0
76	SEDIMENT	930510/930510	LT 15.0	96.0+/-28.0	LT 25.2	68.0+/-40.0	12716.0+/-685.0
76	SEDIMENT	931022/931022	LT 50.3	230.0+/-53.0	LT 60.8	77.0+/-37.0	3181.0+/-682.0

GAMMA SPEC REPORT OF FSH
SAMPLE FREQUENCY IS : SEM-ANNUAL
RESULTS IN PCI/KG(WET) +/- 2 SIGMA

Fish

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	CO-58 K-40	CO-60 MN-54	CS-134 ZN-65	CS-137	FE-59
25	WHITE PERCH	930506/930507	LT 5.5	LT 12.1	LT 11.0	LT 10.0	LT 9.5
			3024.0+/-290.0	LT 3.6	LT 9.3		
25	FRESHWATER DRUM	930506/930507	LT 9.2	LT 7.3	LT 8.0	LT 12.0	LT 8.2
			2337.0+/-250.0	LT 6.5	LT 18.0		
25	YELLOW PERCH	930506/930507	LT 5.8	LT 6.4	LT 5.5	20.9+/-10.0	LT 8.7
			3189.0+/-280.0	LT 6.0	LT 19.0		
25	WALLEYE	930506/930507	LT 12.3	LT 10.0	LT 10.0	LT 15.2	LT 9.7
			2716.0+/-340.0	LT 9.4	LT 16.1		
25	CATFISH	930506/930507	LT 18.6	LT 17.5	LT 17.0	LT 15.1	LT 48.9
			1800.0+/-334.0	LT 14.3	LT 36.2		
25	WHITE SUCKER	930506/930507	LT 6.3	LT 9.2	LT 4.7	LT 7.2	LT 14.3
			2979.0+/-271.0	LT 7.2	LT 19.4		
25	SMALLMOUTH BASS	930506/930507	LT 6.0	LT 4.0	LT 6.0	LT 7.6	LT 7.5
			2420.0+/-180.0	LT 2.9	LT 9.9		
25	LAKE TROUT	930506/930507	LT 8.0	LT 10.2	LT 7.9	LT 9.1	LT 19.7
			2240.0+/-240.0	LT 7.0	LT 13.8		
25	CATFISH	931019/931020	LT 20.7	LT 9.3	LT 8.2	LT 12.0	LT 30.3
			2423.0+/-208.0	LT 3.3	LT 10.0		
25	ROCK BASS	931019/931020	LT 21.8	LT 4.9	LT 8.6	LT 12.2	LT 31.3
			2663.0+/-330.0	LT 10.5	LT 18.4		
25	RED HORSE	931019/931020	LT 24.7	LT 6.3	LT 11.1	LT 11.2	LT 39.0
			1970.0+/-331.0	LT 11.6	LT 32.1		
25	WALLEYE	931019/931020	LT 11.2	LT 16.6	LT 18.2	LT 21.6	LT 41.2
			3220.0+/-181.0	LT 15.3	LT 33.1		
25	WHITE SUCKER	931019/931020	LT 15.8	LT 30.3	LT 19.5	LT 19.1	LT 30.6
			2729.0+/-499.0	LT 19.4	LT 23.5		
32	WALLEYE	930506/930507	LT 28.9	LT 28.1	LT 23.7	LT 23.3	LT 75.5
			2650.0+/-505.0	LT 29.6	LT 74.8		
32	YELLOW PERCH	930506/930507	LT 5.3	LT 11.9	LT 3.2	13.6+/-8.1	LT 27.1
			3220.0+/-300.0	LT 6.6	LT 6.2		
32	WHITE PERCH	930506/930507	LT 2.6	LT 5.5	LT 8.0	LT 9.2	LT 11.7
			2596.0+/-256.0	LT 4.2	LT 18.4		
32	WHITE SUCKER	930506/930507	LT 4.4	LT 9.0	LT 3.3	LT 8.4	LT 12.7
			2745.0+/-262.0	LT 6.7	LT 12.9		
32	CARP	930506/930507	LT 5.5	LT 7.8	LT 6.3	LT 4.2	LT 7.1
			2392.0+/-253.0	LT 5.9	LT 11.2		
32	FRESHWATER DRUM	930506/930507	LT 5.2	LT 4.8	LT 4.7	15.7+/-1.0	LT 9.1
			2554.0+/-250.0	LT 3.8	LT 13.5		

GAMMA SPEC REPORT OF FSH
SAMPLE FREQUENCY IS : SEM-ANNUAL
RESULTS IN PCI/KG(WET) +/- 2 SIGMA

Fish

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	CO-58 K-40	CO-60 MN-54	CS-134 ZN-65	CS-137	FE-59
32	CATFISH	931019/931020	LT 17.8	LT 13.0	LT 6.6	LT 8.9	LT 12.9
			2320.0+/-284.0	LT 6.3	LT 21.2		
32	WALLEYE	931019/931020	LT 20.9	LT 19.6	LT 19.8	LT 19.2	LT 25.6
			2807.0+/-455.0	LT 13.6	LT 37.8		
32	WHITE SUCKER	931019/931020	LT 4.3	LT 9.1	LT 3.7	LT 8.0	LT 7.5
			3251.0+/-316.0	LT 5.3	LT 18.3		
32	WHITE BASS	931019/931020	LT 18.8	LT 11.9	LT 9.9	LT 21.3	LT 19.7
			2359.0+/-388.0	LT 13.5	LT 11.0		
32	CARP	931019/931020	LT 18.7	LT 14.3	LT 19.4	LT 18.5	LT 45.5
			2400.0+/-362.0	LT 19.3	LT 22.0		
32	LAKE TROUT	931019/931020	LT 28.9	LT 12.9	LT 22.2	LT 21.9	LT 55.0
			2125.0+/-430.0	LT 14.3	LT 30.7		

DIRECT REPORT
SAMPLE FREQUENCY IS : QUARTERLY
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
01	TLD	930107/930402	17.10+/-.40
01	TLD	930402/930707	16.80+/-.20
01	TLD	930706/931007	14.10+/-.30
01	TLD	931007/940106	12.90+/-.20
02	TLD	930107/930402	16.50+/-.10
02	TLD	930402/930707	16.20+/-.40
02	TLD	930706/931007	15.50+/-.20
02	TLD	931007/940106	12.70+/-.40
03	TLD	930107/930402	18.60+/-.40
03	TLD	930402/930707	18.00+/-.20
03	TLD	930706/931007	17.60+/-.30
03	TLD	931007/940106	15.50+/-.40
04	TLD	930107/930402	19.00+/-.20
04	TLD	930402/930707	17.60+/-.20
04	TLD	930706/931007	17.80+/-.10
04	TLD	931007/940106	15.00+/-.10
05	TLD	930107/930402	17.80+/-.40
05	TLD	930402/930707	15.80+/-.60
05	TLD	930706/931007	17.60+/-.30
05	TLD	931007/940106	12.70+/-.40
06	TLD	930107/930402	20.40+/-.10
06	TLD	930402/930707	17.90+/-.20
06	TLD	930706/931007	17.50+/-.20
06	TLD	931007/940106	14.90+/-.20
07	TLD	930107/930402	19.90+/-.10
07	TLD	930402/930707	20.00+/-.40
07	TLD	930706/931007	18.70+/-.70

DIRECT REPORT
SAMPLE FREQUENCY IS : QUARTERLY
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
07	TLD	931007/940106	14.70+/-.20
08	TLD	930107/930402	17.40+/-.30
08	TLD	930402/930707	15.20+/-.30
08	TLD	930706/931007	17.20+/-.30
08	TLD	931007/940106	12.60+/-.40
09	TLD	930107/930402	16.70+/-.20
09	TLD	930402/930707	14.90+/-.30
09	TLD	930706/931007	16.00+/-.10
09	TLD	931007/940106	12.90+/-.20
10	TLD	930107/930402	17.40+/-.30
10	TLD	930402/930707	19.10+/-.30
10	TLD	930706/931007	17.30+/-.20
10	TLD	931007/940106	15.80+/-.20
11	TLD	930107/930402	18.10+/-.60
11	TLD	930402/930707	15.90+/-.20
11	TLD	930706/931007	17.30+/-.40
11	TLD	931007/940106	12.80+/-.30
12	TLD	930107/930402	16.50+/-.20
12	TLD	930402/930707	16.30+/-.20
12	TLD	930706/931007	17.00+/-.20
12	TLD	931007/940106	13.50+/-.10
13	TLD	930107/930402	17.00+/-.30
13	TLD	930402/930707	16.00+/-.30
13	TLD	930706/931007	16.50+/-.20
13	TLD	931007/940106	13.90+/-.20

DIRECT REPORT
SAMPLE FREQUENCY IS : QUARTERLY
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
14	TLD	930107/930402	17.10+/-.20
14	TLD	930402/930707	16.60+/-.40
14	TLD	930706/931007	16.60+/-.30
14	TLD	931007/940106	12.80+/-.20
15	TLD	930107/930402	17.90+/-.20
15	TLD	930402/930707	16.30+/-.20
15	TLD	930706/931007	17.20+/-.30
15	TLD	931007/940106	12.80+/-.40
16	TLD	930107/930402	21.00+/-.30
16	TLD	930402/930707	20.00+/-.30
16	TLD	930706/931007	21.30+/-.20
16	TLD	931007/940106	18.60+/-.20
17	TLD	930107/930402	20.40+/-.20
17	TLD	930402/930707	20.20+/-.10
17	TLD	930706/931007	21.30+/-.20
17	TLD	931007/940106	16.80+/-.40
18	TLD	930107/930402	26.70+/-.30
18	TLD	930402/930707	25.60+/-.40
18	TLD	930706/931007	28.00+/-.20
18	TLD	931007/940106	23.40+/-.20
19	TLD	930107/930402	20.00+/-.10
19	TLD	930402/930707	20.20+/-.20
19	TLD	930706/931007	19.70+/-.20
19	TLD	931007/940106	16.50+/-.20
20	TLD	930107/930402	20.40+/-.10
20	TLD	930402/930707	21.60+/-.40
20	TLD	930706/931007	20.60+/-.20

DIRECT REPORT
SAMPLE FREQUENCY IS : QUARTERLY
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
20	TLD	931007/940106	17.00+/-.20
21	TLD	930107/930402	21.90+/-.50
21	TLD	930402/930707	20.10+/-.30
21	TLD	930706/931007	25.10+/-.20
21	TLD	931007/940106	17.00+/-.30
22	TLD	930107/930402	20.50+/-.10
22	TLD	930402/930707	19.80+/-.40
22	TLD	930706/931007	21.10+/-.10
22	TLD	931007/940106	16.00+/-.20
23	TLD	930107/930402	22.20+/-.40
23	TLD	930402/930707	18.70+/-.40
23	TLD	930706/931007	18.80+/-.20
24	TLD	930107/930402	18.40+/-.40
24	TLD	930402/930707	18.60+/-.20
24	TLD	930706/931007	20.50+/-.10
24	TLD	931007/940106	14.80+/-.30
35	TLD	930107/930402	17.10+/-.20
35	TLD	930402/930707	15.90+/-.20
35	TLD	930706/931007	17.50+/-.20
35	TLD	931007/940106	13.60+/-.10
36	TLD	930107/930402	20.70+/-.20
36	TLD	930402/930707	22.30+/-.30
36	TLD	930706/931007	21.90+/-.10
36	TLD	931007/940106	17.20+/-.10
41	TLD	930107/930402	17.20+/-.40

DIRECT REPORT
SAMPLE FREQUENCY IS : QUARTERLY
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
41	TLD	930402/930707	16.80+/-.40
41	TLD	930706/931007	20.10+/-.10
41	TLD	931007/940106	13.90+/-.10
42	TLD	930107/930402	18.60+/-.20
42	TLD	930402/930707	16.40+/-.20
42	TLD	930706/931007	18.50+/-.10
42	TLD	931007/940106	13.40+/-.30
43	TLD	930107/930402	17.40+/-.40
43	TLD	930402/930707	15.30+/-.10
43	TLD	930706/931007	17.20+/-.20
43	TLD	931007/940106	12.80+/-.30
45	TLD	930107/930402	16.80+/-.30
45	TLD	930402/930707	16.40+/-.30
45	TLD	930706/931007	17.00+/-.10
45	TLD	931007/940106	13.00+/-.10
53	TLD	930107/930402	17.00+/-.30
53	TLD	930402/930707	16.40+/-.40
53	TLD	930706/931007	16.60+/-.20
53	TLD	931007/940106	12.90+/-.30
54	TLD	930402/930707	18.40+/-.20
54	TLD	930706/931007	17.40+/-.20
54	TLD	931007/940106	14.70+/-.10
55	TLD	930107/930402	17.40+/-.30
55	TLD	930402/930707	19.60+/-.20
55	TLD	930706/931007	16.80+/-.20
55	TLD	931007/940106	15.00+/-.30

DIRECT REPORT
SAMPLE FREQUENCY IS : QUARTERLY
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
56	TLD	930107/930402	18.60+/-.40
56	TLD	930706/931007	17.40+/-.30
56	TLD	931007/940106	11.50+/-.10
58	TLD	930107/930402	18.70+/-.30
58	TLD	930402/930707	18.00+/-.20
58	TLD	930706/931007	19.00+/-.20
58	TLD	931007/940106	14.20+/-.20

DIRECT REPORT
SAMPLE FREQUFNCY IS : QUARTERLY2
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
01	TLB	930107/930402	12.60+/-.30
01	TLB	930402/930707	13.70+/-.40
01	TLB	930707/931008	09.40+/-.30
01	TLB	931008/940106	11.50+/-.30
02	TLB	930107/930402	11.40+/-.30
02	TLB	930402/930707	13.50+/-.40
02	TLB	930707/931008	13.30+/-.20
02	TLB	931008/940106	11.40+/-.30
03	TLB	930107/930402	13.30+/-.40
03	TLB	930402/930707	15.40+/-.20
03	TLB	930707/931008	14.80+/-.30
03	TLB	931008/940106	13.70+/-.10
04	TLB	930107/930402	13.40+/-.30
04	TLB	930402/930707	15.00+/-.20
04	TLB	930707/931008	15.10+/-.40
04	TLB	931008/940106	13.50+/-.20
05	TLB	930107/930402	12.20+/-.50
05	TLB	930402/930707	13.40+/-.60
05	TLB	930707/931008	14.10+/-.20
05	TLB	931008/940106	12.40+/-.10
06	TLB	930107/930402	15.00+/-.40
06	TLB	930402/930707	14.90+/-.20
06	TLB	930707/931008	16.50+/-.10
06	TLB	931008/940106	14.70+/-.30
07	TLB	930107/930402	14.70+/-.20
07	TLB	930402/930707	16.80+/-.60
07	TLB	930707/931008	15.40+/-.10

DIRECT REPORT
SAMPLE FREQUENCY IS : QUARTERLY2
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
07	TLB	931008/940106	13.40+/-.20
08	TLB	930107/930402	11.00+/-.40
08	TLB	930402/930707	12.40+/-.50
08	TLB	930707/931008	12.80+/-.20
08	TLB	931008/940106	11.20+/-.30
09	TLB	930107/930402	11.40+/-.40
09	TLB	930402/930707	12.40+/-.40
09	TLB	930707/931008	13.00+/-.10
09	TLB	931008/940106	11.50+/-.30
10	TLB	930107/930402	13.60+/-.20
10	TLB	930402/930707	16.70+/-.40
10	TLB	930707/931008	15.80+/-.10
10	TLB	931008/940106	15.00+/-.40
11	TLB	930107/930402	14.30+/-.20
11	TLB	930402/930707	13.20+/-.30
11	TLB	930707/931008	15.40+/-.10
11	TLB	931008/940106	11.10+/-.40
12	TLB	930107/930402	13.20+/-.40
12	TLB	930402/930707	13.70+/-.60
12	TLB	930707/931008	15.40+/-.10
12	TLB	931008/940106	13.10+/-.10
13	TLB	930107/930402	14.70+/-.20
13	TLB	930402/930707	13.20+/-.20
13	TLB	930707/931008	16.00+/-.10
13	TLB	931008/940106	13.10+/-.20

DIRECT REPORT
SAMPLE FREQUENCY IS : QUARTERLY2
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
14	TLD	930107/930402	14.70+/-.20
14	TLD	930402/930707	13.80+/-.20
14	TLD	930707/931008	15.40+/-.10
14	TLD	931008/940106	12.80+/-.10
15	TLD	930107/930402	13.10+/-.60
15	TLD	930402/930707	13.60+/-.50
15	TLD	930707/931008	13.90+/-.40
15	TLD	931008/940106	12.20+/-.10
16	TLD	930107/930402	17.80+/-.60
16	TLD	930402/930707	17.20+/-.40
16	TLD	930707/931008	20.40+/-.10
16	TLD	931008/940106	16.60+/-.10
17	TLD	930107/930402	16.60+/-.40
17	TLD	930402/930707	17.40+/-.20
17	TLD	930707/931008	20.40+/-.10
17	TLD	931008/940106	15.60+/-.20
18	TLD	930107/930402	22.80+/-.30
18	TLD	930402/930707	22.80+/-.30
18	TLD	930707/931008	24.60+/-.40
18	TLD	931008/940106	19.80+/-.20
19	TLD	930107/930402	14.70+/-.30
19	TLD	930402/930707	16.80+/-.40
19	TLD	930707/931008	16.10+/-.20
19	TLD	931008/940106	13.80+/-.10
20	TLD	930107/930402	15.20+/-.30
20	TLD	930402/930707	17.00+/-.20
20	TLD	930707/931008	15.90+/-.20

DIRECT REPORT
SAMPLE FREQUENCY IS : QUARTERLY2
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
20	TLB	931008/940106	14.80+/-.20
21	TLB	930107/930402	16.60+/-.40
21	TLB	930402/930707	17.20+/-.30
21	TLB	930707/931008	17.60+/-.30
21	TLB	931008/940106	15.40+/-.30
22	TLB	930107/930402	15.30+/-.40
22	TLB	930402/930707	16.60+/-.30
22	TLB	930707/931008	16.60+/-.10
22	TLB	931008/940106	14.20+/-.30
23	TLB	930107/930402	17.10+/-.60
23	TLB	930402/930707	16.30+/-.20
23	TLB	930707/931008	18.20+/-.30
23	TLB	931008/940106	14.60+/-.20
24	TLB	930107/930402	15.50+/-.40
24	TLB	930402/930707	15.70+/-.40
24	TLB	930707/931008	16.30+/-.20
24	TLB	931008/940106	13.60+/-.10
35	TLB	930107/930402	12.90+/-.20
35	TLB	930402/930707	13.50+/-.30
35	TLB	930707/931008	13.90+/-.20
35	TLB	931008/940106	12.20+/-.10
36	TLB	930107/930402	17.80+/-.30
36	TLB	930402/930707	19.90+/-.50
36	TLB	930707/931008	19.60+/-.20
36	TLB	931008/940106	15.70+/-.20

DIRECT REPORT
SAMPLE FREQUENCY IS : QUARTERLY2
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
41	TLB	930107/930402	14.00+/-.40
41	TLB	930402/930707	13.90+/-.40
41	TLB	930707/931008	16.60+/-.20
41	TLB	931008/940106	12.80+/-.10
42	TLB	930107/930402	15.10+/-.30
42	TLB	930402/930707	13.90+/-.20
42	TLB	930707/931008	15.40+/-.10
42	TLB	931008/940106	12.10+/-.10
43	TLB	930107/930402	13.20+/-.60
43	TLB	930402/930707	13.20+/-.30
43	TLB	930707/931008	14.70+/-.30
43	TLB	931008/940106	11.60+/-.10
45	TLB	930107/930402	13.50+/-.40
45	TLB	930402/930707	13.90+/-.20
45	TLB	930707/931008	15.40+/-.10
45	TLB	931008/940106	12.50+/-.10
53	TLB	930107/930402	13.20+/-.40
53	TLB	930402/930707	15.70+/-.10
53	TLB	930707/931008	15.40+/-.10
53	TLB	931008/940106	13.60+/-.10
54	TLB	930402/930707	15.40+/-.20
54	TLB	930707/931008	12.20+/-.30
54	TLB	931008/940106	13.30+/-.20
55	TLB	930107/930402	15.90+/-.60
55	TLB	930402/930707	17.10+/-.30
55	TLB	930707/931008	15.90+/-.10
55	TLB	931008/940106	15.30+/-.30

DIRECT REPORT
SAMPLE FREQUENCY IS : QUARTERLY2
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
56	TLB	930107/930402	15.00+/-.30
56	TLB	930707/931008	13.70+/-.30
56	TLB	931008/940106	11.80+/-.10
58	TLB	930107/930402	13.40+/-.40
58	TLB	930402/930707	15.40+/-.20
58	TLB	930707/931008	15.60+/-.20
58	TLB	931008/940106	13.20+/-.10

DIRECT REPORT
SAMPLE FREQUENCY IS : ANNUAL
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
01	TLA	930107/940106	53.80+/-.20
02	TLA	930107/940106	46.70+/-.50
03	TLA	930107/940106	50.30+/-.60
04	TLA	930107/940106	51.80+/-.10
05	TLA	930107/940106	47.70+/-.10
06	TLA	930107/940106	56.70+/-.20
07	TLA	930107/940106	56.10+/-.10
08	TLA	930107/940106	40.70+/-.30
09	TLA	930107/940106	44.00+/-.30
10	TLA	930107/940106	59.10+/-.80
11	TLA	930107/940106	45.30+/-.90
12	TLA	930107/940106	39.90+/-.20
13	TLA	930107/940106	52.00+/-.30

DIRECT REPORT
SAMPLE FREQUENCY IS : ANNUAL
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
14	TLA	930107/940106	48.60+/-.10
15	TLA	930107/940106	46.60+/-.60
16	TLA	930107/940106	67.60+/-1.10
17	TLA	930107/940106	63.90+/-.20
18	TLA	930107/940106	84.50+/-.20
19	TLA	930107/940106	54.50+/-.70
20	TLA	930107/940106	54.40+/-.30
21	TLA	930107/940106	66.60+/-.20
22	TLA	930107/940106	55.80+/-.10
23	TLA	930107/940106	61.40+/-.30
24	TLA	930107/940106	55.10+/-.50
35	TLA	930107/940106	46.50+/-.20
36	TLA	930107/940106	65.40+/-.40

DIRECT REPORT
SAMPLE FREQUENCY IS : ANNUAL
RESULTS IN MR/QTR +/- 2 SIGMA

Direct Radiation

STATION LOCATION	SAMPLE TYPE	COLLECTION DATE	DIRECT
41	TLA	930107/940106	49.30+/-1.00
42	TLA	930107/940106	52.80+/-.30
43	TLA	930107/940106	46.30+/-.30
45	TLA	930107/940106	46.30+/-.50
53	TLA	930107/940106	49.80+/-.60
54	TLA	930107/940106	52.80+/-.50
55	TLA	930107/940106	58.80+/-.80
56	TLA	930107/940106	55.60+/-.20
58	TLA	930107/940106	49.30+/-1.00