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U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

THREE MILE ISLAND NUCLEAR STATION
UNITS 1 AND 2 (TMI-1 & TMI-2)
OPERATING LICENSE NO. DPR-50 AND POSSESSION ONLY LICENSE NO. DPR-73
DOCKET NOS. 50-289 AND 50-320

SUBJECT: 2002 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM REPORT

In accordance with TMI-1 Technical Specification 6.9.3.1 and TMI-2 Technical Specification 6.8.1.1, enclosed is the Annual Radiological Environmental Operating Report covering the time-period of January 1 through December 31, 2002, for the Three Mile Island Nuclear Station.

Please contact Adam Miller of TMI-1 Regulatory Assurance at (717) 948-8128 if you have any questions regarding this submittal.

Sincerely,

A handwritten signature in cursive script, appearing to read "George H. Gellrich".

George H. Gellrich
Plant Manager

GHG/awm

Enclosure

cc: Region I Administrator
TMI-1 Senior Project Manager
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TMI Senior Resident Inspector
GPU Nuclear TMI-2 Cognizant Officer
File 03011

NMSS07
JE25

Docket No: 50-289
50-320

THREE MILE ISLAND NUCLEAR STATION UNITS 1 and 2

Annual Radiological
Environmental Operating Report

1 January Through 31 December 2002

Prepared By
Teledyne Brown Engineering
Environmental Services



Three Mile Island Nuclear Station
Middletown, PA 17057

April 2003

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I. Summary and Conclusions

This report on the Radiological Environmental Monitoring Program conducted for the Three Mile Island Nuclear Station (TMINS) by AmerGen covers the period 1 January 2002 through 31 December 2002. During that time period, 1,720 analyses were performed on 1337 samples. In assessing all the data gathered for this report and comparing these results with preoperational data, it was concluded that the operation of TMINS had no adverse radiological impact on the environment.

Surface, drinking, effluent, storm, and well water samples were analyzed for concentrations of tritium and gamma emitting nuclides. Surface, drinking, and effluent water samples were also analyzed for concentrations of I-131. Drinking and effluent water samples were also analyzed for concentrations of gross beta. Effluent water samples were also analyzed for concentrations of Sr-89 and Sr-90. Well water samples were also analyzed for concentrations of Sr-90. No Sr-89 and Sr-90 activities were detected. Gross beta, I-131, and tritium activities detected were consistent with those detected in previous years. Iodine-131 detected was from upstream medical sources. No other fission or activation products attributed to TMI release were detected.

Fish (predator and bottom feeder) and sediment samples were analyzed for concentrations of gamma emitting nuclides. Fish samples were also analyzed for concentrations of Sr-89 and Sr-90. No Sr-89 and Sr-90 activity was detected. No fission or activation products were detected in fish. Cesium-137 levels detected in sediment were consistent with levels detected in previous years and were due to previous plant releases and fallout from nuclear weapons testing. No other TMINS-produced fission or activation products were detected in sediment.

Air particulate samples were analyzed for concentrations of gross beta and gamma emitting nuclides. Cosmogenic Be-7 was detected at levels consistent with those detected in previous years. No fission or activation products were detected.

High sensitivity I-131 analyses were performed on weekly air samples. All results were less than the minimum detectable activity.

Cow milk samples were analyzed for concentrations of I-131, gamma emitting nuclides, Sr-89 and Sr-90. No I-131 and Sr-89 activities were detected. Concentrations of naturally occurring K-40 were consistent with those detected in previous years. Sr-90 activities detected were consistent with those detected in previous years. No other fission or activation products were found.

Food Product samples were analyzed for concentrations of gamma emitting nuclides and Sr-90. No Sr-90 activity was detected. Concentrations of naturally occurring K-40 were consistent with those detected in previous years. No fission or activation products were detected.

Environmental gamma radiation measurements were performed quarterly using thermoluminescent dosimeters. Levels detected were consistent with those observed in previous years.

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II. Introduction

The Three Mile Island Nuclear Station (TMINS), consisting of two pressurized water reactors (PWR), is located on the northern one-half of Three Mile Island in the Susquehanna River approximately 2.5 miles south of Middletown in Londonderry Township, Dauphin County, Pennsylvania. TMI-1 is owned and operated by AmerGen and became operational in 1974. TMI-2 is operated by GPU Nuclear, Inc. and owned by Metropolitan Edison (50%), Pennsylvania Electric (25%) and Jersey Central Power & Light (25%). TMI-2 became operational in 1978 and was shut down following the 1979 accident. At the end of 1993, TMI-2 was placed in a condition called Post-Defueling Monitored Storage. TMI-2 is maintained by Amergen under contract with GPU Nuclear.

A Radiological Environmental Monitoring Program (REMP) for TMINS was initiated in 1974. This report covers those analyses performed by Teledyne Brown Engineering (TBE), ICN Pharmaceutical, and Environmental Inc. (Midwest Labs) on samples collected during the period 1 January 2002 through 31 December 2002.

A. Objective of the REMP

The objectives of the REMP are to:

1. Evaluate the relationship between quantities of radioactive material released from the plant and resultant radiation doses to individuals from principal pathways of exposure.
2. Provide data on measurable levels of radiation and radioactive materials in the site environs.
3. To verify inplant controls for the containment of radioactive materials.
4. To determine buildup of long-lived radionuclides in the environment and changes in background radiation levels.
5. To provide reassurance to the public that the program is capable of adequately assessing impacts and identifying noteworthy changes in the radiological status of the environment.
6. To fulfill the requirements of the TMI-1 and TMI-2 Technical Specifications.

B. Implementation of the Objectives

The implementation of the objectives is accomplished by:

1. Identifying significant exposure pathways.
2. Establishing baseline radiological data of media within those pathways.
3. Continuously monitoring those media before and during Station operation to assess Station radiological effects (if any) on man and the environment.

III. Program Description

A. Sample Collection

Samples for the TMINS REMP were collected for AmerGen by Normandeau Associates, RMC Environmental Services Division (RMC). This section describes the general collection methods used by RMC to obtain environmental samples for the TMINS REMP in 2002. Sample locations and descriptions can be found in Tables B-1 and B-2, and Figures B-1 through B-3, Appendix B. The collection procedures used by RMC are listed in Table B-3.

Aquatic Environment

The aquatic environment was evaluated by performing radiological analyses on samples of surface water, drinking water, effluent water, storm water, ground water, fish, and sediment. Two gallon water samples were collected monthly from continuous samplers located at three surface water locations (A3-2, J1-2 and Q9-1), three drinking water locations (G15-2, G15-3 and Q9-1), and one effluent water location (K1-1). Control locations were A3-2 and Q9-1. Monthly grab water samples were taken from one storm water runoff location (EDCB). Grab ground water samples were collected quarterly at seven locations (48S, GP-1, GP-6, GP-8, MS-22, OSF and OS-18), semiannually at 12 locations (GP-9, GP-12, MS-2, MS-5, MS-20, NW-A, NW-B, NW-C, NW-CW, OS-14, RW-1 and RW-2) and annually at eight locations (E1-2, MS-1, MS-4, MS-7, MS-8, MS-19, MS-21 and N2-1). All water samples were collected in new unused plastic bottles, which were rinsed at least twice with source water prior to collection. Fish samples comprising the flesh of two groups, bottom feeder and predator, were collected semiannually at an upstream control (BKG) and a downstream Indicator (IND) location. Sediment samples

composed of recently deposited substrate were collected semiannually at three locations (J2-1, K1-3 and A1-3). In addition, one sediment sample was collected annually at the EDCB. Location A1-3 was the control.

Atmospheric Environment

The atmospheric environment was evaluated by performing radiological analyses on samples of air particulate, airborne iodine, milk, and Food Product. Airborne iodine and particulate samples were collected and analyzed weekly at seven locations (A3-1, E1-2, F1-3, G2-1, H3-1, M2-1, and Q15-1). The control location was Q15-1. Airborne iodine and particulate samples were obtained at each location, using a vacuum pump with charcoal and glass fiber filters attached. The pumps were run continuously and sampled air at the rate of approximately one cubic foot per minute. The filters were replaced weekly and sent to the laboratory for analysis.

Milk samples were collected biweekly at four locations (K15-3, D2-1, E2-2, and G2-1) from March through November, and monthly from December through February. The control location was K15-3. All samples were collected in new unused two gallon plastic bottles from the bulk tank at each location, preserved with sodium bisulfite, and shipped promptly to the laboratory.

Food Products were collected annually at two locations (B10-2 and E1-2). The control location was B10-2. Four different kinds of vegetables were collected near the site boundary in the southeast (SE) and east-southeast (ESE) meteorological sectors, placed in new unused plastic bags, and sent to the laboratory for analysis.

Ambient Gamma Radiation

Direct radiation measurements were made using Panasonic 814 calcium sulfate (CaSO_4) thermoluminescent dosimeters (TLD). The TLD locations were placed on and around the TMINS site as follows:

A site boundary ring consisting of 21 locations (A1-4, B1-1, B1-2, C1-2, D1-1, E1-4, F1-2, F1-4, G1-3, G1-5, G1-6, H1-1, J1-1, J1-3, K1-4, L1-1, M1-1, N1-3, P1-2, Q1-2, and R1-1) near and within the site perimeter representing fence post doses (i.e., at locations where the doses will be potentially greater than maximum annual off-site doses) from TMINS release.

An offsite ring consisting of 58 locations (A3-1, A5-1, A9-3, B2-1, B5-1, B10-1, C1-1, C2-1, C5-1, C8-1, D1-2, D2-2, D6-1, E1-2, E2-3, E5-1, E7-1, F1-1, F2-1, F5-1, F10-1, G1-2, G2-4, G5-1, H3-1, H5-1, H8-1, J3-1, J5-1, J7-1, K2-1, K3-1, K5-1, K8-1, L1-2, L2-1, L5-1, L8-1, M1-2, M2-1, M5-1, M9-1, N1-1, N2-1, N5-1, N8-1, P1-1, P2-1, P5-1, P8-1, Q1-1, Q2-1, Q5-1, Q9-1, R1-2, R3-1, R5-1, and R9-1) extending to approximately 5 miles from the site designed to measure possible exposures to close-in population.

The balance of 11 locations (D15-1, F25-1, G10-1, G15-1, H15-1, J15-1, K15-1, L15-1, N15-2, Q15-1, and R15-1) represent control areas.

The specific TLD locations were determined by the following criteria:

1. The presence of relatively dense population;
2. Site meteorological data taking into account distance and elevation for each of the sixteen–22 1/2 degree sectors around the site, where estimated annual dose from TMINS, if any, would be most significant;
3. On hills free from local obstructions and within sight of the vents (where practical);
4. And near the closest dwelling to the vents in the prevailing downwind direction.

Each TLD station consists of two primary program TLD badges, each of which has three CaSO_4 thermoluminescent phosphors enclosed in plastic, placed at each location in a frame located approximately three feet above ground level. Since each TLD responds to radiation independently, this provides six independent detectors at each station. The TLDs were exchanged quarterly and sent to ICN for analysis.

B. Sample Analysis

This section describes the general analytical methods used by TBE and Midwest Labs to analyze the environmental samples for radioactivity for the TMINS REMP in 2002. The analytical procedures used by the laboratories are listed in Table B-3.

In order to achieve the stated objectives, the current program includes the following analyses:

1. Concentrations of beta emitters in drinking and effluent water, and air particulates.
2. Concentrations of gamma emitters in surface, drinking, effluent, storm, and ground water, air particulates, milk, fish, sediment, and Food Product.
3. Concentrations of tritium in surface, drinking, effluent, storm, and ground water.
4. Concentrations of I-131 in surface, drinking, and effluent water, air and milk.
5. Concentrations of strontium in effluent and ground water, fish, milk, and Food Product.
6. Ambient gamma radiation levels at various site environs.

C. Data Interpretation

The radiological and direct radiation data collected prior to TMINS becoming operational was used as a baseline with which these operational data were compared. For the purpose of this report, TMINS was considered operational at initial criticality. In addition, data were compared to previous years' operational data for consistency and trending. Several factors were important in the interpretation of the data:

1. Lower Limit of Detection and Minimum Detectable Activity

The lower limit of detection (LLD) was defined as the smallest concentration of radioactive material in a sample that would yield a net count (above background) that would be detected with only a 5% probability of falsely concluding that a blank observation represents a "real" signal. The LLD was intended as a before the fact estimate of a system (including instrumentation, procedure and sample type) and not as an after the fact criteria for the presence of activity. All analyses were designed to achieve the required TMINS detection capabilities for environmental sample analysis.

The minimum detectable activity (MDA) is defined above with the exception that the measurement is an after the fact estimate of the presence of activity.

2. Net Activity Calculation and Reporting of Results

Net activity for a sample was calculated by subtracting background activity from the sample activity. Since the REMP measures extremely small changes in radioactivity in the environment, background variations may result in sample activity being lower than the background activity effecting a negative number. An MDA was reported in all cases where positive activity was not detected.

Gamma spectroscopy results for each type of sample were grouped as follows:

For surface, drinking, effluent, storm, and ground water 11 nuclides, Mn-54, Co-58, Fe-59, Co-60, Zn-65, Zr-95, Nb-95, Cs-134, Cs-137, Ba-140 and La-140 were reported.

For fish eight nuclides, K-40, Mn-54, Co-58, Fe-59, Co-60, Zn-65, Cs-134 and Cs-137 were reported.

For sediment six nuclides, K-40, Mn-54, Co-58, Co-60, Cs-134 and Cs-137 were reported.

For air particulate six nuclides, Be-7, Mn-54, Co-58, Co-60, Cs-134 and Cs-137 were reported.

For milk five nuclides, K-40, Cs-134, Cs-137, Ba-140 and La-140 were reported.

For Food Products four nuclides, K-40, I-131, Cs-134 and Cs-137 were reported.

Means and standard deviations of the results were calculated. The standard deviations represent the variability of measured results for different samples rather than single analysis uncertainty.

D. Program Exceptions

For 2002 the TMINS REMP had a sample recovery rate in excess of 99%. Exceptions are listed below:

1. Due to a frozen pipeline, hourly aliquots were not collected by the automatic sampler. Grab samples were obtained to represent the collection period.
12/26/01 – 01/30/02 Location J1-2

2. A grab sample in lieu of a composite sample was collected due to a sample collection error. The automatic sampler was left in the off position.
06/12/02 – 06/19/02 (June), Location Q9-1
3. Numerous hourly aliquots were not collected by the automatic sampler due to a pump malfunction. A grab sample was collected.
11/13/02 – 11/20/02 Location Q9-1
4. Air particulate and air iodine samples were not available for the following periods and locations, due to pump failures:
06/19/2002 – 06/26/2002 (week 25), Location H3-1
09/11/2002 – 09/18/2002 (week 37), Location G2-1
5. Air particulate and air iodine sample volumes were low for the following periods and locations, due to pump failures:
09/18/2002 – 09/25/2002 (week 38), Location G2-1
6. Milk sample I-131 results not reported due to the presence of a non-decaying beta emitter:
06/05/02, Location D2-1
11/06/02, Location G2-1
7. Insufficient sample volume on milk sample to make a complete composite.
11/20/02 Location G2-1
8. TLD sample lost due to vandalism:
Jul – Sep, Location E5-1
9. Food Product sample I-131 LLD not achieved due to delay in counting.
08/01/02, Location E1-2

Each program exception was reviewed to understand the causes of the program exception. Sampling and maintenance errors were reviewed with the personnel involved to prevent recurrence. Occasional equipment breakdowns and power outages were unavoidable.

The overall sample recovery rate indicates that the appropriate procedures and equipment are in place to assure reliable program implementation.

E. Program Changes

Beginning the second quarter 2002, Teledyne Brown Engineering Environmental Services became the primary laboratory and Environmental Inc. (Midwest Labs) became the QC laboratory.

Tritium and gamma spectroscopy analyses in surface water were added to location A3-2 in June 2002

IV. Results and Discussion

A. Aquatic Environment

1. Surface Water

Samples were taken from a continuous sampler at three locations (A3-2, J1-2, and Q9-1) on a monthly schedule. Of these locations only J1-2 located downstream, could be affected by TMINS' effluent releases. The following analyses were performed.

Tritium

Monthly samples from all locations were analyzed for tritium activity (Table C-I.1, Appendix C). Positive tritium activity was detected in seven of 31 samples, primarily at location J1-2 which is located immediately downstream of the TMINS effluent outfall. All samples ranged from <92 to 1,540 pCi/l. Concentrations detected were consistent with those detected in previous years and were well below any regulatory limits. (Figures C-1 and C-2, Appendix C).

Iodine

Monthly samples from location A3-2 were analyzed for iodine-131 activity (Table C-I.2, Appendix C). Iodine-131 activity was detected in four samples. The values ranged from <0.2 to 1.7 pCi/l. Concentrations detected were consistent with those detected in previous years. Iodine-131 activity was the result of medical treatments.

Gamma Spectrometry

Samples from all locations were analyzed for gamma emitting nuclides (Table C-I.3, Appendix C). All nuclides were less than the MDA.

2. Drinking Water

Monthly samples were collected from continuous water samplers at three locations (G15-2, G15-3, and Q9-1). Two locations (G15-2 and G15-3) could be affected by TMINS' effluent releases. The following analyses were performed:

Gross Beta

Monthly samples from all locations were analyzed for concentrations of gross beta. (Tables C-II.1, Appendix C). Gross beta activity was detected in 27 of 36 samples. The values ranged from 1.3 to 4.5 pCi/l. Concentrations detected were consistent with those detected in previous years (Figures C-3, Appendix C).

Iodine-131

Monthly samples from all locations were analyzed for concentrations of iodine-131. (Tables C-II.2, Appendix C). Iodine-131 activity was detected in one of 36 samples. The value was 0.4 pCi/l. The highest MDA was calculated at 1.0 pCi/l.

Tritium

Monthly samples from all locations were analyzed for tritium activity (Table C-II.3, Appendix C). Tritium activity was detected in four of 36 samples. The values ranged from <89 to 215 pCi/l. Concentrations detected were consistent with those detected in previous years (Figures C-4, Appendix C).

Gamma Spectrometry

Samples from all locations were analyzed for gamma emitting nuclides (Table C-II.4, Appendix C). All nuclides were less than the MDA.

3. Effluent Water

Monthly samples were collected from continuous water samplers at one location (K1-1). The following analyses were performed:

Gross Beta

Monthly samples from location K1-1 were analyzed for concentrations of gross beta. (Tables C–III.1, Appendix C). Gross beta was detected in all 12 samples. The values ranged from 2.6 to 6.2 pCi/l. Concentrations detected were consistent with those detected in previous years.

Iodine-131

Monthly samples from location K1-1 were analyzed for concentrations of iodine-131. (Tables C– III.1, Appendix C). Iodine activity was detected in three samples. The values ranged from <0.2 to 2.1 pCi/l. Concentrations detected were consistent with those detected in previous years.

Tritium

Monthly samples from location K1-1 were analyzed for tritium activity (Table C– III.1, Appendix C). Tritium activity was detected in six samples. The values ranged from <101 to 20,100 pCi/l. Concentrations detected were consistent with those detected in previous years.

Strontium

Semiannual samples from location K1-1 were analyzed for Sr-89 and Sr-90 (Table C– III.1, Appendix C). No strontium activity was detected. The highest MDA was calculated at 1.2 pCi/l for Sr-89 and at 0.5 pCi/l for Sr-90.

Gamma Spectrometry

Samples from location K1-1 were analyzed for gamma emitting nuclides (Table C– III.2, Appendix C). All nuclides were less than the MDA.

4. Storm Water

Monthly grabs from the storm water collection basin (EDCB) were composited quarterly. The following analyses were performed:

Tritium

All samples from location EDCB were analyzed for tritium activity

(Table C–IV.1, Appendix C). Tritium activity was detected in three samples. The values ranged from <168 to 297 pCi/l. Concentrations detected were consistent with those detected in previous years.

Gamma Spectrometry

Samples from location EDCB were analyzed for gamma emitting nuclides (Table C–IV.1, Appendix C). All nuclides were less than the MDA.

5. Ground Water

Quarterly, semiannual and annual grab samples were collected at 27 locations (48S, GP-1, GP-6, GP-8, MS-22, OSF, OS-18, GP-9, GP-12, MS-2, MS-5, MS-20, NW-A, NW-B, NW-C, NW-CW, OS-14, RW-1, RW-2, E1-2, MS-1, MS-4, MS-7, MS-8, MS-19, MS-21 and N2-1). The following analyses were performed:

Tritium

All samples from the locations were analyzed for tritium activity (Table C–V.1, Appendix C). Tritium activity was detected in 50 of 59 samples. The values ranged from <98 to 8,090 pCi/l. Concentrations detected were consistent with those detected in previous years.

Strontium

Annual samples from four locations (48S, MS-2, MS-8 and OS-14) were analyzed for Sr-90 (Table C–V.2, Appendix C). No Sr-90 activity was detected. The highest MDA was calculated at <0.2 pCi/l.

Gamma Spectrometry

Quarterly samples from two locations (48S and OSF) and annual samples from 10 locations (E1-2, MS-2, MS-5, MS-8, MS-20, MS-22, N2-1, OS-14, RW-1 and RW-2) were analyzed for gamma emitting nuclides (Table C–V.2, Appendix C). All nuclides were less than the MDA.

6. Fish

Fish samples comprised of bottom feeder and predator were

collected at two locations (IND and BKG) semiannually. Location IND could be affected by TMINS' effluent releases. The following analysis was performed:

Strontium

The edible portion of fish samples from both locations were analyzed for Sr-89 and Sr-90. (Table C–VI.1, Appendix C). No strontium activity was detected. The highest MDA was calculated at <15 pCi/kg wet for Sr-89 and at <4 pCi/kg wet for Sr-90.

Gamma Spectrometry

The edible portion of fish samples from both locations was analyzed for gamma emitting nuclides (Table C–VI.2, Appendix C). Naturally occurring K-40 was found at all stations and ranged from 3,060 to 3,460 pCi/kg wet and was consistent with levels detected in previous years. No fission or activation products were found.

7. Sediment

Aquatic sediment samples were collected at three locations (A1-3, J2-1 and K1-3) semiannually. In addition, location EDCB was sampled annually. Of these locations two (J2-1 and K1-3) could be affected by TMINS' effluent releases. The following analysis was performed:

Gamma Spectrometry

Sediment samples from all four locations were analyzed for gamma emitting nuclides (Table C–VII.1, Appendix C). Nuclides detected were naturally occurring K-40, and the fission product Cs-137. K-40 was found at all stations and ranged from 9,748 to 18,470 pCi/kg dry. Concentrations of the fission product Cs-137 were found in all samples. Location EDCB had the highest average concentration of 288 pCi/kg dry. The activity detected was consistent with those detected in the pre-operational years (Figure C-5, Appendix C). No other TMINS fission or activation products were found.

B. Atmospheric Environment

1. Airborne

a. Air Particulates

Continuous air particulate samples were collected from seven locations on a weekly basis. The seven locations were separated into three groups: Group I represents locations within the TMINS site boundary (E1-2 and F1-3), Group II represents the location at an intermediate distance from the TMINS site (A3-1, G2-1, M2-1, AND H3-1), and Group III represents the control location at a remote distance from TMINS (Q15-1). The following analyses were performed:

Gross Beta

Weekly samples were analyzed for concentrations of beta emitters (Table C–VIII.1 and C–VIII.2, Appendix C).

Detectable gross beta activity was observed at all locations. Comparison of results among the three groups aid in determining the effects, if any, resulting from the operation of TMINS. The results from the On-Site locations (Group I) ranged from 7 to 31 E–3 pCi/m³ with a mean of 19 E–3 pCi/m³. The results from the Offsite location (Group II) ranged from 6 to 40 E–3 pCi/m³ with a mean of 19 E–3 pCi/m³. The results from the Control locations (Group III) ranged from 8 to 32 E–3 pCi/m³ with a mean of 20 E–3 pCi/m³. Comparison of the 2002 air particulate data with previous years data indicate no effects from the operation of TMINS (Figure C–6, Appendix C). In addition a comparison of the weekly mean values for 2002 indicate no notable differences among the three groups (Figure C–7, Appendix C).

Gamma Spectrometry

Weekly samples were composited quarterly and analyzed for gamma emitting nuclides (Table C–VIII.3, Appendix C). Naturally occurring Be–7 due to cosmic ray activity was detected in all samples. These values ranged from 36 to 81 E–3 pCi/m³. All other nuclides were less than the MDA.

b. Airborne Iodine

Continuous air samples were collected from seven (A3-1, E1-2, F1-3, G2-1, H3-1, M2-1, and Q15-1) locations and analyzed weekly for I-131 (Table C-IX.1, Appendix C). All results were less than the MDA.

2. Terrestrial

a. Milk

Samples were collected from four locations (K15-3, D2-1, E2-2, and G2-1) biweekly March through November and monthly December through February. The following analyses were performed:

Iodine-131

Milk samples from all locations were analyzed for concentrations of I-131 (Table C-X.1, Appendix C). All results were less than the MDA.

Strontium

Milk samples from all locations were composited quarterly and analyzed for Sr-89 and Sr-90 (Table C-X.2, Appendix C). No Sr-89 activity was detected. Sr-90 activity was detected. The values ranged from 0.5 to 2.5 pCi/l. The activity detected was consistent with those detected in the pre-operational years (Figure C-8, Appendix C).

Gamma Spectrometry

Milk samples from all locations were analyzed for concentrations of gamma emitting nuclides (Table C-X.3, Appendix C).

Naturally occurring K-40 activity was found in all samples. The values ranged from 1,100 to 2,060 pCi/l. All other nuclides were less than the MDA.

b. Food Product

Samples were collected from two locations (B10-2 and E1-2) annually. The following analyses were performed:

Strontium

Each Food Product sample was analyzed for concentrations of Sr-90 (Table C–XI.1, Appendix C). No Sr-90 activity was detected. The highest MDA was calculated at <6 pCi/l.

Gamma Spectrometry

Each Food Product sample was analyzed for concentrations of gamma emitting nuclides (Table C–XI.1, Appendix C).

Naturally occurring K–40 activity was found in all samples. The values ranged from 1,740 to 4,960 pCi/l. All other nuclides were less than the MDA.

C. Ambient Gamma Radiation

Ambient gamma radiation levels were measured utilizing Panasonic 814 (CaSO₄) thermoluminescent dosimeters. Fifty-eight TLD locations were established around the site. Results of TLD measurements are listed in Tables C–XII.1 to C–XII.3, Appendix C.

TLD measurements were below 10 mR/standard month, with a range of 3.4 to 8.5 mR/standard month. A comparison of the Site Boundary and Intermediate Distance data to the Control Location data, indicate that the ambient gamma radiation levels from the Control Locations D15-1, F25-1, G10-1, G15-1, H15-1, J15-1, K15-1, L15-1, N15-2, Q15-1, and R15-1 were consistently higher. The historical ambient gamma radiation data from Locations D15-1, F25-1, G10-1, G15-1, H15-1, J15-1, K15-1, L15-1, N15-2, Q15-1, and R15-1 were plotted along with similar data from the Site, Intermediate Distance and Outer Ring Locations (Figure C–9, Appendix C). Locations D15-1, F25-1, G10-1, G15-1, H15-1, J15-1, K15-1, L15-1, N15-2, Q15-1, and R15-1 have a historical high bias, but tracked with the data from all three groups, this bias is most likely due to radon emanating from the ground.

D. Land Use Survey

A Land Use Survey conducted during the May to September 2002 growing season around the Three Mile Island Nuclear Station (TMINS) was performed by Normandeau Associates, RMC Environmental Services Division for AmerGen to comply with Sections 2.15 and 3.4.2 of the Plant's Offsite Dose Calculation Manual. The purpose of the survey was to document the nearest resident and milk-producing animal in each of the

sixteen 22 ½ degree sectors around the site. The distance and direction of all locations from the TMINS reactor buildings were positioned using Global Positioning System (GPS) technology. There were no changes required to the TMINS REMP, as a result of this survey. The results of this survey are summarized below.

Distance in Miles from the TMINS Reactor Buildings		
Sector	Residence	Milk Farm
1 N	1.1	2.1
2 NNE	0.7	-
3 NE	0.5	4.1
4 ENE	0.5	1.1
5 E	0.4	1.1
6 ESE	1.1	3.2
7 SE	0.7	1.4
8 SSE	0.7	-
9 S	2.3	-
10 SSW	0.6	4.8
11 SW	0.5	-
12 WSW	0.5	-
13 W	0.4	-
14 WNW	0.4	3.7
15 NW	0.4	-
16 NNW	0.7	-

APPENDIX A

RADIOLOGICAL ENVIRONMENTAL MONITORING REPORT SUMMARY

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE THREE MILE ISLAND NUCLEAR STATION, 2002**

Name of Facility: THREE MILE ISLAND NUCLEAR STATION				DOCKET NUMBER: 50-289 & 50-320		REPORTING PERIOD: 2002		
Location of Facility: MIDDLETOWN COUNTY, PA				INDICATOR LOCATIONS	CONTROL LOCATION	LOCATION WITH HIGHEST ANNUAL MEAN		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	MEAN (F) RANGE	MEAN (F) RANGE	MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
A-1 SURFACE WATER (PCI/LITER)	TRITIUM	31	3000	511 (6/12) (<92/1540)	145 (1/19) (<94/<186)	511 (6/12) (<92/1540)	J1-2 INDICATOR WEST SHORE, TMI 0.5 MILES S OF SITE	0
	I-131	12	N/A	N/A	0.7 (4/12) (<0.2/1.7)	0.7 (4/12) (<0.2/1.7)	A3-2 CONTROL SWATARA CREEK 2.5 MILES N OF SITE	0
	GAMMA MN-54	31	15	4 (0/12) (<2/<8)	3 (0/19) (<1/<6)	4 (0/12) (<2/<8)	J1-2 INDICATOR WEST SHORE, TMI 0.5 MILES S OF SITE	0
	CO-58		15	4 (0/12) (<2/<8)	3 (0/19) (<1/<6)	4 (0/12) (<2/<8)	J1-2 INDICATOR WEST SHORE, TMI 0.5 MILES S OF SITE	0
	CO-60		15	4 (0/12) (<2/<7)	3 (0/19) (<1/<5)	4 (0/12) (<2/<7)	J1-2 INDICATOR WEST SHORE, TMI 0.5 MILES S OF SITE	0
	FE-59		30	8 (0/12) (<4/<16)	7 (0/19) (<2/<11)	8 (0/12) (<4/<16)	J1-2 INDICATOR WEST SHORE, TMI 0.5 MILES S OF SITE	0
	ZN-65		30	8 (0/12) (<4/<18)	7 (0/19) (<1/<13)	8 (0/12) (<4/<18)	J1-2 INDICATOR WEST SHORE, TMI 0.5 MILES S OF SITE	0
	ZR-95		30	7 (0/12) (<4/<13)	6 (0/19) (<1/<9)	7 (0/12) (<4/<13)	J1-2 INDICATOR WEST SHORE, TMI 0.5 MILES S OF SITE	0

FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE THREE MILE ISLAND NUCLEAR STATION, 2002**

Name of Facility: THREE MILE ISLAND NUCLEAR STATION				DOCKET NUMBER: 50-289 & 50-320		REPORTING PERIOD: 2002		
Location of Facility: MIDDLETOWN COUNTY, PA				INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	MEAN (F) RANGE	MEAN (F) RANGE	MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
A-2 DRINKING WATER (PCI/LITER)	NB-95		15	4 (0/12) (<2/<8)	4 (0/19) (<1<6)	4 (0/12) (<2/<8)	J1-2 INDICATOR WEST SHORE, TMI 0.5 MILES S OF SITE	0
	CS-134		15	4 (0/12) (<2/<8)	3 (0/19) (<1<6)	4 (0/12) (<2/<8)	J1-2 INDICATOR WEST SHORE, TMI 0.5 MILES S OF SITE	0
	CS-137		18	4 (0/12) (<2/<8)	3 (0/19) (<1<6)	4 (0/12) (<2/<8)	J1-2 INDICATOR WEST SHORE, TMI 0.5 MILES S OF SITE	0
	BA-140		60	24 (0/12) (<11/<36)	20 (0/19) (<8/<35)	24 (0/12) (<11/<36)	J1-2 INDICATOR WEST SHORE, TMI 0.5 MILES S OF SITE	0
	LA-140		15	7 (0/12) (<2/<11)	6 (0/19) (<2/<12)	7 (0/7) (<4/<9)	A3-2 CONTROL SWATARA CREEK 2.5 MILES N OF SITE	0
	GROSS BETA	36	4	2.7 (20/24) (<1.5/4.5)	2.0 (7/12) (1.3/3.0)	3.0 (10/12) (<1.5/4.0)	G15-2 INDICATOR WRIGHTSVILLE WATER SUPPLY 13.6 MILES SE OF SITE	0
	I-131	36	1	0.4 (1/24) (<0.2/<1.0)	0.5 (0/12) (<0.2/<0.9)	0.5 (0/12) (<0.2/<0.9)	Q9-1 CONTROL STEELTON WATER AUTHORITY 8.5 MILES NW OF SITE	0
	TRITIUM	36	2000	139 (3/24) (<89/215)	136 (1/12) (<89/<178)	142 (3/12) (<89/215)	G15-3 INDICATOR LANCASTER WATER AUTHORITY 14.8 MILES SE OF SITE	0

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Name of Facility: THREE MILE ISLAND NUCLEAR STATION Location of Facility: MIDDLETOWN COUNTY, PA				DOCKET NUMBER: 50-289 & 50-320 REPORTING PERIOD: 2002					
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR LOCATIONS MEAN (F) RANGE	CONTROL LOCATION MEAN (F) RANGE	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS	
	GAMMA MN-54	36	15	4 (0/24) (<1/<6)	4 (0/12) (<1/<6)	4 (0/12) (<1/<6)	G15-2 INDICATOR WRIGHTSVILLE WATER SUPPLY 13.6 MILES SE OF SITE	0	
	CO-58		15	3 (0/24) (<1/<6)	4 (0/12) (<1/<6)	4 (0/12) (<1/<6)	Q9-1 CONTROL STEELTON WATER AUTHORITY 8.5 MILES NW OF SITE	0	
	CO-60		15	3 (0/24) (<1/<6)	4 (0/12) (<1/<6)	4 (0/12) (<1/<6)	Q9-1 CONTROL STEELTON WATER AUTHORITY 8.5 MILES NW OF SITE	0	
	FE-59		30	7 (0/24) (<3/<12)	8 (0/12) (<2/<13)	8 (0/12) (<2/<13)	Q9-1 CONTROL STEELTON WATER AUTHORITY 8.5 MILES NW OF SITE	0	
	ZN-65		30	7 (0/24) (<2/<14)	7 (0/12) (<1/<13)	7 (0/12) (<1/<13)	Q9-1 CONTROL STEELTON WATER AUTHORITY 8.5 MILES NW OF SITE	0	
	ZR-95		30	6 (0/24) (<2/<11)	6 (0/12) (<1/<11)	7 (0/12) (<4/<9)	G15-3 INDICATOR LANCASTER WATER AUTHORITY 14.8 MILES SE OF SITE	0	
	NB-95		15	4 (0/24) (<2/<7)	4 (0/12) (<1/<7)	4 (0/12) (<1/<7)	Q9-1 CONTROL STEELTON WATER AUTHORITY 8.5 MILES NW OF SITE	0	
	CS-134		15	3 (0/24) (<1/<6)	3 (0/12) (<1/<6)	3 (0/12) (<2/<5)	G15-3 INDICATOR LANCASTER WATER AUTHORITY 14.8 MILES SE OF SITE	0	

FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

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MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	MEAN (F) RANGE	MEAN (F) RANGE	MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
A-4 EFFLUENT WATER (PCI/LITER)	CS-137		18	4 (0/24) (<1/<6)	4 (0/12) (<1/<6)	4 (0/12) (<1/<6)	Q9-1 CONTROL STEELTON WATER AUTHORITY 8.5 MILES NW OF SITE	0
	BA-140		60	21 (0/24) (<8/<30)	20 (0/12) (<7/<43)	22 (0/12) (<12/<30)	G15-3 INDICATOR LANCASTER WATER AUTHORITY 14.8 MILES SE OF SITE	0
	LA-140		15	7 (0/24) (<2/<10)	6 (0/12) (<2/<13)	7 (0/12) (<2/<10)	G15-3 INDICATOR LANCASTER WATER AUTHORITY 14.8 MILES SE OF SITE	0
	GROSS BETA	12	N/A	4.0 (12/12) (2.6/6.2)	N/A	4.0 (12/12) (2.6/6.2)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	I-131	12	N/A	0.8 (3/12) (<0.2/2.1)	N/A	0.8 (3/12) (<0.2/2.1)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	H-3	12	N/A	4783 (6/12) (<101/20100)	N/A	4783 (6/12) (<101/20100)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	SR-89	2	N/A	1.2 (0/2) (<1.2)	N/A	1.2 (0/2) (<1.2)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	SR-90	2	N/A	0.5 (0/2) (<0.5)	N/A	0.5 (0/2) (<0.5)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0

FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

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Location of Facility: MIDDLETOWN COUNTY, PA				INDICATOR LOCATIONS	CONTROL LOCATION	LOCATION WITH HIGHEST ANNUAL MEAN		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	MEAN (F) RANGE	MEAN (F) RANGE	MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
	GAMMA MN-54	12	N/A	4 (0/12) (<2/<7)	N/A	4 (0/12) (<2/<7)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	CO-58		N/A	4 (0/12) (<2/<7)	N/A	4 (0/12) (<2/<7)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	CO-60		N/A	4 (0/12) (<2/<6)	N/A	4 (0/12) (<2/<6)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	FE-59		N/A	8 (0/12) (<2/<13)	N/A	8 (0/12) (<2/<13)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	ZN-65		N/A	8 (0/12) (<2/<15)	N/A	8 (0/12) (<2/<15)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	ZR-95		N/A	7 (0/12) (<4/<12)	N/A	7 (0/12) (<4/<12)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	NB-95		N/A	4 (0/12) (<2/<8)	N/A	4 (0/12) (<2/<8)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	CS-134		N/A	4 (0/12) (<2/<7)	N/A	4 (0/12) (<2/<7)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0

FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE THREE MILE ISLAND NUCLEAR STATION, 2002**

Name of Facility: THREE MILE ISLAND NUCLEAR STATION Location of Facility: MIDDLETOWN COUNTY, PA				DOCKET NUMBER: 50-289 & 50-320 REPORTING PERIOD: 2002				
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR LOCATIONS MEAN (F) RANGE	CONTROL LOCATION MEAN (F) RANGE	LOCATION WITH HIGHEST ANNUAL MEAN		NUMBER OF NONROUTINE REPORTED MEASUREMENTS
						MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	
9-V STORM WATER (PCI/LITER)	CS-137		N/A	4 (0/12) (<2/<7)	N/A	4 (0/12) (<2/<7)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	BA-140		N/A	23 (0/12) (<9/<43)	N/A	23 (0/12) (<9/<43)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	LA-140		N/A	7 (0/12) (<2/<13)	N/A	7 (0/12) (<2/<13)	K1-1 INDICATOR MAIN STATION LIQ. DISCHARGE 0.2 MILES SSW ON SITE	0
	TRITIUM	4	N/A	236 (3/4) (<168/297)	N/A	236 (3/4) (<168/297)	EDCB INDICATOR STORM WATER BASIN 0 2 MILES SE ON SITE	0
	GAMMA MN-54	4	N/A	3 (0/4) (<2/<4)	N/A	3 (0/4) (<2/<4)	EDCB INDICATOR STORM WATER BASIN 0.2 MILES SE ON SITE	0
	CO-58		N/A	3 (0/4) (<2/<4)	N/A	3 (0/4) (<2/<4)	EDCB INDICATOR STORM WATER BASIN 0 2 MILES SE ON SITE	0
	CO-60		N/A	3 (0/4) (<2/<3)	N/A	3 (0/4) (<2/<3)	EDCB INDICATOR STORM WATER BASIN 0 2 MILES SE ON SITE	0
	FE-59		N/A	6 (0/4) (<4/<8)	N/A	6 (0/4) (<4/<8)	EDCB INDICATOR STORM WATER BASIN 0 2 MILES SE ON SITE	0

FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

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THE THREE MILE ISLAND NUCLEAR STATION, 2002**

Name of Facility: THREE MILE ISLAND NUCLEAR STATION				DOCKET NUMBER: 50-289 & 50-320		REPORTING PERIOD: 2002		
Location of Facility: MIDDLETOWN COUNTY, PA				INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	MEAN (F) RANGE	MEAN (F) RANGE	MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
A-7	ZN-65		N/A	5 (0/4) (<4/<7)	N/A	5 (0/4) (<4/<7)	EDCB INDICATOR STORM WATER BASIN 0.2 MILES SE ON SITE	0
	ZR-95		N/A	6 (0/4) (<4/<7)	N/A	6 (0/4) (<4/<7)	EDCB INDICATOR STORM WATER BASIN 0.2 MILES SE ON SITE	0
	NB-95		N/A	3 (0/4) (<2/<5)	N/A	3 (0/4) (<2/<5)	EDCB INDICATOR STORM WATER BASIN 0.2 MILES SE ON SITE	0
	CS-134		N/A	3 (0/4) (<2/<4)	N/A	3 (0/4) (<2/<4)	EDCB INDICATOR STORM WATER BASIN 0.2 MILES SE ON SITE	0
	CS-137		N/A	3 (0/4) (<2/<4)	N/A	3 (0/4) (<2/<4)	EDCB INDICATOR STORM WATER BASIN 0.2 MILES SE ON SITE	0
	BA-140		N/A	18 (0/4) (<11/<26)	N/A	18 (0/4) (<11/<26)	EDCB INDICATOR STORM WATER BASIN 0.2 MILES SE ON SITE	0
	LA-140		N/A	5 (0/4) (<3/<8)	N/A	5 (0/4) (<3/<8)	EDCB INDICATOR STORM WATER BASIN 0.2 MILES SE ON SITE	0
GROUND WATER (PCI/LITER)	H-3	60	N/A	872 (50/60) (<98/8090)	N/A	6840 (2/2) (5590/8090)	NW-C ONSITE WELL	0

FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE THREE MILE ISLAND NUCLEAR STATION, 2002**

Name of Facility: THREE MILE ISLAND NUCLEAR STATION				DOCKET NUMBER: 50-289 & 50-320		REPORTING PERIOD: 2002		
Location of Facility: MIDDLETOWN COUNTY, PA				INDICATOR LOCATIONS	CONTROL LOCATION	LOCATION WITH HIGHEST ANNUAL MEAN		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	MEAN (F) RANGE	MEAN (F) RANGE	MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
	SR-90	4	N/A	0.2 (0/4) (<0.2)	N/A	0.2 (0/1) (<0.2)	OS-14 ONSITE WELL	0
	GAMMA MN-54	18	N/A	4 (0/18) ($<1/5$)	N/A	5 (0/1) (<5)	E1-2 TMI VISITORS CENTER 0.4 MILES E OF SITE	0
	CO-58		N/A	4 (0/18) ($<1/7$)	N/A	7 (0/1) (<7)	MS-2 ONSITE WELL	0
	CO-60		N/A	4 (0/18) ($<1/6$)	N/A	5 (0/1) (<5)	E1-2 TMI VISITORS CENTER 0.4 MILES E OF SITE	0
	FE-59		N/A	10 (0/18) ($<3/22$)	N/A	22 (0/1) (<22)	MS-5 ONSITE WELL	0
	ZN-65		N/A	8 (0/18) ($<2/13$)	N/A	13 (0/1) (<13)	MS-5 ONSITE WELL	0
	ZR-95		N/A	8 (0/18) ($<2/13$)	N/A	13 (0/1) (<13)	MS-2 ONSITE WELL	0
	NB-95		N/A	5 (0/18) ($<1/7$)	N/A	7 (0/1) (<7)	MS-2 ONSITE WELL	0

FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE THREE MILE ISLAND NUCLEAR STATION, 2002**

Name of Facility: THREE MILE ISLAND NUCLEAR STATION				DOCKET NUMBER: 50-289 & 50-320		REPORTING PERIOD: 2002		
Location of Facility: MIDDLETOWN COUNTY, PA				INDICATOR LOCATIONS	CONTROL LOCATION	LOCATION WITH HIGHEST ANNUAL MEAN		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	MEAN (F) RANGE	MEAN (F) RANGE	MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
6-V BOTTOM FEEDER (FISH) (PCI/KG WET)	CS-134		N/A	3 (0/18) (<1/<6)	N/A	6 (0/1) (<6)	N2-1 GOLDSBORO MARINA 1.2 MILES W OF SITE	0
	CS-137		N/A	4 (0/18) (<1/<6)	N/A	6 (0/1) (<6)	E1-2 TMI VISITORS CENTER 0.4 MILES E OF SITE	0
	BA-140		N/A	31 (0/18) (<16/<46)	N/A	46 (0/18) (<46)	MS-2 ONSITE WELL	0
	LA-140		N/A	10 (0/18) (<4/<15)	N/A	15 (0/1) (<15)	MS-2 & MS-22 ONSITE WELL	0
	SR-89	4	N/A	10 (0/2) (<8/<12)	14 (0/2) (<13/<15)	14 (0/2) (<13/<15)	BKGB CONTROL CITY ISLAND UPSTREAM OF DISCHARGE	0
	SR-90	4	10	2 (0/2) (<2)	3 (0/2) (<2)	3 (0/1) (<3)	BKGB CONTROL CITY ISLAND UPSTREAM OF DISCHARGE	0
	GAMMA K-40	4	N/A	3386 (2/2) (3311/3460)	3229 (2/2) (3060/3398)	3386 (2/2) (3311/3460)	INDB INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
	MN-54		130	21 (0/2) (<11/<30)	15 (0/2) (<12/<19)	21 (0/2) (<11/<30)	INDB INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0

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**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE THREE MILE ISLAND NUCLEAR STATION, 2002**

Name of Facility: THREE MILE ISLAND NUCLEAR STATION				DOCKET NUMBER: 50-289 & 50-320		REPORTING PERIOD: 2002		
Location of Facility: MIDDLETOWN COUNTY, PA				INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	MEAN (F) RANGE	MEAN (F) RANGE	MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
A-10	CO-58		130	21 (0/2) (<12/<29)	15 (0/2) (<12/<18)	21 (0/2) (<12/<29)	INDB INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
	CO-60		130	19 (0/2) (<11/<27)	15 (0/2) (<12/<18)	19 (0/2) (<11/<27)	INDB INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
	FE-59		260	45 (0/2) (<29/<62)	30 (0/2) (<25/<36)	45 (0/2) (<29/<62)	INDB INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
	ZN-65		260	45 (0/2) (<23/<67)	29 (0/2) (<22/<37)	45 (0/2) (<23/<67)	INDB INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
	CS-134		130	18 (0/2) (<10/<26)	13 (0/2) (<10/<16)	18 (0/2) (<10/<26)	INDB INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
	CS-137		150	20 (0/2) (<11/<28)	15 (0/2) (<12/<18)	20 (0/2) (<11/<28)	INDB INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
PREDATOR (FISH) (PCI/KG WET)	SR-89	4	N/A	10 (0/2) (<8/<13)	13 (0/2) (<12/<15)	13 (0/2) (<12/<15)	BKGP CONTROL CITY ISLAND UPSTREAM OF DISCHARGE	0
	SR-90	4	10	2 (0/2) (<2)	3 (0/2) (<2/<4)	3 (0/2) (<2/<4)	BKGP CONTROL CITY ISLAND UPSTREAM OF DISCHARGE	0

FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE THREE MILE ISLAND NUCLEAR STATION, 2002**

Name of Facility: THREE MILE ISLAND NUCLEAR STATION				DOCKET NUMBER: 50-289 & 50-320		REPORTING PERIOD: 2002		
Location of Facility: MIDDLETOWN COUNTY, PA				INDICATOR LOCATIONS	CONTROL LOCATION	LOCATION WITH HIGHEST ANNUAL MEAN		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	MEAN (F) RANGE	MEAN (F) RANGE	MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
	GAMMA K-40	4	N/A	3279 (2/2) (3210/3348)	3221 (2/2) (3062/3380)	3279 (2/2) (3210/3348)	INDP INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
	MN-54		130	17 (0/2) (<17)	13 (0/2) (<12/<14)	17 (0/2) (<17)	INDP INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
	CO-58		130	19 (0/2) (<16/<21)	14 (0/2) (<12/<16)	19 (0/2) (<16/<21)	INDP INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
	CO-60		130	17 (0/2) (<17/<18)	14 (0/2) (<12/<16)	17 (0/2) (<17/<18)	INDP INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
	FE-59		260	41 (0/2) (<40/<42)	30 (0/2) (<24/<36)	41 (0/2) (<40/<42)	INDP INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
	ZN-65		260	37 (0/2) (<37/<38)	29 (0/2) (<25/<33)	37 (0/2) (<37/<38)	INDP INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
	CS-134		130	15 (0/2) (<14/<15)	13 (0/2) (<11/<14)	15 (0/2) (<14/<15)	INDP INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0
	CS-137		150	18 (0/2) (<18/<19)	15 (0/2) (<13/<17)	18 (0/2) (<18/<19)	INDP INDICATOR YORK HAVEN DAM DOWNSTREAM OF DISCHARGE	0

FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE THREE MILE ISLAND NUCLEAR STATION, 2002**

Name of Facility: THREE MILE ISLAND NUCLEAR STATION Location of Facility: MIDDLETOWN COUNTY, PA				DOCKET NUMBER: 50-289 & 50-320 REPORTING PERIOD: 2002				
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR LOCATIONS MEAN (F) RANGE	CONTROL LOCATION MEAN (F) RANGE	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
SEDIMENT (PCI/KG DRY)	GAMMA K-40	7	N/A	15896 (5/5) (11600/18470)	10574 (2/2) (9748/11400)	17985 (2/2) (17500/18470)	J2-1 INDICATOR YORK HAVEN DAM 1.5 MILES S OF SITE	0
	MN-54		N/A	31 (0/5) (<22/<47)	34 (0/2) (<27/<41)	37 (0/2) (<2/<47)	K1-3 INDICATOR SUSQUEHANNA RIVER 0.3 SSW OF SITE	0
	CO-58		N/A	31 (0/5) (<21/<47)	33 (0/2) (<26/<41)	37 (0/2) (<27/<47)	K1-3 INDICATOR SUSQUEHANNA RIVER 0.3 SSW OF SITE	0
	CO-60		N/A	33 (0/5) (<26/<44)	29 (0/2) (<24/<35)	35 (0/2) (<26/<44)	K1-3 INDICATOR SUSQUEHANNA RIVER 0.3 SSW OF SITE	0
	CS-134		150	27 (0/5) (<17/<38)	29 (0/2) (<23/<35)	32 (0/2) (<25/<38)	K1-3 INDICATOR SUSQUEHANNA RIVER 0.3 SSW OF SITE	0
	CS-137		180	218 (5/5) (139/288)	71 (2/2) (67/75)	288 (1/1) (288)	EDCB INDICATOR STORM WATER BASIN 0.2 MILES SE OF SITE	0
AIR PARTICULATE (E-3 PCI/CU METER)	GROSS BETA	362	10	19 (310/310) (6/40)	20 (52/52) (8/32)	20 (52/52) (8/32)	Q15-1 CONTROL WEST FAIRVIEW 13.5 MILES NW OF SITE	0

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FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

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THE THREE MILE ISLAND NUCLEAR STATION, 2002**

Name of Facility: THREE MILE ISLAND NUCLEAR STATION				DOCKET NUMBER: 50-289 & 50-320		REPORTING PERIOD: 2002		
Location of Facility: MIDDLETOWN COUNTY, PA				INDICATOR LOCATIONS	CONTROL LOCATION	LOCATION WITH HIGHEST ANNUAL MEAN		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	MEAN (F) RANGE	MEAN (F) RANGE	MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
A-13	GAMMA BE-7	28	N/A	64 (24/24) (36/81)	67 (4/4) (47/77)	69 (4/4) (61/81)	E1-2 INDICATOR TMI VISITORS CENTER 0.4 MILES E OF SITE	0
	MN-54		N/A	0.4 (0/24) (<0.2/<0.9)	0.4 (0/4) (<0.4/<0.5)	0.5 (0/4) (<0.3/<0.7)	G2-1 INDICATOR BECKER FARM 1.4 MILES SE OF SITE	0
	CO-58		N/A	0.5 (0/24) (<0.2/<1.3)	0.5 (0/4) (<0.3/<0.6)	0.6 (0/4) (<0.2/<1.3)	H3-1 INDICATOR COLLINS SUBSTATION 2.3 MILES SSE OF SITE	0
	CO-60		N/A	0.4 (0/24) (<0.3/<0.9)	0.4 (0/4) (<0.4)	0.5 (0/4) (<0.3/<0.9)	H3-1 INDICATOR COLLINS SUBSTATION 2.3 MILES SSE OF SITE	0
	CS-134		50	0.4 (0/24) (<0.2/<0.8)	0.4 (0/4) (<0.3/<0.5)	0.5 (0/4) (<0.4/<0.6)	G2-1 INDICATOR BECKER FARM 1.4 MILES SE OF SITE	0
	CS-137		60	0.4 (0/24) (<0.2/<0.9)	0.4 (0/4) (<0.2/<0.4)	0.5 (0/4) (<0.3/<0.6)	G2-1 INDICATOR BECKER FARM 1.4 MILES SE OF SITE	0
AIR IODINE (E-3 PCI/CU.METER)	I-131	362	70	12 (0/310) (<3/<43)	12 (0/52) (<4/<39)	13 (0/52) (<4/<42)	E1-2 INDICATOR TMI VISITORS CENTER 0.4 MILES E OF SITE	0
MILK (PCI/LITER)	I-131	86	1	0.3 (0/64) (<0.1/<0.8)	0.4 (0/22) (<0.1/<0.8)	0.4 (0/21) (<0.1/<0.8)	G2-1 INDICATOR BECKER FARM 1.4 MILES SE OF SITE	0

FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

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Name of Facility: THREE MILE ISLAND NUCLEAR STATION Location of Facility: MIDDLETOWN COUNTY, PA				DOCKET NUMBER: 50-289 & 50-320 REPORTING PERIOD: 2002					
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR LOCATIONS MEAN (F) RANGE	CONTROL LOCATION MEAN (F) RANGE	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS	
A-14	SR-89	16	N/A	1.8 (0/12) (<0.6/<3.5)	2.1 (0/4) (<0.7/<4.0)	2.1 (0/4) (<0.7/<4.0)	K15-3 CONTROL MYERS FARM 14.5 MILES SSW OF SITE	0	
	SR-90	16	2	1.0 (12/12) (0.5/2.5)	0.9 (4/4) (0.8/1.0)	1.6 (4/4) (0.7/2.5)	D2-1 INDICATOR ALWINE FARM 1.1 MILES ENE OF SITE	0	
	GAMMA K-40	88	N/A	1450 (66/66) (1100/2060)	1539 (22/22) (1340/1760)	1539 (22/22) (1340/1760)	K15-3 CONTROL MYERS FARM 14.5 MILES SSW OF SITE	0	
	CS-134		15	4 (0/66) (<2/<8)	4 (0/22) (<2/<7)	4 (0/22) (<2/<8)	G2-1 INDICATOR BECKER FARM 1.4 MILES SE OF SITE	0	
	CS-137		18	4 (0/66) (<2/<8)	4 (0/22) (<2/<6)	4 (0/22) (<2/<8)	G2-1 INDICATOR BECKER FARM 1.4 MILES SE OF SITE	0	
	BA-140		60	22 (0/66) (<8/<44)	22 (0/22) (<8/<35)	23 (0/22) (<9/<44)	G2-1 INDICATOR BECKER FARM 1.4 MILES SE OF SITE	0	
	LA-140		15	6 (0/66) (<2/<14)	6 (0/22) (<3/<10)	7 (0/22) (<3/<14)	G2-1 INDICATOR BECKER FARM 1.4 MILES SE OF SITE	0	
FOOD PRODUCT (PCI/KG WET)	SR-90	2	10	3 (0/1) (<3)	6 (0/1) (<6)	6 (0/1) (<6)	B10-2 CONTROL MILTON HERSHEY SCHOOL 10.1 MILES NNE OF SITE	0	

FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

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MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSES PERFORMED	NUMBER OF ANALYSES PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR LOCATIONS MEAN (F) RANGE	CONTROL LOCATION MEAN (F) RANGE	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS	
A-15	GAMMA K-40	8	N/A	3085 (4/4) (2070/4960)	2608 (4/4) (1740/4050)	3085 (4/4) (2070/4960)	E1-2 INDICATOR TMI VISITORS CENTER 0.4 MILES E OF SITE	0	
	I-131		60	61 (0/4) (<16/<178)	21 (0/4) (<17/<24)	61 (0/4) (<16/<178)	E1-2 INDICATOR TMI VISITORS CENTER 0.4 MILES E OF SITE	0	
	CS-134		60	13 (0/4) (<7/<22)	7 (0/4) (<7/<10)	13 (0/4) (<7/<22)	E1-2 INDICATOR TMI VISITORS CENTER 0.4 MILES E OF SITE	0	
	CS-137		80	12 (0/4) (<8/<21)	9 (0/4) (<7/<10)	12 (0/4) (<8/<21)	E1-2 INDICATOR TMI VISITORS CENTER 0.4 MILES E OF SITE	0	
	DIRECT RADIATION (MILLI-ROENTGEN/STD MO.	TLD-QUARTERLY	359	N/A	4.9 (315/315) (3.4/8.5)	5.5 (44/44) (3.9/8.0)	7.7 (4/4) (7.2/8.5)	H8-1 INDICATOR SAGINAW ROAD 7.4 MILES SSE OF SITE	0

FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

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APPENDIX B

LOCATION DESIGNATION, DISTANCE & DIRECTION, AND SAMPLE COLLECTION & ANALYTICAL METHODS

TABLE B-1: Location Designation and Identification System for the Three Mile Island Nuclear Station

<u>XYZ</u> -	General code for identification of locations, where:
X -	Angular Sector of Sampling Location. The compass is divided into 16 sectors of 22 1/2 degrees each with center at Three Mile Island's Units 1 and 2 off-gas vents. Sector A is centered due North, and others are alphabetical in a clockwise direction.
<u>YY</u> -	Radial Zone of Sampling Location in miles.
Z -	Station's Numerical Designation within sector and zone, using 1, 2, 3... in each sector and zone.

TABLE B-2. Radiological Environmental Monitoring Program - Sampling Locations, Distance and Direction, Three Mile Island Nuclear Generating Station, 2002

<u>Sample Medium</u>	<u>Station Code</u>	<u>Map Number</u>	<u>Distance*</u>	<u>Azimuth</u>	<u>Description</u>
AQS	A1-3	16	0.5 mi	0°	N of site off north tip of TMI in Susquehanna River
ID	A1-4	113	0.3	5	N of Reactor Building on W fence adjacent to North Weather Station, TMI
AP, AI, ID	A3-1	39	2.6	358	N of site at Mill Street Substation
SW	A3-2	40	2.5	355	N of site at Swatara Creek, Middletown
ID	A5-1	44	4.3	3	N of site on Vine Street Exit off Route 283
ID	A9-3	127	8.1	3	N of site at Duke Street Pumping Station, Hummelstown
ID	B1-1	2	0.6	25	NNE of site on light pole in middle of North Bridge, TMI
ID	B1-2	114	0.4	26	NNE of Reactor Building on top of dike, TMI
ID	B2-1	132	1.9	16	NNE of site on Sunset Dr. (off Hillsdale Rd.)
ID	B5-1	45	4.8	18	NNE of site at intersection of School House and Miller Roads
ID	B10-1	61	9.4	21	NNE of site at intersection of West Areba Avenue and Mill Street, Hershey
FP	B10-2	1	10.1	28	NNE of site at Milton Hershey School, Hershey
ID	C1-1	17	0.7	35	NE of site along Route 441 N
ID	C1-2	116	0.3	54	NE of Reactor Building on top of dike, TMI
ID	C2-1	43	1.6	48	NE of site at Middletown Junction
ID	C5-1	46	4.5	42	NE of site on Kennedy Lane
ID	C8-1	62	7.2	48	NE of site at Schenk's Church on School House Road
AQF	Control	-	-	-	All locations where finfish are collected upstream of the TMINS liquid discharge outfall (above Dock St. Dam, Harnsburg) are grouped together and referred to as "control"
GAD	Control	-	-	-	All locations greater than 10 miles from TMINS
ID	D1-1	3	0.2	74	ENE of Reactor Building on top of dike, TMI
ID	D1-2	18	0.6	60	ENE of site on Laurel Road
M	D2-1	29	1.1	65	ENE of site at farm on Gingnch Road
ID	D2-2	133	1.7	73	ENE of site along Hillsdale Rd. (S of Zion Rd.)
ID	D6-1	47	5.2	65	ENE of site off Beagle Road
ID	D15-1	80	10.9	63	ENE of site along Route 241, Lawn, PA
AP, AI, ID, GW, FP	E1-2	19	0.4	95	E of site at TMI Visitor's Center
ID	E1-4	117	0.2	98	E of Reactor Building on top of dike, TMI
M	E2-2	109	1.1	93	E of site at farm on Pecks Road
ID	E2-3	134	1.9	96	E of site along Hillsdale Rd. (N of Creek Rd.)
ID	E5-1	48	4.6	81	E of site at intersection of North Market Street (Route 230) and Zeager Road
ID	E7-1	64	6.8	86	E of site along Hummelstown Street, Elizabethtown
ID	F1-1	20	0.5	117	ESE of site near entrance to 500 kV Substation
ID	F1-2	118	0.2	109	ESE of Reactor Building on top of dike midway within Interim Solid Waste Staging Facility, TMI
AP, AI	F1-3	149	0.6	105	ESE of site in 500 kV Substation
ID	F1-4	154	0.3	115	ESE of Reactor Building on top of dike, TMI
ID	F2-1	135	1.2	120	ESE of site along Engle Road
ID	F5-1	49	4.7	107	ESE of site along Amosite Road
ID	F10-1	66	9.4	112	ESE of site along Donegal Springs Road, Donegal Springs
ID	F25-1	82	21.1	113	ESE of site at intersection of Steel Way and Loop Roads, Lancaster
ID	G1-2	22	0.6	143	SE of site along Route 441 S
ID	G1-3	119	0.3	129	SE of Reactor Building on top of dike, TMI
ID	G1-5	139	0.3	144	SE of Reactor Building on top of dike, TMI
ID	G1-6	140	0.3	141	SE of Reactor Building on top of dike, TMI
AI, AP, M	G2-1	104	1.4	125	SE of site at farm on Becker Road
ID	G2-4	136	1.7	135	SE of site on Becker Road
ID	G5-1	50	4.8	131	SE of site at intersection of Bainbridge and Risser Roads
ID	G10-1	67	9.8	127	SE of site at farm along Engles Tollgate Road, Manetta
ID	G15-1	84	14.4	124	SE of site at Columbia Water Treatment Plant
DW	G15-2	85	13.6	128	SE of site at Wnghtsville Water Treatment Plant
DW	G15-3	86	14.8	124	SE of site at Lancaster Water Treatment Plant
ID	H1-1	5	0.5	167	SSE of site, TMI

TABLE B-2: Radiological Environmental Monitoring Program - Sampling Locations, Distance and Direction, Three Mile Island Nuclear Generating Station, 2002

<u>Sample Medium</u>	<u>Station Code</u>	<u>Map Number</u>	<u>Distance*</u>	<u>Azimuth</u>	<u>Description</u>
AP, AI, ID	H3-1	41	2.3 mi	159°	SSE of site in Falmouth-Collins Substation
ID	H5-1	52	4.1	157	SSE of site by Guard Shack at Brunner Island Steam Electric Station
ID	H8-1	68	7.4	163	SSE of site along Saginaw Road, Starview
ID	H15-1	87	13.2	157	SSE of site at intersection of Orchard and Stonewood Roads, Wilshire Hills
AQF	Indicator	-	-	-	All locations where finfish are collected downstream of the TMINS liquid discharge outfall are grouped together and referred to as "indicator"
GAD	Indicator	-	-	-	All locations within ten miles of TMINS
ROD	Indicator	-	-	-	All locations where rodents are collected within the owner controlled area, TMI
ID	J1-1	6	0.8	182	S of site, TMI
SW	J1-2	23	0.5	188	S of site downstream of the TMINS liquid discharge outfall in Susquehanna River
ID	J1-3	121	0.3	189	S of Reactor Building on wooden post of Building 221, just S of Unit 2 Admin. Building, TMI
AQS	J2-1	31	1.5	182	S of site in Susquehanna River just upstream of the York Haven Dam
ID	J3-1	141	2.7	178	S of site at York Haven/Cly
ID	J5-1	53	4.9	182	S of site along Canal Road, Conewago Heights
ID	J7-1	69	6.5	177	S of site off of Maple Street, Manchester
ID	J15-1	88	12.6	180	S of site in Met-Ed York Load Dispatch Station
EW	K1-1	7	0.2	209	On site at RML-7 Main Station Discharge Building
AQS	K1-3	24	0.3	202	SSW of site in Susquehanna River
ID	K1-4	123	0.2	208	SSW of Reactor Building on top of dike behind Warehouse 2, TMI
ID	K2-1	32	1.1	200	SSW of site on S Shelley Island
ID	K3-1	142	2.1	202	SSW of site along Rt. 262, N of Cly
ID	K5-1	54	5.0	200	SSW of site along Conewago Creek Road, Sinnerstown
ID	K8-1	70	7.4	196	SSW of site at intersection of Copenhafer Road and Route 295, Zions View
ID	K15-1	90	12.7	204	SSW of site on the Bird's Nest Child Care Center Building, Weiglestown
M	K15-3	151	14.5	205	SSW of site at farm along S Salem Church Rd, Dover
ID	L1-1	9	0.1	235	SW of site on top of dike W of Mech. Draft Cooling Tower, TMI
ID	L1-2	26	0.5	221	SW of site on Beech Island
ID	L2-1	33	1.9	227	SW of site along Route 262
ID	L5-1	55	4.1	228	SW of site at intersection of Stevens and Wilson Roads
ID	L8-1	71	8.0	225	SW of site along Rohlers Church Rd, Andersontown
ID	L15-1	91	11.7	225	SW of site on W side of Route 74, rear of church, Mt. Royal
ID	M1-1	129	0.1	249	WSW of Reactor Building on SE corner of U-2 Screenhouse fence, TMI
ID	M1-2	143	0.5	241	WSW of site on W side of unnamed island between N tip of Beech Island and Shelley Island
AP, AI, ID	M2-1	34	1.3	253	WSW of site adjacent to Fishing Creek, Goldsboro
ID	M5-1	56	4.3	249	WSW of site at intersection of Lewisberry and Roxberry Roads, Newberrytown
ID	M9-1	72	8.6	242	WSW of site along Alpine Road, Maytown
ID	N1-1	10	0.7	270	W of site on Shelley Island
ID	N1-3	124	0.1	270	W of Reactor Building on fence adjacent to Screenhouse entrance gate, TMI
ID, GW	N2-1	35	1.2	262	W of site at Goldsboro Marina
ID	N5-1	57	4.9	268	W of site off of Old York Road along Robin Hood Drive
ID	N8-1	73	7.8	260	W of site along Route 382, 1/2 mile north of Lewisberry
ID	N15-2	95	10.4	274	W of site at intersection of Lisburn Road and Main Street, Lisburn
ID	P1-1	12	0.4	293	WNW of site on Shelley Island

TABLE B-2: Radiological Environmental Monitoring Program - Sampling Locations, Distance and Direction, Three Mile Island Nuclear Generating Station, 2002

<u>Sample Medium</u>	<u>Station Code</u>	<u>Map Number</u>	<u>Distance*</u>	<u>Azimuth</u>	<u>Description</u>
ID	P1-2	38	0.2 mi	290°	WNW of Reactor Building on fence N of Unit 1 Screenhouse, TMI
ID	P2-1	36	1.9	283	WNW of site along Route 262
ID	P5-1	58	4.9	285	WNW of site at intersection of Valley Road (Route 262) and Beinhower Road
ID	P8-1	74	8.0	292	WNW of site along Evergreen Road, Reesers Summit
ID	Q1-1	13	0.5	317	NW of site on Shelley Island
ID	Q1-2	125	0.2	318	NW of Reactor Building on fence W of Warehouse 1, TMI
ID	Q2-1	37	1.8	310	NW of site along access road along river
ID	Q5-1	59	5.0	318	NW of site along Lumber Street, Highspire
SW, ID	Q9-1	76	8.5	308	NW of site at the Steelton Water Company
AP, AI, ID	Q15-1	97	13.5	305	NW of site behind West Fairview Fire Dept. Social Hall
ID	R1-1	14	0.2	335	NNW of Reactor Building along W fence, TMI
ID	R1-2	27	0.7	332	NNW of site on Henry Island
ID	R3-1	107	2.6	338	NNW of site at Crawford Station, Middletown
ID	R5-1	60	4.9	339	NNW of site at intersection of Spring Garden Drive and Route 441
ID	R9-1	77	8.1	340	NNW of site at intersection of Derry and 66th Streets, Rutherford Heights
ID	R15-1	99	11.2	330	NNW of site at intersection of Route 22 and Colonial Road, Colonial Park

IDENTIFICATION KEY

ID = Immersion Dose (TLD)
 SW = Surface Water
 AI = Air Iodine
 AP = Air Particulate
 FP = Food Products (Green Leafy Vegetation, Fruits, Vegetables)

GW = Ground Water (offsite)
 DW = Drinking Water
 M = Milk (Cow)
 GAD = Meat (Game)

AQF = Finfish
 AQS = Aquatic Sediment
 EW = Effluent Water
 ROD = Rodents

TABLE B-3: Radiological Environmental Monitoring Program – Summary of Sample Collection and Analytical Methods, Three Mile Island Nuclear Station, 2002

Sample Medium	Analysis	Sampling Method	Collection Procedure Number	Sample Size	Analytical Procedure Number
Surface Water	Gamma Spectroscopy	Monthly composite from a continuous water compositor.	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-042-5 Determination of gamma emitting radionuclides Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Surface Water	Tritium	Monthly composite from a continuous water compositor.	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-052-35 Determination of tritium in water by liquid scintillation Env. Inc., T-02 Determination of tritium in water (direct method)
Surface Water	Iodine- 131	Monthly composite from a continuous water compositor.	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-032-20 Radiometric determination of I-131 by the beta-gamma coincidence counting technique Env. Inc., I-131-01 Determination of I-131 in milk by anion exchange
Drinking Water	Gross Beta	Monthly composite from a continuous water compositor.	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-032-41 Gross Alpha and/or gross beta activity in water samples (suspended and dissolved fractions) Env. Inc., W(DS)-01 Determination of gross alpha and/or gross beta in water (dissolved solids or total residue) Env. Inc. , W(SS)-02 Determination of gross alpha and/or gross beta in water (suspended solids)
Drinking Water	Gamma Spectroscopy	Monthly composite from a continuous water compositor.	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-042-5 Determination of gamma emitting radionuclides Env. Inc. , GS-01 Determination of gamma emitters by gamma spectroscopy
Drinking Water	Tritium	Monthly composite from a continuous water compositor.	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-052-35 Determination of tritium in water by liquid scintillation Env. Inc., T-02 Determination of tritium in water (direct method)
Drinking Water	Iodine-131	Monthly composite from a continuous water compositor.	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-032-20 Radiometric determination of I-131 by the beta-gamma coincidence counting technique Env. Inc., I-131-01 Determination of I-131 in milk by anion exchange

TABLE B-3: Radiological Environmental Monitoring Program – Summary of Sample Collection and Analytical Methods, Three Mile Island Nuclear Station, 2002

Effluent Water	Iodine-131	Monthly composite from a continuous water compositor.	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-032-20 Radiometric determination of I-131 by the beta-gamma coincidence counting technique Env. Inc , I-131-01 Determination of I-131 in milk by anion exchange
Effluent Water	Gross Beta	Monthly composite from a continuous water compositor.	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-032-41 Gross Alpha and/or gross beta activity in water samples (suspended and dissolved fractions) Env. Inc., W(DS)-01 Determination of gross alpha and/or gross beta in water (dissolved solids or total residue) Env. Inc., W(SS)-02 Determination of gross alpha and/or gross beta in water (suspended solids)
Effluent Water	Gamma Spectroscopy	Monthly composite from a continuous water compositor.	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-042-5 Determination of gamma emitting radioisotopes Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Effluent Water	Tritium	Monthly composite from a continuous water compositor.	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-052-35 Determination of tritium in water by liquid scintillation Env. Inc , T-02 Determination of tritium in water (direct method)
Effluent Water	Strontium 89/90	Semi-annual composite from monthly samples.	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-032-16 Determination of radiostrontium in water samples
Storm Water	Gamma Spectroscopy	Quarterly grab sample	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	1 gallon	TBE, PRO-042-5 Determination of gamma emitting radioisotopes Env. Inc , GS-01 Determination of gamma emitters by gamma spectroscopy
Storm Water	Tritium	Quarterly grab sample	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	1 gallon	TBE, PRO-052-35 Determination of tritium in water by liquid scintillation Env. Inc , T-02 Determination of tritium in water (direct method)
Ground Water	Gamma Spectroscopy	Monthly, Quarterly, Semi-Annual and Annual samples	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	1 gallon	TBE, PRO-042-5 Determination of gamma emitting radioisotopes Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy

TABLE B-3: Radiological Environmental Monitoring Program – Summary of Sample Collection and Analytical Methods, Three Mile Island Nuclear Station, 2002

Ground Water	Tritium	Monthly, Quarterly, Semi-Annual and Annual samples	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	1 gallon	TBE, PRO-052-35 Determination of tritium in water by liquid scintillation Env. Inc., T-02 Determination of tritium in water (direct method)
Ground Water	Strontium 89/90	Monthly, Quarterly, Semi-Annual and Annual samples	RMC-ER5 Collection of water samples for radiological analysis (Three Mile Island Nuclear Generating Station)	1 gallon	TBE, PRO-032-16 Determination of radiostrontium in water samples
Fish	Gamma Spectroscopy	Semi-annual samples collected via electroshocking or other techniques	RMC-ER6 Collection of fish samples for radiological analysis (Three Mile Island Nuclear Generating Station)	1000 grams (wet)	TBE, PRO-042-5 Determination of gamma emitting radioisotopes Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Fish	Strontium 89/90	Semi-annual samples collected via electroshocking or other techniques	RMC-ER6 Collection of fish samples for radiological analysis (Three Mile Island Nuclear Generating Station)	1000 grams (wet)	TBE, PRO-032-85 Determination of radiostrontium in fish and shellfish
Sediment	Gamma Spectroscopy	Semi-annual grab samples	RMC-ER7 Collection of sediment samples for radiological analysis (Three Mile Island Nuclear Generating Station)	500 grams (dry)	TBE, PRO-042-5 Determination of gamma emitting radioisotopes Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Air Particulates	Gross Beta	One-week composite of continuous air sampling through glass fiber filter paper	RMC-ER8 Collection of air particulate and air iodine samples for radiological analysis (Three Mile Island Nuclear Generating Station)	1 filter (approximately 280 cubic meters weekly)	TBE, PRO-032-10 Gross beta and/or alpha activity in air particulate filters (direct count method) Env. Inc., AP-02 Determination of gross alpha and/or gross beta in air particulate filters

TABLE B-3: Radiological Environmental Monitoring Program – Summary of Sample Collection and Analytical Methods, Three Mile Island Nuclear Station, 2002

Sample Medium	Analysis	Sampling Method	Collection Procedure Number	Sample Size	Analytical Procedure Number
Air Particulates	Gamma Spectroscopy	Quarterly composite of each station	TBE, PRO-032-122 Procedure for the compositing of samples	13 filters (approximately 3600 cubic meters)	TBE, PRO-042-5 Determination of gamma emitting radioisotopes Env. Inc , GS-01 Determination of gamma emitters by gamma spectroscopy
Air Iodine	Gamma Spectroscopy	One-week composite of continuous air sampling through charcoal filter	RMC-ER8 Collection of air particulate and air iodine samples for radiological analysis (Three Mile Island Nuclear Generating Station)	1 filter (approximately 280 cubic meters weekly)	TBE, PRO-042-5 Determination of gamma emitting radioisotopes Env. Inc , I-131-02 Determination of I-131 in charcoal canisters by gamma spectroscopy (batch method)
Milk	I-131	Bi-weekly grab sample when cows are on pasture. Monthly all other times	RMC-ER10 Collection of milk samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-032-20 Radiometric determination of I-131 by the beta-gamma coincidence counting technique Env. Inc , I-131-01 Determination of I-131 in milk by anion exchange
Milk	Strontium-89/90	Quarterly composite of Bi-weekly and monthly grab samples	RMC-ER10 Collection of milk samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-032-105 Determination of radiostrontium in milk (Argonne Strontium Extraction Method)
Vegetation	Gamma Spectroscopy	Annual grab sample	RMC-ER Collection of vegetation samples for radiological analysis (Three Mile Island Nuclear Generating Station)	1000 grams	TBE, PRO-042-5 Determination of gamma emitting radioisotopes Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Vegetation	Strontium-89/90	Annual grab sample	RMC-ER Collection of vegetation samples for radiological analysis (Three Mile Island Nuclear Generating Station)	1000 grams	TBE, PRO-032-23R Determination of radiostrontium in feedstuff and forage
Milk	Gamma Spectroscopy	Bi-weekly grab sample when cows are on pasture. Monthly all other times	RMC-ER10 Collection of milk samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 gallon	TBE, PRO-042-5 Determination of gamma emitting radioisotopes Env. Inc , GS-01 Determination of gamma emitters by gamma spectroscopy
TLD	Thermoluminescence Dosimetry	Quarterly TLDs comprised of two Panasonic 814 (containing 4 each CaSO ₄ elements)	RMC-ER9 Collection of TLD samples for radiological analysis (Three Mile Island Nuclear Generating Station)	2 dosimeters	ICN Pharmaceutical

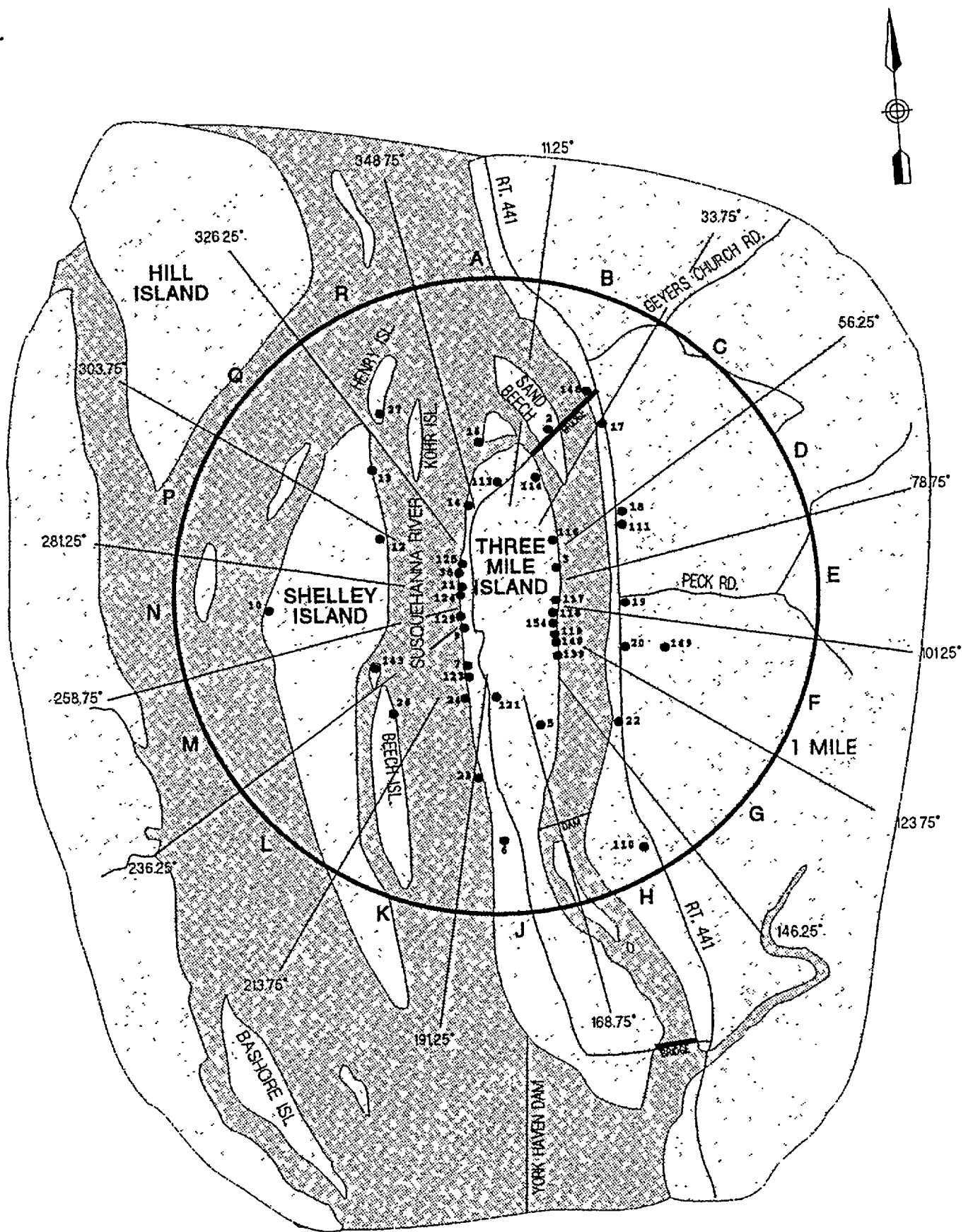


Figure B-1
Locations of REMP Stations
Within 1 Mile of TMINS

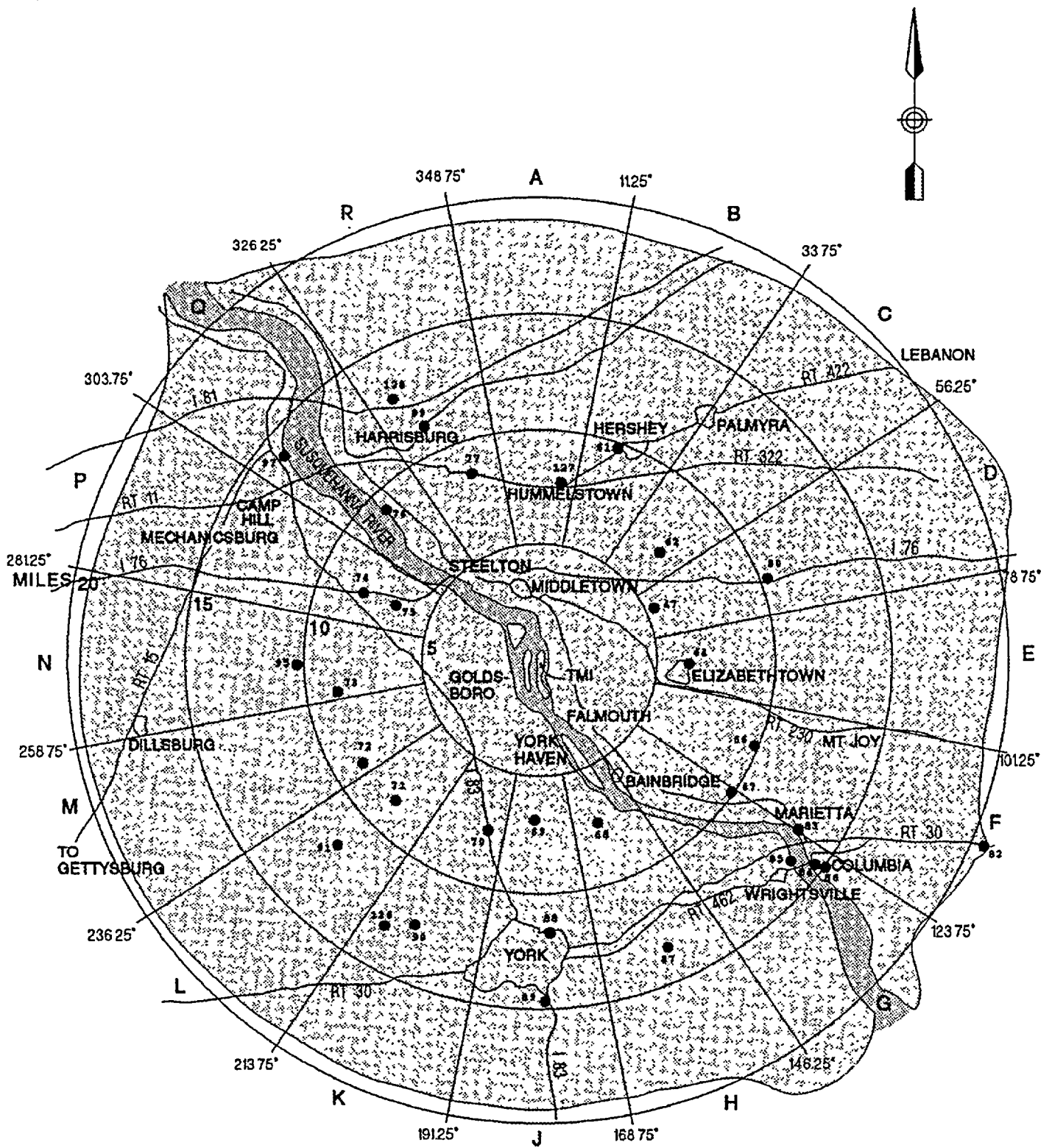


Figure B-3
Locations of REMP Stations
Greater Than 5 Miles of TMINS

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APPENDIX C

DATA TABLES AND FIGURES PRIMARY LABORATORY

**TABLE C-I.1 CONCENTRATIONS OF TRITIUM IN SURFACE WATER SAMPLES COLLECTED
IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	A3-2	J1-2	Q9-1
12/26/01 - 01/30/02		< 165	< 139
01/30/02 - 02/27/02		237 \pm 80	< 128
02/27/02 - 03/27/02		< 134	< 130
03/27/02 - 04/24/02		< 103	< 101
04/24/02 - 05/29/02		< 92	< 101
05/29/02 - 07/03/02	< 97	1480 \pm 109	< 94
07/03/02 - 07/31/02	< 130	920 \pm 104	131 \pm 83
07/31/02 - 08/28/02	< 181	265 \pm 117	< 174
08/28/02 - 09/25/02	< 169	845 \pm 95	< 167
09/25/02 - 10/30/02	< 169	1540 \pm 149	< 165
10/30/02 - 11/26/02	< 186	< 181	< 180
11/26/02 - 01/02/03	< 153	< 166	< 165
MEAN	155 \pm 64	511 \pm 1086	140 \pm 61

**TABLE C-1.2 CONCENTRATIONS OF I-131 IN SURFACE WATER SAMPLES COLLECTED
IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	A3-2
12/26/01 - 01/30/02	< 0.3
01/30/02 - 02/27/02	< 0.4
02/27/02 - 03/27/02	< 0.3
03/27/02 - 04/24/02	< 0.2
04/24/02 - 05/29/02	< 0.8
05/29/02 - 07/03/02	< 0.6
07/03/02 - 07/31/02	1.6 \pm 0.3
07/31/02 - 08/28/02	1.7 \pm 0.6
08/28/02 - 09/25/02	0.4 \pm 0.2
09/25/02 - 10/30/02	1.2 \pm 0.4
10/30/02 - 11/26/02	< 0.4
11/26/02 - 01/02/03	< 0.3
MEAN	0.7 \pm 1.1

TABLE C-I.3

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES
COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Zr-95	Nb-95	Cs-134	Cs-137	Ba-140	La-140
A3-2	12/26/01 - 01/30/02											
	01/30/02 - 02/27/02											
	02/27/02 - 03/27/02	(1)										
	03/27/02 - 04/24/02											
	04/24/02 - 05/29/02											
	05/29/02 - 07/03/02	< 3	< 4	< 7	< 3	< 7	< 6	< 4	< 3	< 3	< 23	< 8
	07/03/02 - 07/31/02	< 5	< 5	< 10	< 5	< 12	< 8	< 6	< 5	< 6	< 26	< 9
	07/31/02 - 08/28/02	< 4	< 4	< 9	< 4	< 7	< 6	< 4	< 3	< 4	< 27	< 9
	08/28/02 - 09/25/02	< 2	< 2	< 5	< 2	< 3	< 3	< 3	< 2	< 2	< 24	< 8
	09/25/02 - 10/30/02	< 3	< 3	< 7	< 3	< 6	< 6	< 4	< 3	< 3	< 23	< 7
	10/30/02 - 11/26/02	< 4	< 5	< 9	< 5	< 10	< 8	< 5	< 4	< 5	< 26	< 7
	11/26/02 - 01/02/03	< 2	< 2	< 4	< 2	< 4	< 3	< 2	< 2	< 2	< 11	< 4
	MEAN	3 \pm 2	3 \pm 2	7 \pm 4	3 \pm 2	7 \pm 6	6 \pm 4	4 \pm 3	3 \pm 2	4 \pm 3	23 \pm 11	7 \pm 3
J1-2	12/26/01 - 01/30/02	< 3	< 3	< 5	< 2	< 5	< 4	< 3	< 4	< 3	< 22	< 4
	01/30/02 - 02/27/02	< 3	< 3	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 24	< 5
	02/27/02 - 03/27/02	< 3	< 2	< 4	< 2	< 5	< 4	< 2	< 2	< 2	< 11	< 2
	03/27/02 - 04/24/02	< 4	< 4	< 8	< 4	< 8	< 7	< 4	< 4	< 4	< 19	< 6
	04/24/02 - 05/29/02	< 8	< 8	< 16	< 7	< 18	< 13	< 8	< 8	< 8	< 36	< 11
	05/29/02 - 07/03/02	< 5	< 5	< 10	< 4	< 8	< 8	< 5	< 4	< 5	< 30	< 9
	07/03/02 - 07/31/02	< 4	< 4	< 8	< 4	< 9	< 7	< 4	< 4	< 5	< 21	< 7
	07/31/02 - 08/28/02	< 4	< 5	< 9	< 4	< 8	< 8	< 5	< 4	< 5	< 30	< 10
	08/28/02 - 09/25/02	< 2	< 2	< 5	< 3	< 4	< 4	< 3	< 2	< 2	< 25	< 9
	09/25/02 - 10/30/02	< 4	< 4	< 10	< 4	< 8	< 8	< 5	< 4	< 5	< 30	< 9
	10/30/02 - 11/26/02	< 3	< 3	< 7	< 3	< 7	< 6	< 4	< 4	< 4	< 20	< 5
	11/26/02 - 01/02/03	< 4	< 4	< 9	< 4	< 8	< 8	< 4	< 4	< 5	< 22	< 7
	MEAN	4 \pm 3	4 \pm 3	8 \pm 7	4 \pm 3	8 \pm 7	7 \pm 5	4 \pm 3	4 \pm 3	4 \pm 3	24 \pm 13	7 \pm 5
Q9-1	12/26/01 - 01/30/02	< 3	< 1	< 3	< 2	< 3	< 4	< 3	< 2	< 2	< 9	< 3
	01/30/02 - 02/27/02	< 2	< 1	< 3	< 3	< 6	< 6	< 4	< 3	< 2	< 11	< 3
	02/27/02 - 03/27/02	< 2	< 2	< 4	< 2	< 5	< 6	< 2	< 2	< 2	< 15	< 3
	03/27/02 - 04/24/02	< 4	< 4	< 9	< 5	< 10	< 8	< 5	< 4	< 5	< 21	< 7
	04/24/02 - 05/29/02	< 6	< 6	< 11	< 5	< 13	< 9	< 6	< 6	< 6	< 25	< 8
	05/29/02 - 07/03/02	< 5	< 5	< 10	< 5	< 9	< 8	< 6	< 4	< 4	< 32	< 10
	07/03/02 - 07/31/02	< 4	< 5	< 9	< 4	< 10	< 7	< 5	< 5	< 4	< 24	< 8
	07/31/02 - 08/28/02	< 5	< 6	< 11	< 5	< 10	< 9	< 6	< 4	< 4	< 35	< 12
	08/28/02 - 09/25/02	< 1	< 1	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 7	< 2
	09/25/02 - 10/30/02	< 2	< 2	< 5	< 2	< 5	< 4	< 3	< 2	< 2	< 16	< 5
	10/30/02 - 11/26/02	< 4	< 4	< 9	< 4	< 10	< 8	< 5	< 4	< 5	< 26	< 8
	11/26/02 - 01/02/03	< 2	< 2	< 8	< 3	< 8	< 3	< 2	< 2	< 2	< 8	< 3
	MEAN	3 \pm 3	3 \pm 4	7 \pm 7	3 \pm 3	8 \pm 7	6 \pm 5	4 \pm 4	3 \pm 3	3 \pm 3	19 \pm 19	6 \pm 7

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

TABLE C-II.1 CONCENTRATIONS OF GROSS BETA IN DRINKING WATER SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	G15-2	G15-3	Q9-1
12/26/01 - 01/30/02	3.3 \pm 1.0	2.1 \pm 0.9	1.9 \pm 0.9
01/30/02 - 02/27/02	3.7 \pm 1.0	2.6 \pm 0.9	2.0 \pm 0.8
02/27/02 - 03/27/02	< 1.5	1.8 \pm 0.8	< 1.4
03/27/02 - 04/24/02	2.0 \pm 0.9	1.6 \pm 0.8	1.3 \pm 0.8
04/24/02 - 05/29/02	2.7 \pm 1.3	2.4 \pm 1.3	< 1.7
05/29/02 - 07/03/02	2.9 \pm 1.3	2.2 \pm 1.2	< 1.6
07/03/02 - 07/31/02	< 1.9	2.2 \pm 1.5	2.7 \pm 1.4
07/31/02 - 08/28/02	3.3 \pm 1.4	2.7 \pm 1.4	2.6 \pm 1.4
08/28/02 - 09/25/02	2.9 \pm 1.6	3.5 \pm 1.7	< 2.2
09/25/02 - 10/30/02	3.6 \pm 1.4	4.5 \pm 1.5	3.0 \pm 1.3
10/30/02 - 11/26/02	3.7 \pm 1.6	< 2.0	< 2.0
11/26/02 - 01/02/03	4.0 \pm 1.5	< 1.8	2.2 \pm 1.3
MEAN	3.0 \pm 1.6	2.5 \pm 1.7	2.0 \pm 1.1

TABLE C-II.2 CONCENTRATIONS OF I-131 IN DRINKING WATER SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	G15-2	G15-3	Q9-1
12/26/01 - 01/30/02	< 0.4	< 0.3	< 0.3
01/30/02 - 02/27/02	< 0.3	< 0.3	< 0.3
02/27/02 - 03/27/02	< 0.3	< 0.3	< 0.4
03/27/02 - 04/24/02	< 0.2	< 0.2	< 0.4
04/24/02 - 05/29/02	< 0.3	0.4 \pm 0.2	< 0.9
05/29/02 - 07/03/02	< 0.7	< 0.6	< 0.7
07/03/02 - 07/31/02	< 0.7	< 0.4	< 0.4
07/31/02 - 08/28/02	< 0.6	< 1.0	< 0.9
08/28/02 - 09/25/02	< 0.3	< 0.2	< 0.2
09/25/02 - 10/30/02	< 0.3	< 0.3	< 0.4
10/30/02 - 11/26/02	< 0.7	< 0.3	< 0.5
11/26/02 - 01/02/03	< 0.2	< 0.2	< 0.2
MEAN	0.4 \pm 0.4	0.4 \pm 0.4	0.5 \pm 0.5

TABLE C-II.3 CONCENTRATIONS OF TRITIUM IN DRINKING WATER SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	G15-2	G15-3	Q9-1
12/26/01 - 01/30/02	< 139	< 139	< 139
01/30/02 - 02/27/02	< 133	< 133	< 133
02/27/02 - 03/27/02	< 89	< 89	< 89
03/27/02 - 04/24/02	< 101	< 101	< 100
04/24/02 - 05/29/02	< 100	< 102	< 98
05/29/02 - 07/03/02	< 96	109 \pm 61	96 \pm 61
07/03/02 - 07/31/02	< 130	131 \pm 83	< 130
07/31/02 - 08/28/02	< 176	< 158	< 174
08/28/02 - 09/25/02	< 160	215 \pm 114	< 168
09/25/02 - 10/30/02	< 181	< 178	< 164
10/30/02 - 11/26/02	< 175	< 181	< 178
11/26/02 - 01/02/03	< 165	< 162	< 162
MEAN	137 \pm 69	142 \pm 77	136 \pm 67

TABLE C-II.4

**CONCENTRATIONS OF GAMMA EMITTERS IN DRINKING WATER SAMPLES COLLECTED
IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Zr-95	Nb-95	Cs-134	Cs-137	Ba-140	La-140
G15-2	12/26/01 - 01/30/02	< 3	< 1	< 5	< 2	< 3	< 6	< 2	< 4	< 2	< 14	< 3
	01/30/02 - 02/27/02	< 2	< 2	< 5	< 3	< 3	< 4	< 2	< 2	< 2	< 8	< 3
	02/27/02 - 03/27/02	< 5	< 2	< 6	< 5	< 7	< 11	< 5	< 3	< 5	< 16	< 3
	03/27/02 - 04/24/02	< 3	< 4	< 7	< 5	< 7	< 6	< 4	< 3	< 4	< 16	< 6
	04/24/02 - 05/29/02	< 6	< 6	< 12	< 6	< 14	< 10	< 7	< 6	< 6	< 27	< 9
	05/29/02 - 07/03/02	< 4	< 4	< 9	< 4	< 8	< 7	< 5	< 4	< 4	< 26	< 9
	07/03/02 - 07/31/02	< 4	< 3	< 7	< 3	< 7	< 6	< 4	< 3	< 3	< 18	< 6
	07/31/02 - 08/28/02	< 4	< 4	< 10	< 4	< 8	< 8	< 5	< 4	< 4	< 29	< 9
	08/28/02 - 09/25/02	< 1	< 1	< 3	< 1	< 2	< 2	< 1	< 1	< 1	< 13	< 4
	09/25/02 - 10/30/02	< 2	< 2	< 5	< 2	< 4	< 4	< 2	< 2	< 2	< 15	< 4
	10/30/02 - 11/26/02	< 3	< 4	< 8	< 3	< 7	< 6	< 4	< 3	< 4	< 27	< 9
	11/26/02 - 01/02/03	< 4	< 4	< 8	< 4	< 8	< 7	< 4	< 4	< 4	< 18	< 7
	MEAN	3 \pm 3	3 \pm 3	7 \pm 5	4 \pm 3	7 \pm 7	6 \pm 5	4 \pm 3	3 \pm 3	4 \pm 3	19 \pm 13	6 \pm 5
G15-3	12/26/01 - 01/30/02	< 2	< 2	< 4	< 1	< 3	< 7	< 2	< 3	< 2	< 23	< 6
	01/30/02 - 02/27/02	< 2	< 2	< 5	< 2	< 3	< 5	< 2	< 3	< 3	< 12	< 2
	02/27/02 - 03/27/02	< 5	< 6	< 9	< 3	< 7	< 9	< 5	< 5	< 3	< 29	< 8
	03/27/02 - 04/24/02	< 5	< 5	< 11	< 5	< 11	< 8	< 5	< 5	< 5	< 24	< 8
	04/24/02 - 05/29/02	< 3	< 3	< 6	< 3	< 7	< 5	< 3	< 3	< 4	< 14	< 5
	05/29/02 - 07/03/02	< 4	< 4	< 9	< 4	< 8	< 7	< 4	< 4	< 4	< 26	< 8
	07/03/02 - 07/31/02	< 3	< 3	< 7	< 5	< 6	< 5	< 3	< 3	< 3	< 17	< 6
	07/31/02 - 08/28/02	< 5	< 4	< 9	< 4	< 9	< 7	< 5	< 4	< 4	< 28	< 10
	08/28/02 - 09/25/02	< 2	< 2	< 5	< 2	< 4	< 4	< 3	< 2	< 2	< 25	< 9
	09/25/02 - 10/30/02	< 4	< 4	< 9	< 4	< 8	< 8	< 4	< 4	< 4	< 30	< 9
	10/30/02 - 11/26/02	< 4	< 4	< 9	< 5	< 10	< 8	< 5	< 4	< 4	< 23	< 8
	11/26/02 - 01/02/03	< 2	3	< 6	< 3	< 6	< 5	< 3	< 3	< 3	< 17	< 5
	MEAN	3 \pm 3	4 \pm 2	7 \pm 4	3 \pm 2	7 \pm 5	6 \pm 3	4 \pm 2	3 \pm 2	4 \pm 2	22 \pm 12	7 \pm 4

TABLE C-II.4

**CONCENTRATIONS OF GAMMA EMITTERS IN DRINKING WATER SAMPLES COLLECTED
IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Zr-95	Nb-95	Cs-134	Cs-137	Ba-140	La-140
Q9-1	12/26/01 - 01/30/02	< 3	< 4	< 5	< 3	< 4	< 5	< 2	< 4	< 5	< 20	< 3
	01/30/02 - 02/27/02	< 3	< 3	< 9	< 5	< 6	< 8	< 4	< 3	< 3	< 13	< 3
	02/27/02 - 03/27/02	< 2	< 2	< 4	< 3	< 3	< 4	< 3	< 3	< 3	< 8	< 3
	03/27/02 - 04/24/02	< 4	< 4	< 9	< 4	< 9	< 7	< 5	< 4	< 5	< 21	< 7
	04/24/02 - 05/29/02	< 4	< 4	< 7	< 4	< 8	< 6	< 4	< 4	< 4	< 17	< 6
	05/29/02 - 07/03/02	< 3	< 4	< 9	< 6	< 7	< 6	< 4	< 3	< 4	< 24	< 8
	07/03/02 - 07/31/02	< 3	< 3	< 6	< 3	< 6	< 5	< 3	< 3	< 3	< 16	< 5
	07/31/02 - 08/28/02	< 4	< 4	< 8	< 5	< 8	< 7	< 5	< 3	< 4	< 26	< 9
	08/28/02 - 09/25/02	< 1	< 1	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 7	< 2
	09/25/02 - 10/30/02	< 6	< 6	< 13	< 6	< 13	< 11	< 7	< 6	< 6	< 43	< 13
	10/30/02 - 11/26/02	< 5	< 5	< 12	< 6	< 11	< 10	< 6	< 5	< 6	< 28	< 10
	11/26/02 - 01/02/03	< 4	< 3	< 8	< 4	< 8	7	< 4	< 4	< 4	< 18	< 6
	MEAN	3 \pm 3	4 \pm 3	8 \pm 6	4 \pm 3	7 \pm 7	6 \pm 5	4 \pm 3	3 \pm 3	4 \pm 3	20 \pm 19	6 \pm 7

TABLE C-III.1 CONCENTRATIONS OF GROSS BETA, IODINE-131, TRITIUM, AND STRONTIUM IN EFFLUENT WATER SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	Gross Beta	I-131	H-3	Sr-89	Sr-90
K1-1	01/02/02 - 01/30/02	6.2 \pm 1.2	< 0.4	< 165		
	01/30/02 - 02/27/02	2.7 \pm 0.9	< 0.3	2081 \pm 139		
	02/27/02 - 03/27/02	3.3 \pm 1.0	< 0.4	< 130		
	03/27/02 - 04/24/02	3.3 \pm 1.0	< 0.2	< 103		
	04/24/02 - 05/29/02	2.6 \pm 1.3	< 1.0	< 101		
	05/29/02 - 07/03/02	3.7 \pm 1.4	< 0.7	10400 \pm 224	< 1.2	< 0.4
	07/03/02 - 07/31/02	4.3 \pm 1.7	< 0.6	5840 \pm 178		
	07/31/02 - 08/28/02	4.9 \pm 1.7	2.1 \pm 0.8	4320 \pm 215		
	08/28/02 - 09/25/02	4.7 \pm 1.8	1.8 \pm 0.2	13800 \pm 343		
	09/25/02 - 10/30/02	6.0 \pm 1.7	1.3 \pm 0.4	20100 \pm 421		
	10/30/02 - 11/26/02	3.0 \pm 1.6	< 0.5	< 187		
	11/26/02 - 01/02/03	3.4 \pm 1.4	< 0.4	< 164	< 1.2	< 0.5
	MEAN	4.0 \pm 2.4	0.8 \pm 1.2	4783 \pm 13285	1.2 \pm 0.03	0.5 \pm 0.1

TABLE C-III.2

CONCENTRATIONS OF GAMMA EMITTERS IN EFFLUENT WATER SAMPLES COLLECTED
IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Zr-95	Nb-95	Cs-134	Cs-137	Ba-140	La-140
C-8	K1-1 01/02/02 - 01/30/02	< 2	< 2	< 5	< 2	< 5	< 7	< 4	< 3	< 2	< 9	< 3
	01/30/02 - 02/27/02	< 3	< 2	< 5	< 2	< 2	< 4	< 2	< 2	< 2	< 13	< 2
	02/27/02 - 03/27/02	< 2	< 4	< 2	< 4	< 6	< 4	< 3	< 3	< 3	< 11	< 4
	03/27/02 - 04/24/02	< 4	< 4	< 8	< 4	< 8	< 7	< 4	< 4	< 4	< 20	< 6
	04/24/02 - 05/29/02	< 6	< 6	< 12	< 6	< 14	< 10	< 7	< 7	< 7	< 29	< 9
	05/29/02 - 07/03/02	< 7	< 7	< 13	< 6	< 15	< 12	< 8	< 7	< 6	< 43	< 13
	07/03/02 - 07/31/02	< 5	< 5	< 10	< 5	< 12	< 9	< 6	< 5	< 5	< 29	< 9
	07/31/02 - 08/28/02	< 4	< 4	< 8	< 4	< 8	< 7	< 5	< 4	< 4	< 29	< 9
	08/28/02 - 09/25/02	< 2	< 3	< 7	< 2	< 5	< 5	< 4	< 2	< 3	< 31	< 11
	09/25/02 - 10/30/02	< 3	< 4	< 7	< 3	< 6	< 6	< 4	< 3	< 3	< 26	< 8
	10/30/02 - 11/26/02	< 3	< 3	< 7	< 3	< 7	< 6	< 4	< 3	< 4	< 18	< 6
	11/26/02 - 01/02/03	< 3	< 3	< 7	< 4	< 7	< 6	< 4	< 3	< 3	< 17	< 6
	MEAN	4 \pm 3	4 \pm 3	8 \pm 6	4 \pm 3	8 \pm 8	7 \pm 5	4 \pm 3	4 \pm 3	4 \pm 3	23 \pm 20	7 \pm 7

**TABLE C-IV.1 CONCENTRATIONS OF TRITIUM AND GAMMA EMITTERS IN STORM WATER SAMPLES COLLECTED
IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	H-3	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Zr-95	Nb-95	Cs-134	Cs-137	Ba-140	La-140
EDCB	01/02/02 - 03/07/02	290 \pm 83	< 2	< 2	< 7	< 3	< 4	< 7	< 2	< 4	< 3	< 13	< 3
	04/04/02 - 06/10/02	187 \pm 67	< 3	< 4	< 7	< 3	< 7	< 6	< 4	< 3	< 3	< 20	< 7
	07/03/02 - 08/28/02	297 \pm 86	< 4	< 4	< 8	< 3	< 7	< 7	< 4	< 3	< 4	< 26	< 8
	10/30/02 - 01/02/03	< 168	< 2	< 2	< 4	< 2	< 4	< 4	< 2	< 2	< 2	< 11	< 3
	MEAN	236 \pm 135	3 \pm 2	3 \pm 2	6 \pm 3	3 \pm 1	5 \pm 3	6 \pm 3	3 \pm 2	3 \pm 2	3 \pm 1	18 \pm 13	5 \pm 5

TABLE CV.1 CONCENTRATIONS OF TRITIUM IN GROUND WATER SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STATION CODE	03/07/02	06/10/02	09/30/02	12/19/02	MEAN
48S	< 139	153 \pm 64	< 140	159 \pm 100	148 \pm 20
GP-1	564 \pm 92	306 \pm 72	682 \pm 98	394 \pm 135	487 \pm 337
GP-6	942 \pm 108	1340 \pm 99	815 \pm 100	218 \pm 129	829 \pm 929
GP-8	1200 \pm 110	764 \pm 86	1680 \pm 118	318 \pm 141	991 \pm 1168
MS-22	629 \pm 97	875 \pm 86	1020 \pm 109	2050 \pm 168	1144 \pm 1251
OSF	295 \pm 83	276 \pm 69	245 \pm 92	241 \pm 128	264 \pm 52
OS-18	467 \pm 91	623 \pm 82	1010 \pm 103	274 \pm 111	594 \pm 624
GP-9		1930 \pm 112		2780 \pm 185	2355 \pm 1202
GP-12		251 \pm 71		974 \pm 152	613 \pm 1022
MS-2		191 \pm 67		288 \pm 133	240 \pm 137
MS-5		197 \pm 67		< 199	198 \pm 3
MS-20		359 \pm 72		369 \pm 133	364 \pm 14
NW-A		760 \pm 86		489 \pm 137	625 \pm 383
NW-B		1170 \pm 96		971 \pm 151	1071 \pm 281
NW-C			8090 \pm 206	5590 \pm 239	6840 \pm 3536
NW-CW		2920 \pm 130		2960 \pm 187	2940 \pm 57
OS-14		138 \pm 65		< 165	152 \pm 38
RW-1		897 \pm 89		228 \pm 104	563 \pm 946
RW-2		215 \pm 68		< 160	188 \pm 78
E1-2		< 98			
MS-1		217 \pm 70			
MS-4		1190 \pm 96			
MS-7		< 113			
MS-8		< 199			
MS-19		< 101			
MS-21		182 \pm 69			
N2-1		< 99			

TABLE C-V.2 CONCENTRATIONS OF STRONTIUM AND GAMMA EMITTERS IN GROUND WATER SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	Sr-90	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Zr-95	Nb-95	Cs-134	Cs-137	Ba-140	La-140
48S	03/07/02	< 0.2	< 5	< 3	< 5	< 6	< 6	< 11	< 5	< 4	< 4	< 36	< 8.9
	06/10/02		< 4	< 5	< 9	< 4	< 9	< 8	< 5	< 4	< 5	< 26	< 9
	09/30/02		< 1	< 1	< 2	< 1	< 2	< 2	< 1	< 1	< 1	< 16	< 4
	12/19/02		< 3	< 3	< 7	< 3	< 7	< 6	< 4	< 5	< 4	< 20	< 5
	MEAN		3 \pm 3	3 \pm 3	6 \pm 5	3 \pm 4	6 \pm 6	7 \pm 7	4 \pm 4	3 \pm 4	3 \pm 3	25 \pm 17	7 \pm 5
C-11	OSF 03/07/02		< 4	< 3	< 8	< 2	< 6	< 5	< 5	< 3	< 2	< 23	< 4.4
	06/10/02		< 4	< 4	< 7	< 3	< 7	< 6	< 4	< 3	< 4	< 20	< 7
	09/30/02		< 2	< 2	< 6	< 2	< 4	< 4	< 2	< 2	< 2	< 31	< 10
	12/19/02		< 4	< 4	< 7	< 4	< 7	< 6	< 4	< 3	< 4	< 21	< 7
	MEAN		3 \pm 2	3 \pm 1	7 \pm 2	3 \pm 1	6 \pm 3	5 \pm 2	4 \pm 2	3 \pm 2	3 \pm 2	24 \pm 10	7 \pm 5
E1-2	06/05/02		< 5	< 5	< 12	< 5	< 11	< 9	< 6	< 4	< 6	< 38	< 13
MS-2	06/10/02	< 0.2	< 5	< 7	< 18	< 4	< 10	< 13	< 7	< 4	< 5	< 46	< 15
MS-5	06/10/02		< 3	< 4	< 22	< 4	< 13	< 6	< 4	< 2	< 3	< 29	< 10
MS-8	06/10/02	< 0.2	< 4	< 6	< 14	< 4	< 9	< 12	< 6	< 4	< 4	< 36	< 12
MS-20	06/10/02		< 3	< 4	< 10	< 4	< 5	< 6	< 4	< 2	< 2	< 27	< 9
MS-22	03/07/02		< 4	< 5	< 14	< 3	< 8	< 10	< 6	< 3	< 4	< 45	< 15
N2-1	06/05/02		< 5	< 5	< 11	< 4	< 13	< 9	< 6	< 6	< 5	< 36	< 12
OS-14	06/10/02	< 0.2	< 4	< 6	< 15	< 4	< 9	< 11	< 6	< 4	< 4	< 36	< 10
RW-1	06/10/02		< 3	< 4	< 10	< 3	< 6	< 7	< 4	< 3	< 3	< 32	< 10
RW-2	06/10/02		< 4	< 5	< 11	< 3	< 7	< 8	< 5	< 3	< 3	< 39	< 12

**TABLE C-VI.1 CONCENTRATIONS OF STRONTIUM IN PREDATOR & BOTTOM FEEDER (FISH)
SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR
STATION, 2002**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	Sr-89	Sr-90
INDP	PREDATOR		
	06/17/02	< 13	< 2
	10/03/02	< 8	< 2
	MEAN	10 \pm 7	2 \pm 1
INDB	BOTTOM FEEDER		
	06/17/02	< 12	< 2
	09/24/02	< 8	< 2
	MEAN	10 \pm 6	2 \pm 1
BKGP	PREDATOR		
	06/17/02	< 12	< 2
	09/24/02	< 15	< 4
	MEAN	13 \pm 5	3 \pm 3
BKGB	BOTTOM FEEDER		
	06/24/02	< 13	< 3
	09/24/02	< 15	< 3
	MEAN	14 \pm 3	3 \pm 0

TABLE C-VI.2

**CONCENTRATIONS OF GAMMA EMITTERS IN PREDATOR & BOTTOM FEEDER (FISH)
SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002**

RESULTS IN UNITS OF PCI/KG WET \pm 2 SIGMA

STC	COLLECTION PERIOD	K-40	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Cs-134	Cs-137
INDP	PREDATOR								
	06/17 - 06/17/02	3210 \pm 336	< 17	< 16	< 40	< 18	< 38	< 14	< 18
	10/03 - 10/03/02	3348 \pm 316	< 17	< 21	< 42	< 17	< 37	< 15	< 19
	MEAN	3279 \pm 195	17 \pm 0.4	19 \pm 7	41 \pm 4	17 \pm 2	37 \pm 1	15 \pm 1	18 \pm 1
INDB	BOTTOM FEEDER								
	06/17 - 06/17/02	3460 \pm 427	< 30	< 29	< 62	< 27	< 67	< 26	< 28
	09/24 - 09/24/02	3311 \pm 220	< 11	< 12	< 29	< 11	< 23	< 10	< 11
	MEAN	3386 \pm 211	21 \pm 27	21 \pm 24	45 \pm 47	19 \pm 23	45 \pm 62	18 \pm 22	20 \pm 24
BKGP	PREDATOR								
	06/17 - 06/17/02	3380 \pm 239	< 12	< 12	< 24	< 12	< 25	< 11	< 13
	09/24 - 09/24/02	3062 \pm 322	< 14	< 16	< 36	< 16	< 33	< 14	< 17
	MEAN	3221 \pm 450	13 \pm 2	14 \pm 6	30 \pm 17	14 \pm 5	29 \pm 11	13 \pm 4	15 \pm 5
BKGB	BOTTOM FEEDER								
	06/24 - 06/24/02	3060 \pm 277	< 19	< 18	< 36	< 18	< 37	< 16	< 18
	09/24 - 09/24/02	3398 \pm 247	< 12	< 12	< 25	< 12	< 22	< 10	< 12
	MEAN	3229 \pm 478	15 \pm 10	15 \pm 9	30 \pm 15	15 \pm 8	29 \pm 20	13 \pm 8	15 \pm 8

TABLE C-VII.1 CONCENTRATIONS OF GAMMA EMITTERS IN SEDIMENT SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/KG DRY \pm 2 SIGMA

STC	COLLECTION PERIOD	K-40	Mn-54	Co-58	Co-60	Cs-134	Cs-137
A1-3							
	06/17/02	11400 \pm 550	< 27	< 26	< 24	< 23	67 \pm 12
	10/29/02	9748 \pm 759	< 41	< 41	< 35	< 35	75 \pm 45
	MEAN	10574 \pm 2336	34 \pm 21	33 \pm 21	29 \pm 15	29 \pm 17	71 \pm 11
J2-1							
	06/17/02	17500 \pm 740	< 27	< 27	< 35	< 24	145 \pm 15
	10/29/02	18470 \pm 1304	< 32	< 35	< 34	< 29	252 \pm 63
	MEAN	17985 \pm 1372	29 \pm 7	31 \pm 11	34 \pm 1	26 \pm 8	198 \pm 151
K1-3							
	06/17/02	11600 \pm 560	< 27	< 27	< 26	< 25	139 \pm 16
	10/29/02	14500 \pm 876	< 47	< 47	< 44	< 38	265 \pm 41
	MEAN	13050 \pm 4101	37 \pm 28	37 \pm 28	35 \pm 25	32 \pm 19	202 \pm 177
EDCB							
	10/29/02	17410 \pm 874	< 22	< 21	< 27	< 17	288 \pm 50

TABLE C-VIII.1 CONCENTRATIONS OF GROSS BETA IN AIR PARTICULATE SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF E-3 PCI/CU METER \pm 2 SIGMA

COLLECTION PERIOD	GROUP I		GROUP II				GROUP III	
	E1-2	F1-3	A3-1	G2-1	M2-1	H3-1	Q15-1	
01/02/02 - 01/09/02	26 \pm 3	27 \pm 3	28 \pm 3	26 \pm 3	25 \pm 2	26 \pm 2	24 \pm 3	
01/09/02 - 01/16/02	22 \pm 3	20 \pm 2	21 \pm 2	20 \pm 2	20 \pm 2	19 \pm 2	20 \pm 2	
01/16/02 - 01/23/02	30 \pm 3	28 \pm 3	28 \pm 3	26 \pm 3	27 \pm 3	25 \pm 3	28 \pm 3	
01/23/02 - 01/30/02	28 \pm 3	25 \pm 3	24 \pm 3	26 \pm 3	24 \pm 2	25 \pm 3	29 \pm 3	
01/30/02 - 02/06/02	14 \pm 2	14 \pm 2	15 \pm 2	14 \pm 2	13 \pm 2	14 \pm 2	17 \pm 2	
02/06/02 - 02/13/02	26 \pm 3	27 \pm 3	28 \pm 3	27 \pm 3	25 \pm 3	24 \pm 3	29 \pm 3	
02/13/02 - 02/20/02	19 \pm 3	18 \pm 2	17 \pm 2	16 \pm 2	18 \pm 2	19 \pm 2	18 \pm 2	
02/20/02 - 02/27/02	18 \pm 2	21 \pm 2	19 \pm 2	18 \pm 2	18 \pm 2	19 \pm 2	18 \pm 2	
02/27/02 - 03/06/02	24 \pm 2	24 \pm 2	22 \pm 2	22 \pm 2	22 \pm 2	22 \pm 2	21 \pm 2	
03/06/02 - 03/13/02	31 \pm 3	31 \pm 2	30 \pm 2	31 \pm 2	29 \pm 2	31 \pm 2	32 \pm 2	
03/13/02 - 03/20/02	14 \pm 2	14 \pm 2	13 \pm 2	12 \pm 2	12 \pm 2	13 \pm 2	15 \pm 2	
03/20/02 - 03/27/02	21 \pm 2	20 \pm 2	19 \pm 2	19 \pm 2	17 \pm 2	19 \pm 2	21 \pm 2	
03/27/02 - 04/03/02	17 \pm 2	18 \pm 2	16 \pm 2	17 \pm 2	18 \pm 2	21 \pm 2	18 \pm 2	
04/03/02 - 04/10/02	15 \pm 2	14 \pm 2	14 \pm 2	14 \pm 2	14 \pm 2	15 \pm 2	16 \pm 2	
04/10/02 - 04/17/02	15 \pm 2	15 \pm 2	16 \pm 2	13 \pm 2	15 \pm 2	16 \pm 2	17 \pm 2	
04/17/02 - 04/24/02	18 \pm 2	19 \pm 2	16 \pm 2	15 \pm 2	17 \pm 2	17 \pm 2	19 \pm 2	
04/24/02 - 05/01/02	14 \pm 2	12 \pm 2	12 \pm 2	12 \pm 2	12 \pm 2	13 \pm 2	13 \pm 2	
05/01/02 - 05/08/02	16 \pm 2	14 \pm 2	14 \pm 2	14 \pm 2	15 \pm 2	15 \pm 2	13 \pm 2	
05/08/02 - 05/15/02	15 \pm 2	17 \pm 2	13 \pm 2	13 \pm 2	13 \pm 2	14 \pm 2	14 \pm 2	
05/15/02 - 05/22/02	12 \pm 2	11 \pm 2	10 \pm 2	11 \pm 2	11 \pm 2	10 \pm 2	13 \pm 2	
05/22/02 - 05/29/02	16 \pm 2	15 \pm 2	16 \pm 2	15 \pm 2	15 \pm 2	16 \pm 2	17 \pm 2	
05/29/02 - 06/05/02	20 \pm 2	18 \pm 2	18 \pm 2	15 \pm 2	16 \pm 2	15 \pm 2	17 \pm 2	
06/05/02 - 06/12/02	22 \pm 2	23 \pm 2	20 \pm 2	21 \pm 2	21 \pm 2	22 \pm 2	21 \pm 2	
06/12/02 - 06/19/02	9 \pm 2	9 \pm 2	8 \pm 2	7 \pm 1	8 \pm 1	8 \pm 2	10 \pm 2	
06/19/02 - 06/26/02	20 \pm 2	19 \pm 2	21 \pm 2	20 \pm 2	21 \pm 2	(1)	23 \pm 2	
06/26/02 - 07/03/02	19 \pm 2	19 \pm 2	21 \pm 2	19 \pm 2	18 \pm 2	19 \pm 2	21 \pm 2	
07/03/02 - 07/10/02	23 \pm 3	25 \pm 3	24 \pm 3	25 \pm 3	24 \pm 3	24 \pm 3	27 \pm 3	
07/10/02 - 07/17/02	15 \pm 2	15 \pm 2	17 \pm 2	16 \pm 2	14 \pm 2	16 \pm 2	17 \pm 2	
07/17/02 - 07/24/02	30 \pm 2	29 \pm 2	29 \pm 3	29 \pm 2	28 \pm 2	28 \pm 2	31 \pm 2	
07/24/02 - 07/31/02	9 \pm 2	15 \pm 2	14 \pm 2	16 \pm 2	16 \pm 3	14 \pm 2	16 \pm 2	
07/31/02 - 08/07/02	25 \pm 3	23 \pm 2	24 \pm 2	25 \pm 2	24 \pm 3	26 \pm 3	27 \pm 2	
08/07/02 - 08/14/02	23 \pm 3	23 \pm 3	24 \pm 2	23 \pm 2	23 \pm 3	23 \pm 3	25 \pm 3	
08/14/02 - 08/21/02	20 \pm 3	22 \pm 3	22 \pm 3	23 \pm 3	22 \pm 3	25 \pm 3	21 \pm 3	
08/21/02 - 08/28/02	18 \pm 3	20 \pm 3	19 \pm 7	20 \pm 3	19 \pm 3	18 \pm 3	16 \pm 3	
08/28/02 - 09/04/02	13 \pm 3	13 \pm 3	11 \pm 3	12 \pm 3	12 \pm 3	13 \pm 3	12 \pm 3	
09/04/02 - 09/11/02	24 \pm 3	22 \pm 3	22 \pm 3	21 \pm 3	20 \pm 3	21 \pm 3	21 \pm 3	
09/11/02 - 09/18/02	21 \pm 3	21 \pm 3	24 \pm 3	(1)	23 \pm 3	21 \pm 3	23 \pm 3	
09/18/02 - 09/25/02	22 \pm 5	18 \pm 5	22 \pm 5	40 \pm 7 (1)	21 \pm 5	21 \pm 5	19 \pm 5	
09/25/02 - 10/02/02	19 \pm 5	27 \pm 5	25 \pm 5	22 \pm 5	23 \pm 5	17 \pm 5	22 \pm 5	
10/02/02 - 10/09/02	22 \pm 5	23 \pm 5	22 \pm 5	23 \pm 5	20 \pm 5	21 \pm 5	19 \pm 5	
10/09/02 - 10/16/02	8 \pm 4	7 \pm 4	11 \pm 4	6 \pm 3	8 \pm 4	6 \pm 3	8 \pm 4	
10/16/02 - 10/23/02	17 \pm 5	14 \pm 4	16 \pm 5	21 \pm 5	17 \pm 5	17 \pm 4	22 \pm 5	
10/23/02 - 10/30/02	22 \pm 4	19 \pm 4	17 \pm 4	19 \pm 4	22 \pm 5	18 \pm 4	18 \pm 4	
10/30/02 - 11/06/02	22 \pm 5	21 \pm 5	17 \pm 5	22 \pm 5	19 \pm 5	22 \pm 5	19 \pm 5	
11/06/02 - 11/13/02	25 \pm 5	22 \pm 5	24 \pm 5	21 \pm 5	25 \pm 5	23 \pm 5	25 \pm 5	
11/13/02 - 11/20/02	17 \pm 4	13 \pm 4	15 \pm 5	13 \pm 4	13 \pm 4	13 \pm 4	14 \pm 4	
11/20/02 - 11/26/02	24 \pm 5	23 \pm 5	24 \pm 6	28 \pm 6	24 \pm 5	22 \pm 5	27 \pm 5	
11/26/02 - 12/04/02	16 \pm 4	13 \pm 4	13 \pm 4	15 \pm 4	16 \pm 4	16 \pm 4	16 \pm 4	
12/04/02 - 12/12/02	18 \pm 4	20 \pm 4	24 \pm 4	22 \pm 4	19 \pm 4	20 \pm 4	25 \pm 4	
12/12/02 - 12/18/02	16 \pm 5	14 \pm 5	15 \pm 5	15 \pm 5	16 \pm 5	15 \pm 5	15 \pm 5	
12/18/02 - 12/26/02	15 \pm 4	13 \pm 4	16 \pm 4	12 \pm 4	12 \pm 4	17 \pm 4	14 \pm 4	
12/26/02 - 01/02/03	25 \pm 5	24 \pm 4	18 \pm 4	24 \pm 5	17 \pm 4	19 \pm 4	24 \pm 5	
MEAN	19 \pm 11	19 \pm 11	19 \pm 11	19 \pm 13	18 \pm 10	19 \pm 10	20 \pm 11	

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-VIII.2 MONTHLY AND YEARLY MEAN VALUES OF GROSS BETA CONCENTRATIONS (E-3 PCI/CU METER) IN AIR PARTICULATE SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

GROUP I - SITE LOCATIONS				GROUP II - OFFSITE LOCATIONS				GROUP III - CONTROL LOCATIONS			
COLLECTION PERIOD	MIN.	MAX.	MEAN \pm 2 SD	COLLECTION PERIOD	MIN.	MAX.	MEAN \pm 2 SD	COLLECTION PERIOD	MIN.	MAX.	MEAN \pm 2 SD
01/02/02 - 01/30/02	20	30	26 \pm 6	01/02/02 - 01/30/02	19	28	24 \pm 6	01/02/02 - 01/30/02	20	29	25 \pm 9
01/30/02 - 02/27/02	14	27	20 \pm 10	01/30/02 - 02/27/02	13	28	19 \pm 9	01/30/02 - 02/27/02	17	29	20 \pm 11
02/27/02 - 04/03/02	14	31	21 \pm 12	02/27/02 - 04/03/02	12	31	20 \pm 12	02/27/02 - 04/03/02	15	32	22 \pm 13
04/03/02 - 05/01/02	12	19	15 \pm 4	04/03/02 - 05/01/02	12	17	14 \pm 4	04/03/02 - 05/01/02	13	19	16 \pm 5
05/01/02 - 05/29/02	11	17	14 \pm 4	05/01/02 - 05/29/02	10	16	13 \pm 4	05/01/02 - 05/29/02	13	17	14 \pm 4
05/29/02 - 07/03/02	9	23	18 \pm 10	05/29/02 - 07/03/02	7	22	17 \pm 10	05/29/02 - 07/03/02	10	23	18 \pm 10
07/03/02 - 07/31/02	9	30	20 \pm 15	07/03/02 - 07/31/02	14	29	21 \pm 12	07/03/02 - 07/31/02	16	31	23 \pm 15
07/31/02 - 08/28/02	18	25	22 \pm 4	07/31/02 - 08/28/02	18	26	22 \pm 5	07/31/02 - 08/28/02	16	27	22 \pm 10
08/28/02 - 10/02/02	13	27	20 \pm 9	08/28/02 - 10/02/02	11	40	21 \pm 13	08/28/02 - 10/02/02	12	23	19 \pm 8
10/02/02 - 10/30/02	7	23	16 \pm 12	10/02/02 - 10/30/02	6	23	16 \pm 11	10/02/02 - 10/30/02	8	22	17 \pm 12
10/30/02 - 11/26/02	13	25	21 \pm 8	10/30/02 - 11/26/02	13	28	20 \pm 10	10/30/02 - 11/26/02	14	27	21 \pm 12
11/26/02 - 01/02/03	13	25	17 \pm 9	11/26/02 - 01/02/03	12	24	17 \pm 7	11/26/02 - 01/02/03	14	25	19 \pm 11
01/02/02 - 01/02/03	7	31	19 \pm 6	01/02/02 - 01/02/03	6	40	19 \pm 6	01/02/02 - 01/02/03	8	32	20 \pm 6

TABLE C-VIII.3 CONCENTRATION OF GAMMA EMITTERS IN AIR PARTICULATE SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF E-3 PCI/CU METER \pm 2 SIGMA

STC	COLLECTION PERIOD		Be-7	Mn-54	Co-58	Co-60	Cs-134	Cs-137
A3-1	01/02	- 04/03/02	74 \pm 11	< 0.2	< 0.2	< 0.4	< 0.4	< 0.2
	04/03	- 07/03/02	72 \pm 5.0	< 0.3	< 0.3	< 0.3	< 0.2	< 0.2
	07/03	- 10/02/02	68 \pm 6.7	< 0.6	< 0.7	< 0.5	< 0.5	< 0.5
	10/02	- 01/01/02	45 \pm 4.8	< 0.3	< 0.4	< 0.3	< 0.3	< 0.3
	MEAN		65 \pm 27	0.3 \pm 0.3	0.4 \pm 0.4	0.3 \pm 0.2	0.4 \pm 0.2	0.3 \pm 0.3
E1-2	12/31	- 04/01/02	71 \pm 12	< 0.3	< 0.3	< 0.3	< 0.5	< 0.4
	04/01	- 07/01/02	81 \pm 5.4	< 0.3	< 0.4	< 0.3	< 0.3	< 0.3
	07/01	- 09/30/02	64 \pm 7.0	< 0.6	< 0.8	< 0.7	< 0.5	< 0.5
	09/30	- 12/30/02	61 \pm 5.6	< 0.4	< 0.5	< 0.4	< 0.3	< 0.4
	MEAN		69 \pm 17	0.4 \pm 0.3	0.5 \pm 0.4	0.4 \pm 0.4	0.4 \pm 0.2	0.4 \pm 0.2
F1-3	12/31	- 04/01/02	73 \pm 11	< 0.3	< 0.4	< 0.4	< 0.4	< 0.3
	04/01	- 07/01/02	77 \pm 5.4	< 0.3	< 0.4	< 0.3	< 0.2	< 0.3
	07/01	- 09/30/02	64 \pm 12	< 0.3	< 0.5	< 0.4	< 0.3	< 0.3
	09/30	- 12/30/02	51 \pm 5.2	< 0.4	< 0.4	< 0.4	< 0.3	< 0.4
	MEAN		66 \pm 23	0.3 \pm 0.1	0.4 \pm 0.1	0.4 \pm 0.1	0.3 \pm 0.1	0.3 \pm 0.1
G2-1	12/31	- 04/01/02	62 \pm 10	< 0.3	< 0.3	< 0.4	< 0.5	< 0.5
	04/01	- 07/01/02	71 \pm 4.7	< 0.4	< 0.4	< 0.4	< 0.4	< 0.3
	07/01	- 09/30/02	63 \pm 11	< 0.7	< 0.9	< 0.7	< 0.6	< 0.6
	09/30	- 12/30/02	36 \pm 6.6	< 0.6	< 0.6	< 0.6	< 0.5	< 0.5
	MEAN		58 \pm 31	0.5 \pm 0.4	0.6 \pm 0.5	0.5 \pm 0.3	0.5 \pm 0.2	0.5 \pm 0.3
H3-1	12/31	- 04/01/02	59 \pm 10	< 0.2	< 0.2	< 0.5	< 0.4	< 0.2
	04/01	- 07/01/02	70 \pm 4.9	< 0.5	< 0.6	< 0.4	< 0.5	< 0.5
	07/01	- 09/30/02	66 \pm 13	< 0.9	< 1.3	< 0.9	< 0.8	< 0.9
	09/30	- 12/30/02	47 \pm 3.4	< 0.3	< 0.3	< 0.3	< 0.2	< 0.2
	MEAN		61 \pm 20	0.5 \pm 0.6	0.6 \pm 1.0	0.5 \pm 0.5	0.5 \pm 0.5	0.5 \pm 0.7
M2-1	12/31	- 04/01/02	68 \pm 11	< 0.2	< 0.3	< 0.4	< 0.4	< 0.4
	04/01	- 07/01/02	73 \pm 5.0	< 0.4	< 0.4	< 0.3	< 0.4	< 0.3
	07/01	- 09/30/02	70 \pm 11	< 0.8	< 0.9	< 0.8	< 0.7	< 0.8
	09/30	- 12/30/02	46 \pm 4.4	< 0.3	< 0.4	< 0.4	< 0.3	< 0.3
	MEAN		64 \pm 25	0.4 \pm 0.5	0.5 \pm 0.6	0.5 \pm 0.5	0.4 \pm 0.3	0.5 \pm 0.4
Q15-1	12/31	- 04/01/02	68 \pm 11	< 0.4	< 0.3	< 0.4	< 0.3	< 0.2
	04/01	- 07/01/02	75 \pm 5.5	< 0.5	< 0.6	< 0.4	< 0.5	< 0.4
	07/01	- 09/30/02	77 \pm 13	< 0.4	< 0.5	< 0.4	< 0.3	< 0.4
	09/30	- 12/30/02	47 \pm 4.4	< 0.4	< 0.5	< 0.4	< 0.4	< 0.4
	MEAN		67 \pm 27	0.4 \pm 0.1	0.5 \pm 0.2	0.4 \pm 0.04	0.4 \pm 0.1	0.4 \pm 0.3

TABLE C-IX.1 CONCENTRATIONS OF I-131 IN AIR IODINE SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF E-3 PCI/CU METER \pm 2 SIGMA

COLLECTION PERIOD	GROUP I		GROUP II				GROUP III
	E1-2	F1-3	A3-1	G2-1	H3-1	M2-1	Q15-1
01/02/02 - 01/09/02	< 4	< 4	< 4	< 4	< 5	< 5	< 5
01/09/02 - 01/16/02	< 5	< 5	< 5	< 5	< 5	< 5	< 5
01/16/02 - 01/23/02	< 9	< 9	< 8	< 8	< 6	< 6	< 6
01/23/02 - 01/30/02	< 8	< 8	< 7	< 7	< 6	< 6	< 6
01/30/02 - 02/06/02	< 7	< 7	< 7	< 7	< 5	< 5	< 5
02/06/02 - 02/13/02	< 5	< 5	< 5	< 5	< 6	< 6	< 7
02/13/02 - 02/20/02	< 5	< 5	< 4	< 5	< 6	< 5	< 5
02/20/02 - 02/27/02	< 6	< 6	< 6	< 6	< 6	< 6	< 6
02/27/02 - 03/06/02	< 6	< 6	< 6	< 6	< 7	< 7	< 7
03/06/02 - 03/13/02	< 4	< 4	< 4	< 4	< 5	< 4	< 5
03/13/02 - 03/20/02	< 6	< 5	< 5	< 5	< 6	< 6	< 6
03/20/02 - 03/27/02	< 6	< 6	< 5	< 6	< 5	< 4	< 4
03/27/02 - 04/03/02	< 4	< 4	< 4	< 4	< 4	< 4	< 4
04/03/02 - 04/10/02	< 6	< 5	< 5	< 4	< 5	< 5	< 5
04/10/02 - 04/17/02	< 6	< 4	< 6	< 6	< 6	< 5	< 4
04/17/02 - 04/24/02	< 17	< 16	< 16	< 8	< 16	< 16	< 16
04/24/02 - 05/01/02	< 6	< 5	< 5	< 5	< 5	< 5	< 5
05/01/02 - 05/08/02	< 10	< 10	< 9	< 10	< 6	< 6	< 4
05/08/02 - 05/15/02	< 8	< 8	< 8	< 8	< 6	< 5	< 5
05/15/02 - 05/22/02	< 6	< 6	< 6	< 6	< 5	< 5	< 5
05/22/02 - 05/29/02	< 7	< 7	< 7	< 7	< 10	< 9	< 9
05/29/02 - 06/05/02	< 18	< 16	< 9	< 10	< 10	< 15	< 15
06/05/02 - 06/12/02	< 11	< 10	< 17	< 10	< 10	< 16	< 16
06/12/02 - 06/19/02	< 7	< 6	< 5	< 6	< 7	< 9	< 9
06/19/02 - 06/26/02	< 9	< 4	< 8	< 4	(1)	< 8	< 8
06/27/02 - 07/03/02	< 8	< 7	< 4	< 7	< 7	< 7	< 4
07/03/02 - 07/10/02	< 15	< 7	< 15	< 12	< 15	< 14	< 15
07/10/02 - 07/17/02	< 15	< 14	< 14	< 13	< 14	< 9	< 11
07/17/02 - 07/24/02	< 10	< 4	< 6	< 4	< 4	< 3	< 4
07/24/02 - 07/31/02	< 9	< 8	< 12	< 8	< 8	< 11	< 8
07/31/02 - 08/07/02	< 24	< 12	< 15	< 12	< 24	< 25	< 7
08/07/02 - 08/14/02	< 11	< 11	< 11	< 5	< 11	< 17	< 17
08/14/02 - 08/21/02	< 21	< 21	< 12	< 21	< 21	< 19	< 19
08/21/02 - 08/28/02	< 34	< 16	< 42	< 16	< 34	< 34	< 34
08/28/02 - 09/04/02	< 20	< 20	< 10	< 20	< 20	< 9	< 9
09/04/02 - 09/11/02	< 17	< 22	< 23	< 22	< 22	< 21	< 21
09/11/02 - 09/18/02	< 16	< 15	< 21	(1)	< 13	< 27	< 27
09/18/02 - 09/25/02	< 18	< 18	< 9	< 35 (1)	< 17	< 17	< 17
09/25/02 - 10/02/02	< 20	< 20	< 20	< 20	< 19	< 12	< 19
10/02/02 - 10/09/02	< 13	< 24	< 23	< 22	< 22	< 22	< 22
10/09/02 - 10/16/02	< 19	< 19	< 16	< 19	< 18	< 14	< 14
10/16/02 - 10/23/02	< 25	< 25	< 33	< 25	< 25	< 10	< 31
10/23/02 - 10/30/02	< 40	< 40	< 27	< 41	< 40	< 27	< 26
10/30/02 - 11/06/02	< 24	< 24	< 43	< 16	< 39	< 39	< 39
11/06/02 - 11/13/02	< 42	< 41	< 35	< 42	< 41	< 42	< 33
11/13/02 - 11/20/02	< 15	< 15	< 17	< 16	< 15	< 6	< 21
11/20/02 - 11/26/02	< 12	< 12	< 19	< 12	< 12	< 12	< 18
11/26/02 - 12/04/02	< 8	< 8	< 12	< 8	< 8	< 11	< 11
12/04/02 - 12/12/02	< 12	< 12	< 11	< 12	< 11	< 12	< 11
12/12/02 - 12/18/02	< 18	< 15	< 11	< 15	< 15	< 8	< 11
12/18/02 - 12/26/02	< 7	< 6	< 7	< 6	< 6	< 6	< 6
12/26/02 - 01/02/03	< 6	< 6	< 12	< 6	< 6	< 12	< 12
MEAN	13 \pm 18	12 \pm 17	13 \pm 19	11 \pm 17	13 \pm 19	12 \pm 18	12 \pm 18

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-X.1 CONCENTRATIONS OF IODINE I-131 IN MILK SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	CONTROL FARM	INDICATOR FARMS		
	K15-3	D2-1	E2-2	G2-1
01/30/02	< 0.4	< 0.4	< 0.4	< 0.4
02/27/02	< 0.4	< 0.4	< 0.4	< 0.5
03/13/02	< 0.3	< 0.3	< 0.2	< 0.3
03/27/02	< 0.3	< 0.3	< 0.3	< 0.3
04/10/02	< 0.2	< 0.2	< 0.1	< 0.1
04/24/02	< 0.2	< 0.2	< 0.2	< 0.2
05/08/02	< 0.1	< 0.1	< 0.2	< 0.1
05/22/02	< 0.4	< 0.4	< 0.4	< 0.4
06/05/02	< 0.8	(1)	< 0.2	< 0.8
06/19/02	< 0.2	< 0.3	< 0.2	< 0.4
07/03/02	< 0.4	< 0.3	< 0.4	< 0.4
07/17/02	< 0.3	< 0.3	< 0.2	< 0.2
07/31/02	< 0.2	< 0.2	< 0.3	< 0.2
08/14/02	< 0.3	< 0.4	< 0.4	< 0.5
08/28/02	< 0.5	< 0.5	< 0.3	< 0.3
09/11/02	< 0.5	< 0.4	< 0.5	< 0.4
09/25/02	< 0.3	< 0.4	< 0.4	< 0.5
10/09/02	< 0.3	< 0.3	< 0.3	< 0.2
10/23/02	< 0.4	< 0.4	< 0.4	< 0.3
11/06/02	< 0.3	< 0.3	< 0.3	(1)
11/20/02	< 0.5	< 0.2	< 0.4	< 0.4
12/12/02	< 0.5	< 0.4	< 0.5	< 0.5
MEAN	0.4 \pm 0.3	0.3 \pm 0.2	0.3 \pm 0.2	0.4 \pm 0.3

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

**TABLE C-X.2 CONCENTRATIONS OF STRONTIUM IN MILK SAMPLES COLLECTED IN
THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	CONTROL FARM		INDICATOR FARMS					
	K15-3		D2-1		E2-2		G2-1	
	Sr-89	Sr-90	Sr-89	Sr-90	Sr-89	Sr-90	Sr-89	Sr-90
01/02/02 - 03/27/02	< 0.6	1.0 \pm 0.4	< 0.7	0.9 \pm 0.4	< 0.6	1.0 \pm 0.4	< 0.8	0.9 \pm 0.4
04/10/02 - 06/19/02	< 1.9	0.8 \pm 0.1	< 1.2	2.1 \pm 0.2	< 1.2	0.8 \pm 0.2	< 1.9	0.6 \pm 0.3
07/03/02 - 09/25/02	< 1.9	1.0 \pm 0.2	< 1.6	0.7 \pm 0.2	< 1.8	0.8 \pm 0.2	< 1.7	0.8 \pm 0.2
10/09/02 - 12/12/02	< 4.0	0.8 \pm 0.3	< 3.5	2.5 \pm 0.3	< 3.5	0.6 \pm 0.2	< 3.5	0.5 \pm 0.3
MEAN	2.1 \pm 2.7	0.9 \pm 0.3	1.8 \pm 2.4	1.6 \pm 1.7	1.8 \pm 2.5	0.8 \pm 0.3	2.0 \pm 2.3	0.7 \pm 0.4

TABLE C-X.3 CONCENTRATIONS OF GAMMA EMITTERS IN MILK SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	K-40	Cs-134	Cs-137	Ba-140	La-140
D2-1	01/30/02	1312 \pm 106	< 3	< 3	< 21	< 3
	02/27/02	1306 \pm 187	< 3	< 6	< 29	< 8
	03/13/02	1446 \pm 119	< 3	< 3	< 10	< 3
	03/27/02	1334 \pm 94	< 3	< 3	< 11	< 2
	04/10/02	1340 \pm 95	< 5	< 5	< 24	< 8
	04/24/02	1510 \pm 86	< 4	< 4	< 21	< 7
	05/08/02	1440 \pm 60	< 2	< 2	< 8	< 2
	05/22/02	1410 \pm 61	< 2	< 2	< 10	< 3
	06/05/02	1490 \pm 90	< 4	< 3	< 21	< 7
	06/19/02	1400 \pm 91	< 4	< 4	< 19	< 6
	07/03/02	1480 \pm 91	< 4	< 4	< 29	< 9
	07/17/02	1510 \pm 93	< 4	< 5	< 21	< 6
	07/31/02	1590 \pm 83	< 6	< 8	< 23	< 7
	08/14/02	1320 \pm 79	< 4	< 4	< 26	< 9
	08/28/02	1290 \pm 88	< 4	< 6	< 25	< 8
	09/11/02	1360 \pm 82	< 3	< 4	< 26	< 9
	09/25/02	1460 \pm 67	< 2	< 3	< 17	< 5
	10/09/02	1550 \pm 67	< 2	< 3	< 21	< 6
	10/23/02	1500 \pm 68	< 2	< 3	< 22	< 7
	11/06/02	1680 \pm 94	< 4	< 5	< 22	< 8
	11/20/02	2060 \pm 129	< 3	< 4	< 22	< 5
	12/12/02	1749 \pm 89	< 2	< 2	< 11	< 3
	MEAN	1479 \pm 354	3 \pm 2	4 \pm 3	20 \pm 12	6 \pm 5
E2-2	01/30/02	1501 \pm 117	< 5	< 4	< 19	< 6
	02/27/02	1417 \pm 132	< 4	< 3	< 28	< 4
	03/13/02	1412 \pm 121	< 4	< 4	< 20	< 2
	03/27/02	1374 \pm 104	< 3	< 2	< 16	< 4
	04/10/02	1480 \pm 82	< 4	< 4	< 18	< 5
	04/24/02	1540 \pm 77	< 3	< 3	< 17	< 4
	05/08/02	1430 \pm 57	< 2	< 2	< 9	< 3
	05/22/02	1450 \pm 70	< 2	< 3	< 13	< 4
	06/05/02	1440 \pm 85	< 4	< 5	< 21	< 6
	06/19/02	1430 \pm 86	< 4	< 5	< 17	< 6
	07/03/02	1440 \pm 91	< 4	< 5	< 31	< 9
	07/17/02	1410 \pm 90	< 4	< 4	< 20	< 6
	07/31/02	1410 \pm 85	< 7	< 7	< 28	< 8
	08/14/02	1340 \pm 114	< 6	< 7	< 42	< 14
	08/28/02	1470 \pm 79	< 4	< 4	< 19	< 6
	09/11/02	1420 \pm 83	< 4	< 4	< 28	< 9
	09/25/02	1440 \pm 65	< 2	< 2	< 18	< 5
	10/09/02	1490 \pm 65	< 2	< 2	< 21	< 7
	10/23/02	1480 \pm 63	< 2	< 2	< 20	< 6
	11/06/02	1490 \pm 89	< 4	< 5	< 25	< 8
	11/20/02	1420 \pm 131	< 3	< 3	< 21	< 5
	12/12/02	1452 \pm 136	< 5	< 6	< 28	< 9
	MEAN	1443 \pm 89	4 \pm 2	4 \pm 3	22 \pm 14	6 \pm 5

TABLE C-X.2 CONCENTRATIONS OF GAMMA EMITTERS IN MILK SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	K-40	Cs-134	Cs-137	Ba-140	La-140
G2-1	01/30/02	1316 \pm 119	< 4	< 4	< 24	< 5
	02/27/02	1430 \pm 103	< 2	< 2	< 21	< 4
	03/13/02	1490 \pm 131	< 5	< 4	< 16	< 4
	03/27/02	1332 \pm 97	< 3	< 3	< 10	< 3
	04/10/02	1500 \pm 80	< 6	< 6	< 22	< 7
	04/24/02	1300 \pm 103	< 5	< 5	< 27	< 9
	05/08/02	1310 \pm 58	< 2	< 3	< 9	< 3
	05/22/02	1480 \pm 63	< 2	< 2	< 10	< 3
	06/05/02	1380 \pm 88	< 4	< 5	< 24	< 7
	06/19/02	1430 \pm 87	< 4	< 5	< 19	< 6
	07/03/02	1460 \pm 83	< 4	< 5	< 24	< 8
	07/17/02	1600 \pm 88	< 3	< 5	< 18	< 5
	07/31/02	1580 \pm 87	< 7	< 7	< 28	< 9
	08/14/02	1100 \pm 86	< 4	< 5	< 33	< 11
	08/28/02	1450 \pm 85	< 4	< 4	< 22	< 7
	09/11/02	1450 \pm 82	< 4	< 4	< 28	< 9
	09/25/02	1660 \pm 76	< 2	< 3	< 20	< 6
	10/09/02	1500 \pm 69	< 2	< 3	< 26	< 8
	10/23/02	1460 \pm 64	< 2	< 2	< 22	< 6
	11/06/02	1370 \pm 89	< 4	< 5	< 25	< 7
	11/20/02	1337 \pm 127	< 7	< 7	< 44	< 14
	12/12/02	1510 \pm 153	< 7	< 7	< 32	< 9
	MEAN	1429 \pm 242	4 \pm 3	4 \pm 3	23 \pm 16	7 \pm 5
K15-3	01/30/02	1497 \pm 173	< 6	< 5	< 35	< 5
	02/27/02	1524 \pm 103	< 3	< 2	< 21	< 4
	03/13/02	1517 \pm 123	< 4	< 3	< 22	< 3
	03/27/02	1658 \pm 176	< 5	< 5	< 22	< 5
	04/10/02	1600 \pm 94	< 6	< 6	< 28	< 9
	04/24/02	1550 \pm 84	< 3	< 5	< 19	< 6
	05/08/02	1650 \pm 65	< 2	< 2	< 8	< 3
	05/22/02	1570 \pm 66	< 2	< 2	< 11	< 3
	06/05/02	1480 \pm 101	< 5	< 5	< 26	< 9
	06/19/02	1550 \pm 79	< 5	< 4	< 21	< 6
	07/03/02	1470 \pm 87	< 4	< 5	< 29	< 9
	07/17/02	1610 \pm 87	< 4	< 4	< 17	< 5
	07/31/02	1550 \pm 79	< 5	< 5	< 22	< 7
	08/14/02	1490 \pm 81	< 3	< 4	< 25	< 8
	08/28/02	1340 \pm 83	< 6	< 6	< 28	< 9
	09/11/02	1370 \pm 94	< 4	< 5	< 32	< 10
	09/25/02	1540 \pm 74	< 3	< 3	< 21	< 6
	10/09/02	1500 \pm 68	< 2	< 3	< 23	< 7
	10/23/02	1620 \pm 74	< 2	< 3	< 24	< 6
	11/06/02	1530 \pm 77	< 3	< 4	< 17	< 5
	11/20/02	1760 \pm 136	< 3	< 4	< 18	< 6
	12/12/02	1483 \pm 86	< 4	< 4	< 17	< 4
	MEAN	1539 \pm 184	4 \pm 3	4 \pm 2	22 \pm 12	6 \pm 4

TABLE C-XI.1

**CONCENTRATIONS OF STRONTIUM AND GAMMA EMITTERS IN
FOOD PRODUCT SAMPLES COLLECTED IN THE VICINITY OF THREE
MILE ISLAND NUCLEAR STATION, 2002**

RESULTS IN UNITS OF PCI/KG WET \pm 2 SIGMA

STC	COLLECTION PERIOD	Sr-90	K-40	I-131	Cs-134	Cs-137
B10-2 Corn	08/01/02		1740 \pm 110	< 23	< 10	< 10
B10-2 Cabbage	08/01/02	< 6	2250 \pm 153	< 19	< 7	< 7
B10-2 Beets	08/01/02		4050 \pm 183	< 24	< 10	< 9
B10-2 Tomatoes	08/13/02		2390 \pm 180	< 17	< 7	< 8
	MEAN		2608 \pm 2003	21 \pm 7	9 \pm 4	9 \pm 2
E1-2 Corn	08/01/02		2070 \pm 158	< 31	< 14	< 13
E1-2 Cabbage	08/01/02	< 3	2640 \pm 129	< 20	< 9	< 8
E1-2 Beets	08/01/02		4960 \pm 1160	< 178 (1)	< 22	< 21
E1-2 Tomatoes	08/13/02		2670 \pm 180	< 16	< 7	< 8
	MEAN	4 \pm 4	3085 \pm 2560	22 \pm 15	13 \pm 14	12 \pm 13

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-XII.1 QUARTERLY TLD RESULTS FOR THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF MILLI-ROENTGEN/STD. MONTH

STATION CODE	MEAN ± 2 S. D.	01/02 - 04/09/02	04/08 - 07/10/02	07/10 - 10/10/2	10/10 - 01/09/03
A1-4	4.3 ± 0.7	4.7	4.3	3.8	4.3
A3-1	4.1 ± 0.5	4.3	4.2	3.7	4.2
A5-1	5.4 ± 0.6	5.5	5.7	5.0	5.4
A9-3	4.5 ± 0.7	4.5	4.7	4.0	4.8
B1-1	4.4 ± 0.8	4.4	4.6	3.8	4.6
B1-2	4.3 ± 0.6	4.5	4.5	3.9	4.3
B2-1	4.4 ± 0.4	4.6	4.5	4.1	4.3
B5-1	5.3 ± 0.9	5.5	5.7	4.7	5.2
B10-1	5.0 ± 1.3	5.8	5.1	4.6	4.3
C1-1	5.2 ± 0.8	5.5	5.5	4.8	4.8
C1-2	4.2 ± 0.7	4.6	4.4	4.0	3.8
C2-1	4.8 ± 0.7	5.1	5.1	4.6	4.4
C5-1	5.3 ± 0.9	5.6	5.7	5.0	4.8
C8-1	5.2 ± 0.6	5.5	5.4	4.9	5.0
D1-1	4.4 ± 0.6	4.5	4.6	3.9	4.4
D1-2	5.0 ± 1.0	5.1	5.7	4.6	4.6
D2-2	5.8 ± 0.8	6.0	6.2	5.4	5.4
D6-1	5.7 ± 1.1	6.1	6.1	5.1	5.3
D15-1	5.3 ± 1.0	5.2	6.0	5.0	4.9
E1-2	4.5 ± 0.6	4.8	4.7	4.2	4.2
E1-4	4.3 ± 1.1	4.6	4.9	3.7	4.1
E2-3	5.5 ± 1.1	5.9	6.0	4.9	5.1
E5-1	5.4 ± 0.9	5.7	5.7	(1)	4.9
E7-1	5.2 ± 0.9	5.7	5.4	4.7	5.0
F1-1	4.8 ± 1.2	5.1	5.4	4.1	4.4
F1-2	4.5 ± 1.0	4.8	5.0	4.0	4.1
F1-4	4.5 ± 0.9	4.7	5.0	4.0	4.3
F2-1	5.8 ± 1.1	5.7	6.5	5.5	5.3
F5-1	5.8 ± 1.0	5.8	6.4	5.2	5.6
F10-1	6.4 ± 1.5	6.8	7.2	6.0	5.5
F25-1	5.5 ± 1.0	5.5	6.2	5.1	5.1
G1-2	5.2 ± 0.7	5.2	5.7	4.9	5.1
G1-3	4.3 ± 1.0	4.5	4.9	3.7	4.2
G1-5	4.4 ± 0.8	4.5	4.9	4.0	4.2
G1-6	4.7 ± 1.2	4.8	5.4	4.1	4.3
G2-4	6.2 ± 0.9	6.3	6.7	5.6	6.2
G5-1	4.8 ± 1.1	4.9	5.5	4.4	4.3
G10-1	7.2 ± 1.4	7.6	8.0	6.9	6.4
G15-1	5.4 ± 1.1	5.7	6.0	4.9	4.9
H1-1	5.0 ± 1.2	5.3	5.7	4.4	4.7
H3-1	4.1 ± 0.8	4.4	4.4	3.6	3.8
H5-1	4.0 ± 0.7	4.1	4.4	3.5	4.0
H8-1	7.7 ± 1.1	7.6	8.5	7.2	7.6
H15-1	5.9 ± 1.0	6.0	6.6	5.5	5.5
J1-1	4.4 ± 0.8	4.6	4.8	4.0	4.0

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

**TABLE C-XII.1 QUARTERLY TLD RESULTS FOR THREE MILE ISLAND NUCLEAR
STATION, 2002**

RESULTS IN UNITS OF MILLI-ROENTGEN/STD. MONTH

STATION CODE	MEAN ± 2 S. D.	01/02 - 04/09/02	04/08 - 07/10/02	07/10 - 10/10/2	10/10 - 01/09/03
J1-3	37 ± 04	3.8	3.9	34	37
J3-1	50 ± 05	5.1	5.2	46	49
J5-1	57 ± 08	5.9	6.1	53	53
J7-1	58 ± 1.0	6.1	6.2	56	5.1
J15-1	57 ± 0.9	6.0	6.2	53	54
K1-4	4.5 ± 0.7	4.7	4.8	4.1	4.2
K2-1	5.5 ± 0.8	5.8	5.9	5.2	5.1
K3-1	4.5 ± 0.8	4.6	5.0	4.2	4.2
K5-1	5.7 ± 0.7	5.7	6.1	5.2	5.6
K8-1	5.4 ± 1.0	5.7	6.0	4.9	5.1
K15-1	5.0 ± 0.8	5.1	5.5	4.6	4.8
L1-1	4.6 ± 0.9	4.8	5.1	4.1	4.5
L1-2	4.5 ± 0.7	4.7	4.8	4.3	4
L2-1	5.2 ± 1.0	4.9	5.8	4.7	5.3
L5-1	4.6 ± 0.5	4.8	4.8	4.4	4.4
L8-1	5.0 ± 0.8	5.3	5.4	4.7	4.7
L15-1	5.0 ± 0.8	5.1	5.5	4.7	4.6
M1-1	4.3 ± 0.4	4.3	4.5	4.0	4.2
M1-2	4.4 ± 0.7	4.5	4.9	4.2	4.1
M2-1	4.2 ± 0.8	4.2	4.7	3.8	3.9
M5-1	4.7 ± 0.8	4.9	5.2	4.3	4.5
M9-1	6.1 ± 0.9	6.2	6.7	5.9	5.6
N1-1	4.7 ± 0.5	4.9	4.8	4.4	4.5
N1-3	4.4 ± 0.6	4.3	4.8	4.1	4.5
N2-1	4.3 ± 0.7	4.3	4.8	3.9	4.3
N5-1	4.3 ± 0.9	4.5	4.7	3.7	4.4
N8-1	5.5 ± 0.7	5.5	5.8	5.0	5.6
N15-2	5.8 ± 1.2	5.6	6.5	5.1	5.9
P1-1	4.6 ± 0.5	4.7	4.7	4.2	4.7
P1-2	4.4 ± 0.8	4.7	4.6	3.8	4.4
P2-1	5.6 ± 1.1	5.7	6.4	5.2	5.2
P5-1	4.8 ± 1.0	5.1	5.2	4.1	4.8
P8-1	4.1 ± 0.9	4.1	4.7	3.7	3.8
Q1-1	4.8 ± 1.1	4.9	5.5	4.4	4.3
Q1-2	3.9 ± 0.7	4.1	4.3	3.6	3.6
Q2-1	4.5 ± 0.8	4.4	5.0	4.3	4.1
Q5-1	4.5 ± 1.3	4.8	5.3	3.9	4.0
Q9-1	4.8 ± 1.3	5.2	5.4	4.0	4.5
Q15-1	5.5 ± 1.1	5.7	6.2	5.0	5.2
R1-1	4.3 ± 0.7	4.4	4.6	3.8	4.3
R1-2	4.1 ± 1.0	4.3	4.7	3.7	3.7
R3-1	5.7 ± 1.2	5.8	6.4	5.3	5.1
R5-1	5.3 ± 0.5	5.4	5.5	4.9	5.2
R9-1	5.2 ± 1.2	5.5	5.9	4.8	4.6
R15-1	4.6 ± 0.9	4.9	4.9	3.9	4.6

TABLE C-XII.2 MEAN QUARTERLY TLD RESULTS FOR THE SITE BOUNDARY, MIDDLE AND CONTROL LOCATIONS FOR THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF MILLI-ROENTGEN PER STD. MONTH ± 2 STANDARD DEVIATIONS OF THE STATION DATA

STATION CODE	SITE BOUNDARY ± 2 S. D.	OFFSITE	CONTROL
JAN-MAR	4.6 \pm 0.6	5.3 \pm 1.4	5.7 \pm 1.5
APR-JUN	4.7 \pm 0.8	5.5 \pm 1.6	6.1 \pm 1.6
JUL-SEP	3.9 \pm 0.4	4.7 \pm 1.4	5.1 \pm 1.5
OCT-DEC	4.2 \pm 0.6	4.8 \pm 1.3	5.2 \pm 1.1

TABLE C-XII.3 SUMMARY OF THE AMBIENT DOSIMETRY PROGRAM FOR THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF MILLI-ROENTGEN/STD. MONTH

LOCATION	SAMPLES ANALYZED	PERIOD MINIMUM	PERIOD MAXIMUM	PERIOD MEAN ± 2 S. D.	PRE-OP MEAN ± 2 S. D.
SITE BOUNDARY	84	3.4	5.7	4.4 \pm 0.9	4.8 \pm 1.5
OFFSITE	231	3.5	8.5	5.1 \pm 1.6	5.2 \pm 1.5
CONTROL	44	3.9	8.0	5.5 \pm 1.6	5.8 \pm 1.7

THE PRE-OPERATIONAL MEAN WAS CALCULATED FROM MONTHLY TLD READINGS 1980 TO 1985.

SITE BOUNDARY STATIONS - A1-4, B1-1, B1-2, C1-2, D1-1, E1-4, F1-2, F1-4, G1-3, G1-5, G1-6, H1-1, J1-1, J1-3, K1-4, L1-1, M1-1, N1-3, P1-2, Q1-2, R1-1

OFFSITE STATIONS - A3-1, A5-1, A9-3, B2-1, B5-1, B10-1, C1-1, C2-1, C5-1, C8-1, D1-2, D2-2, D6-1, E1-2, E2-3, E5-1, E7-1, F1-1, F2-1, F5-1, F10-1, G1-2, G2-4, G5-1, H3-1, H5-1, H8-1, J3-1, J5-1, J7-1, K2-1, K3-1, K5-1, K8-1, L1-2, L2-1, L5-1, L8-1, M1-2, M2-1, M5-1, M9-1, N1-1, N2-1, N5-1, N8-1, P1-1, P2-1, P5-1, P8-1, Q1-1, Q2-1, Q5-1, Q9-1, R1-2, R3-1, R5-1, R9-1

CONTROL STATIONS - D15-1, F25-1, G10-1, G15-1, H15-1, J15-1, K15-1, L15-1, N15-2, Q15-1, R15-1

FIGURE C-1
Monthly Tritium Concentrations in Surface Water
Three Mile Island Nuclear Station, 2002

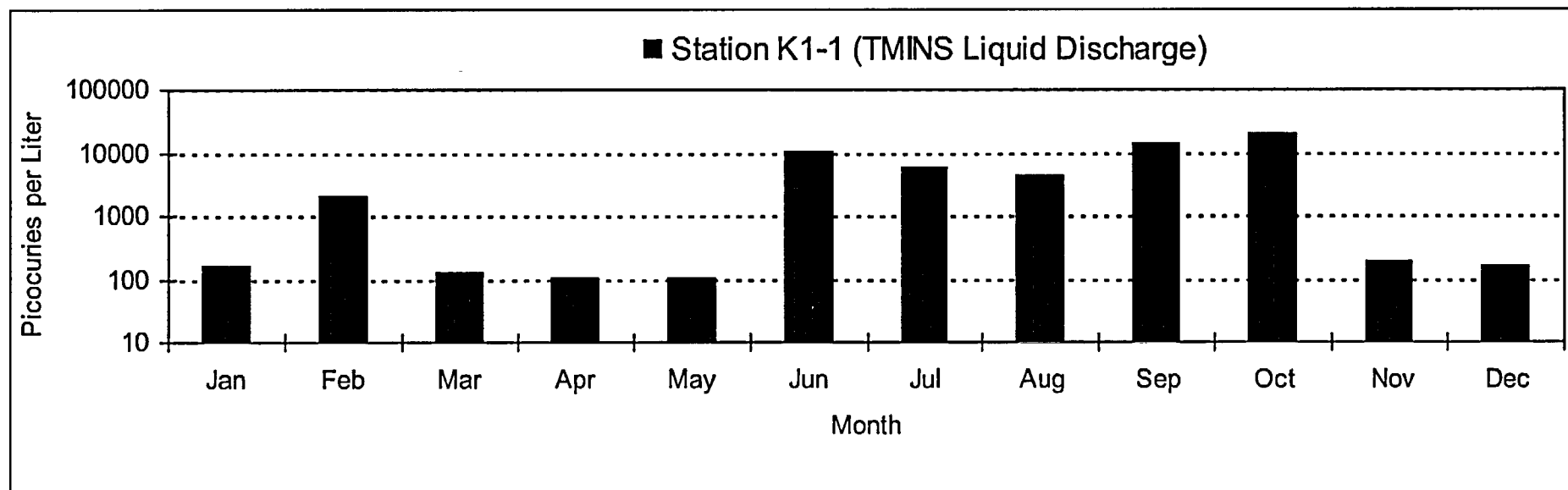
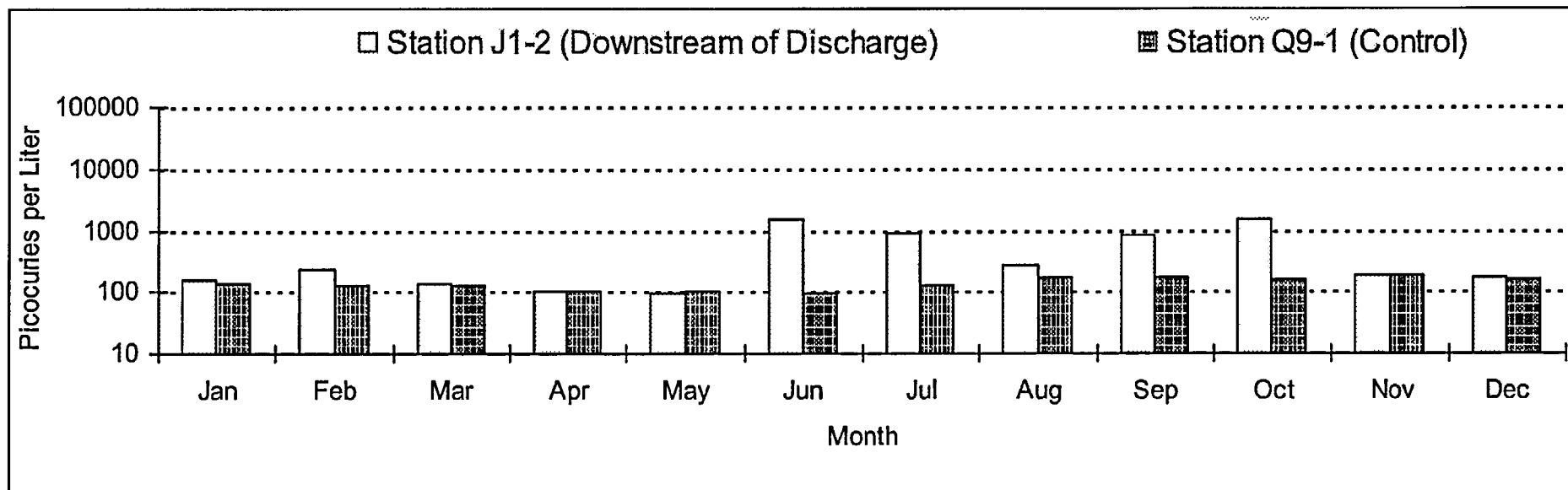


FIGURE C-2
Mean Quarterly Tritium Concentrations in Surface Water
Three Mile Island Nuclear Station, 1974 - 2002

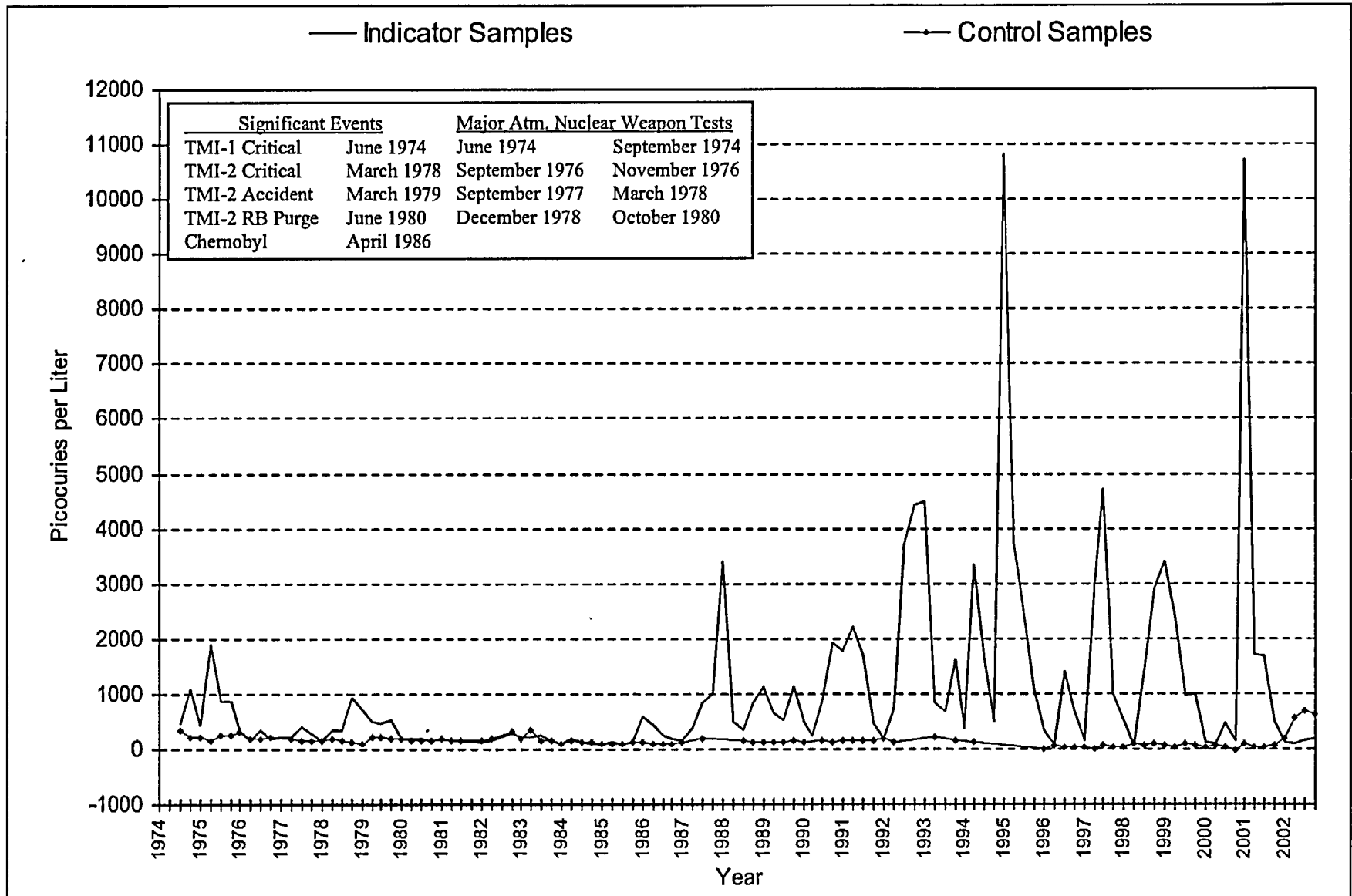


FIGURE C-3
Mean Monthly Gross Beta Concentrations in Drinking Water
Three Mile Island Nuclear Station, 2002

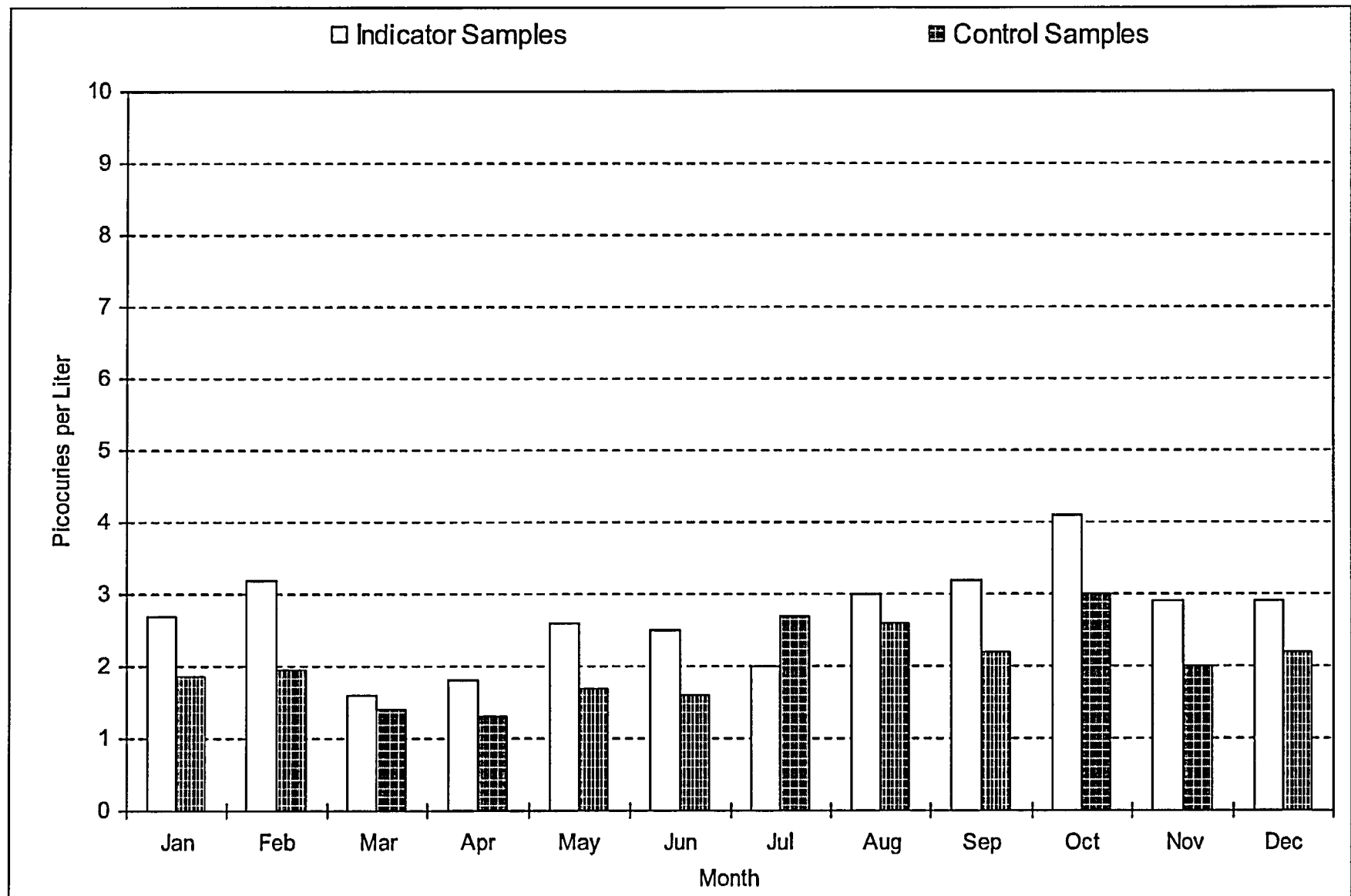


FIGURE C-4
Mean Monthly Tritium Concentrations in Drinking Water
Three Mile Island Nuclear Station, 2002

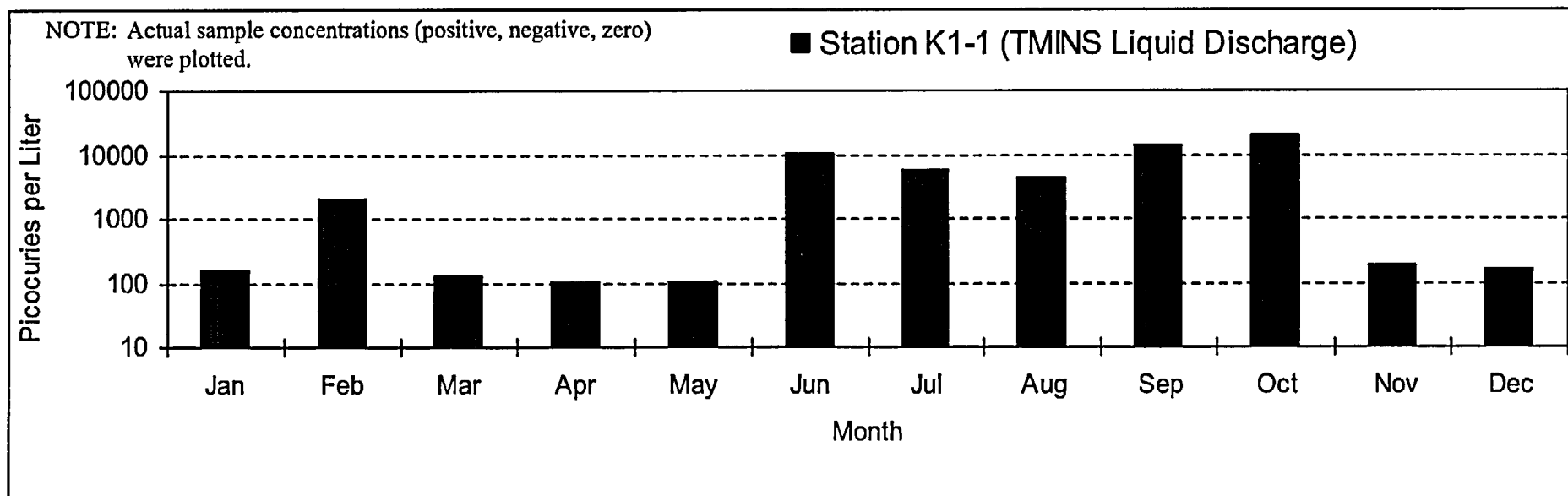
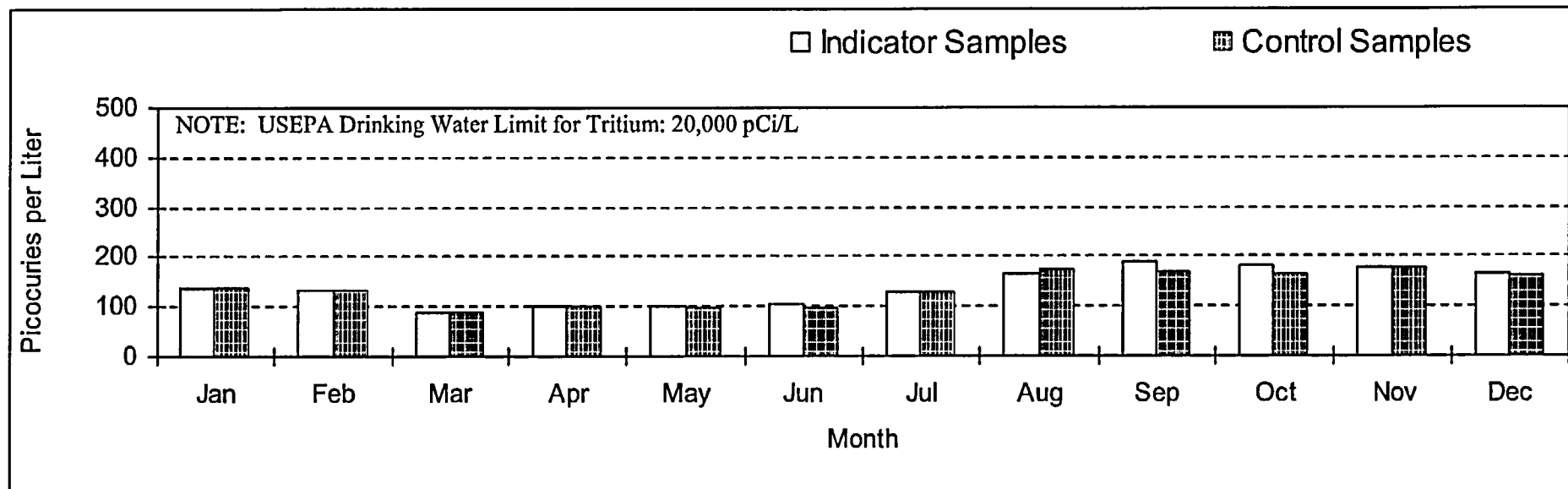


FIGURE C-5
Mean Cesium-137 Concentrations in Aquatic Sediments
Three Mile Island Nuclear Station, 1984 - 2002

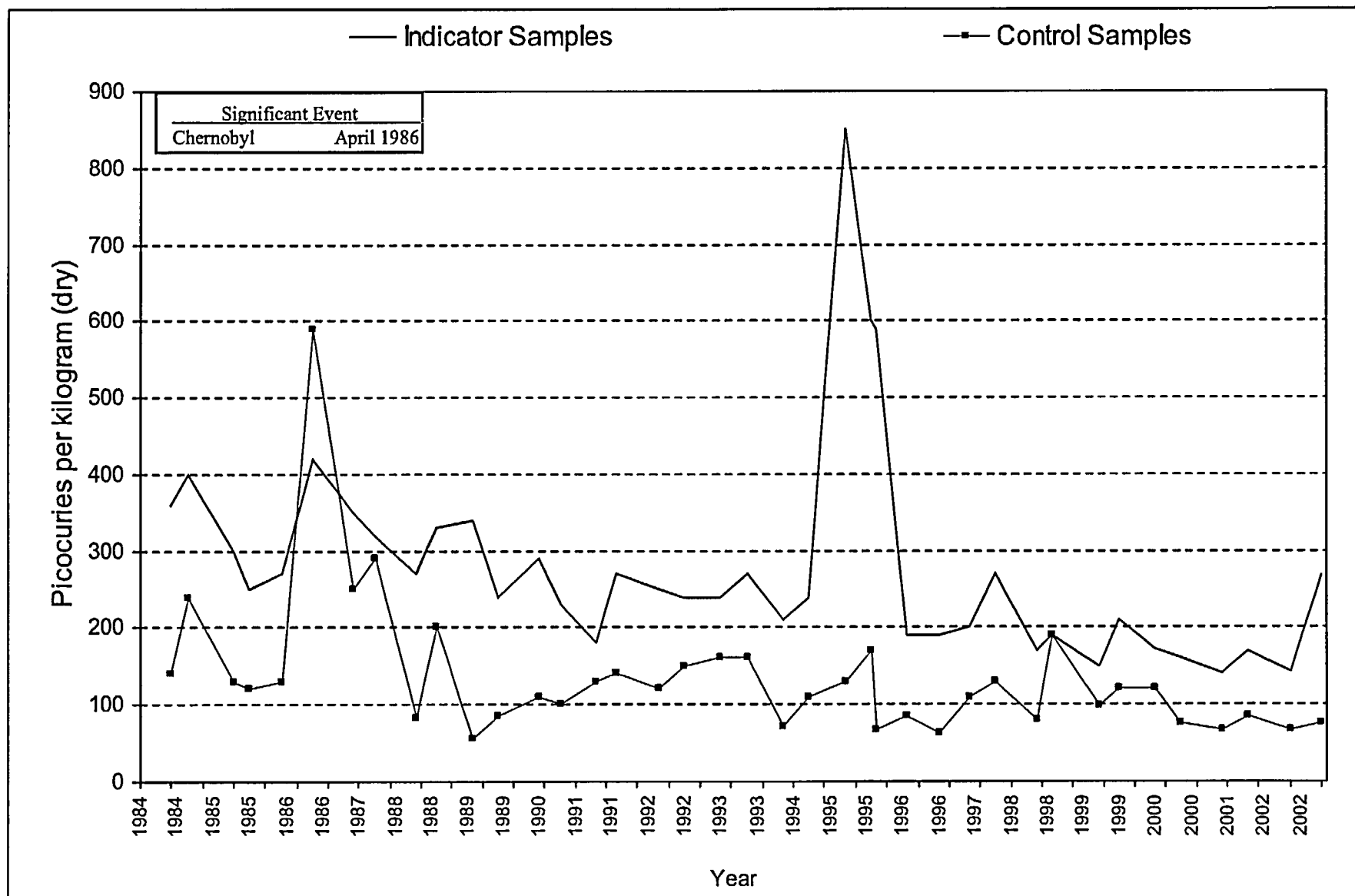


FIGURE C-6
Mean Quarterly Gross Beta Concentrations in Air Particulates
Three Mile Island Nuclear Station, 1972 - 2002

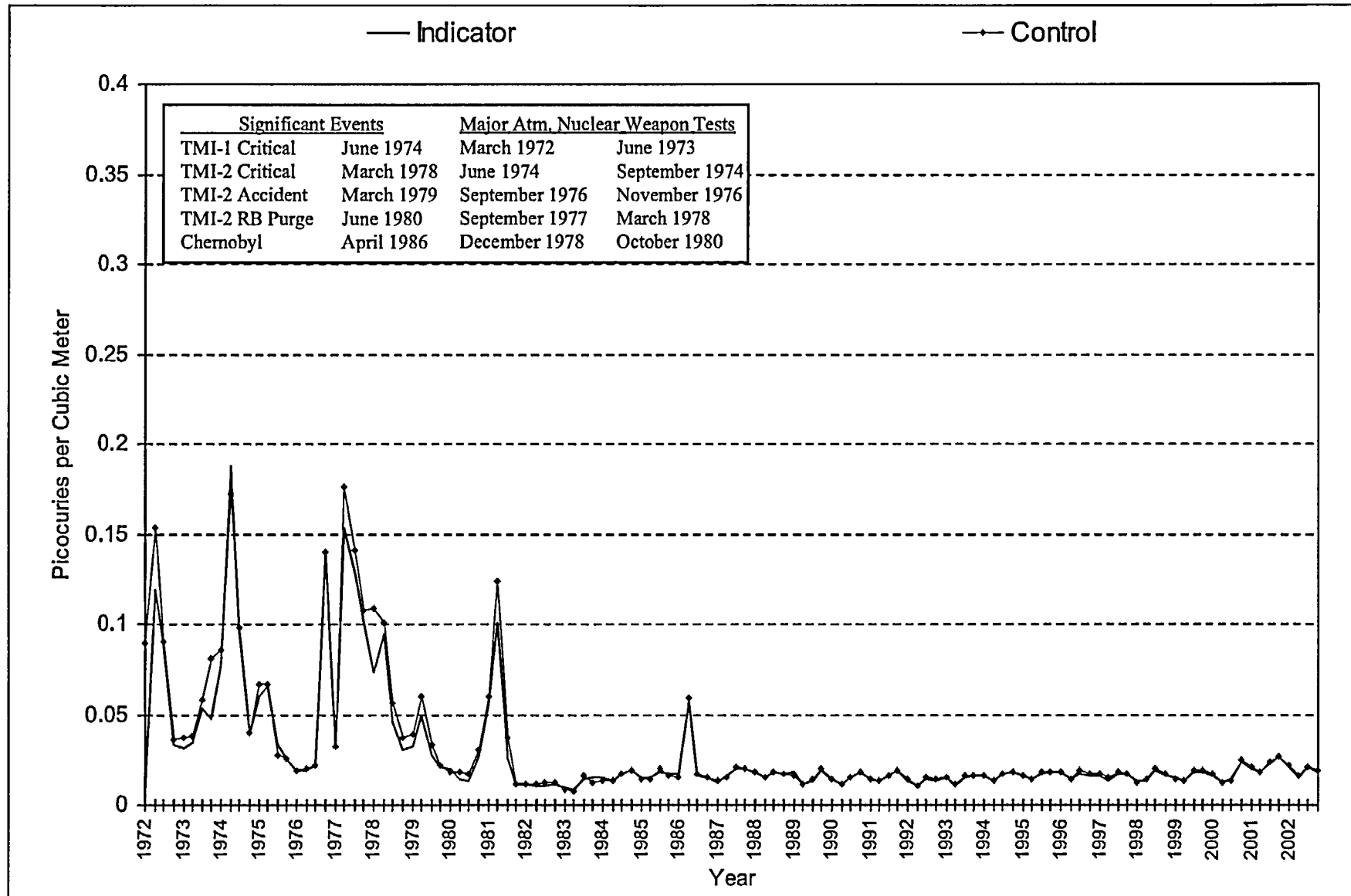


FIGURE C-7
Mean Weekly Gross Beta Concentrations in Air Particulates
Three Mile Island Nuclear Station, 2002

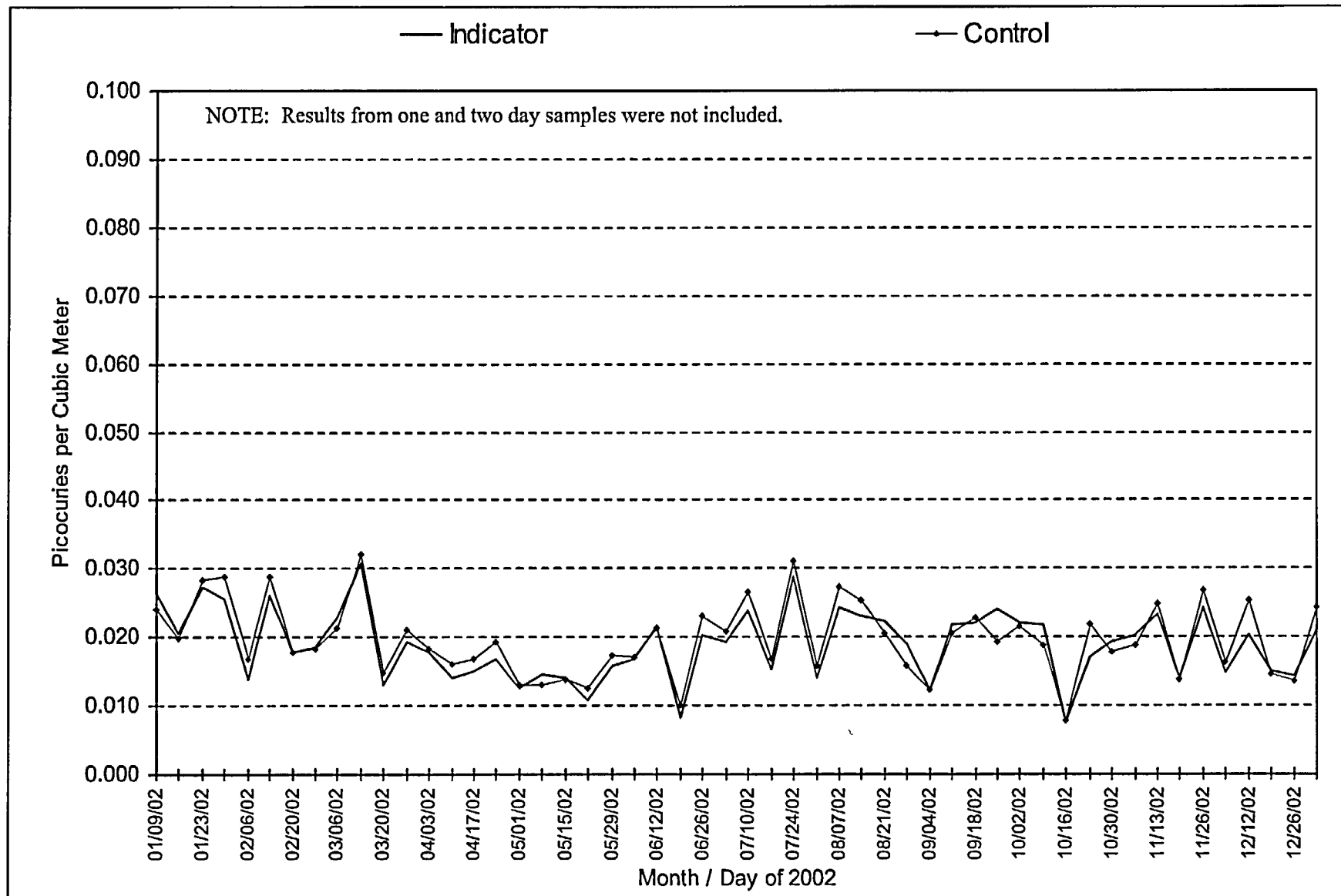


FIGURE C-8
Mean Quarterly Strontium-90 Concentrations in Cow Milk
Three Mile Island Nuclear Station, 1979 - 2002

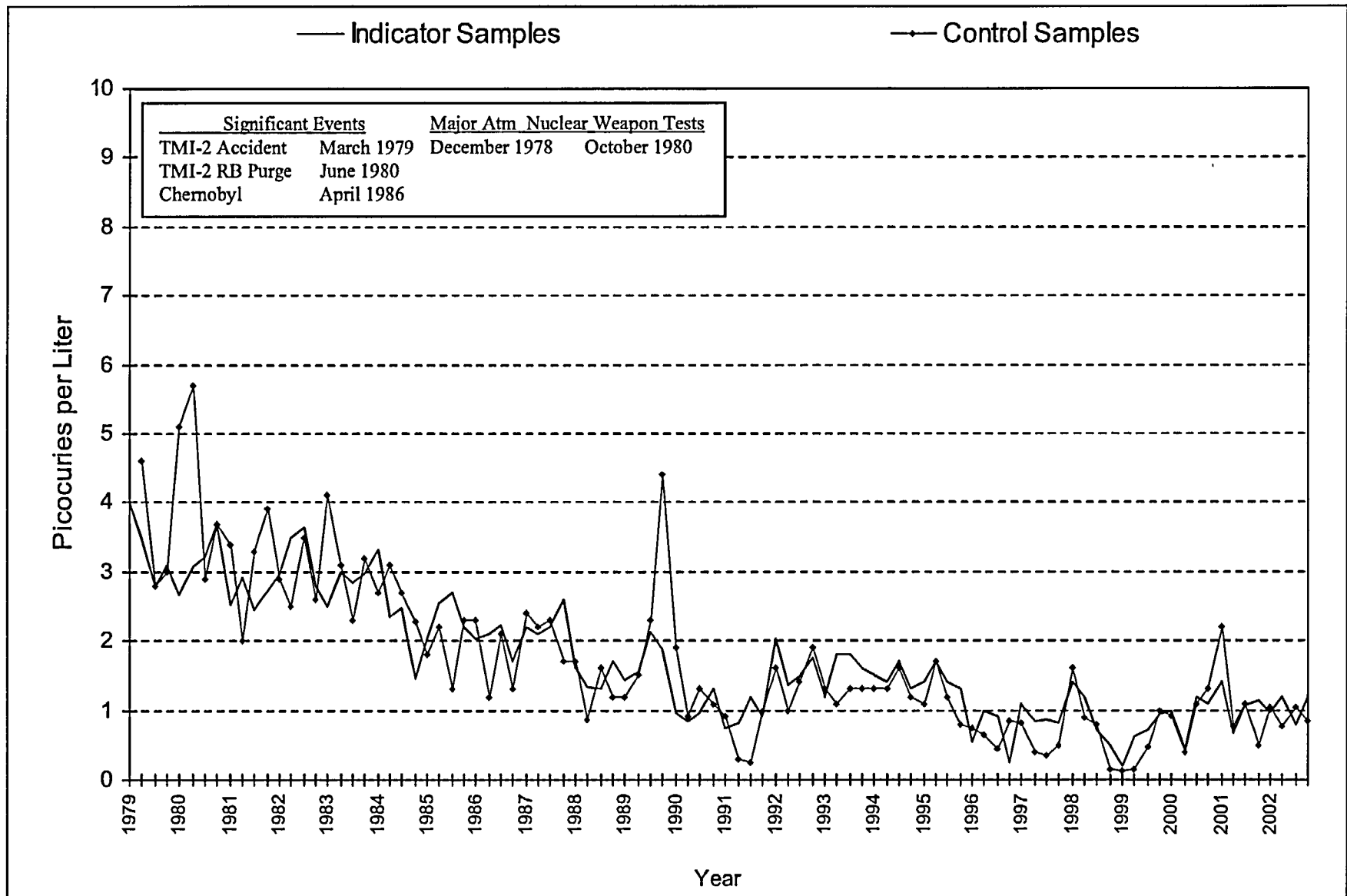
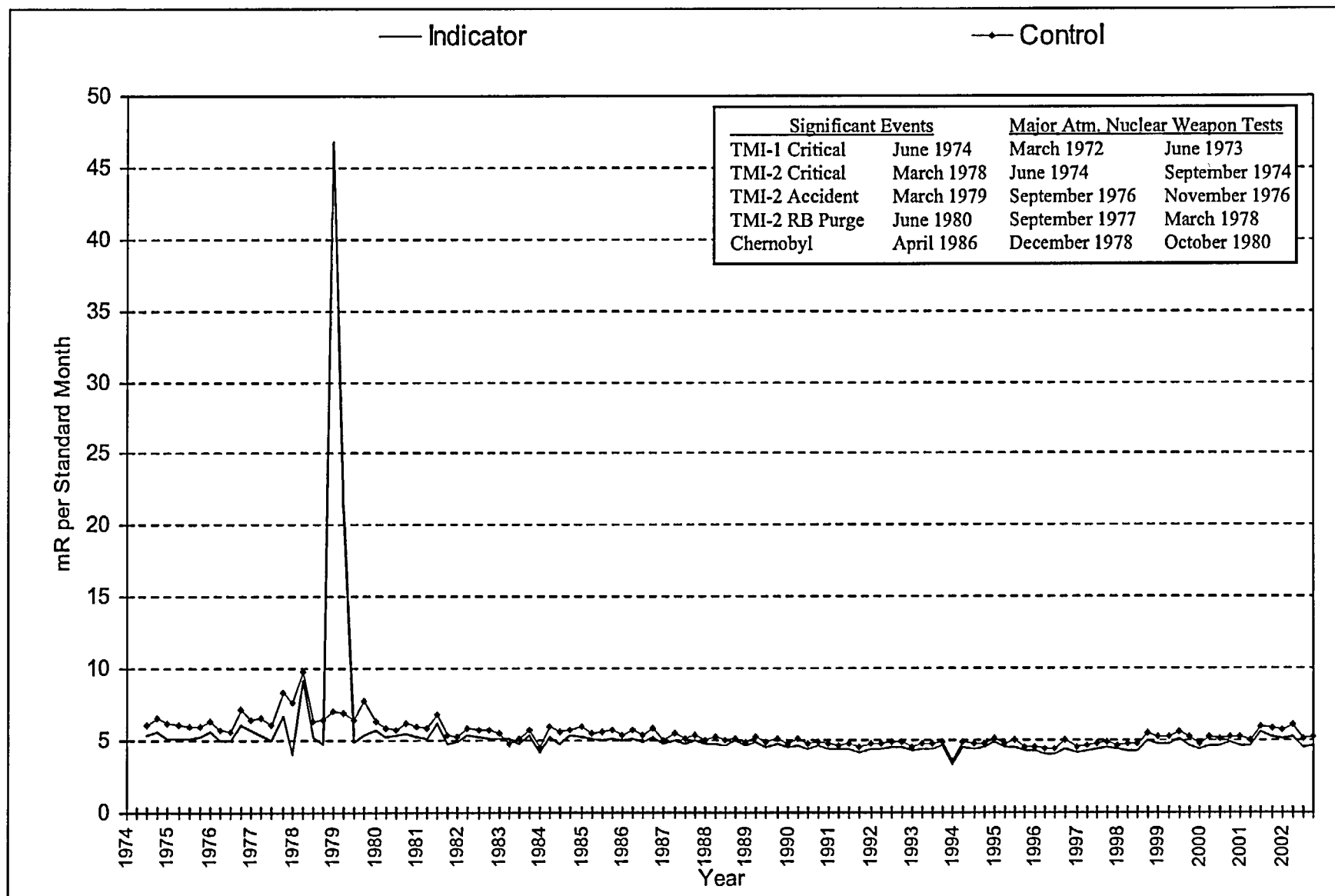


FIGURE C-9
Mean Quarterly Gamma Exposure Rates
Three Mile Island Nuclear Station, 1974 - 2002



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APPENDIX D

DATA TABLES AND FIGURES COMPARISON LABORATORY

The following section contains data and figures illustrating the analyses performed by the quality control laboratory, Environmental Inc. (Env). Duplicate samples were obtained from several locations and media and split between the primary laboratory, Teledyne Brown Engineering (TBE) and Environmental Inc. (Env). Comparison of the results for most media were within expected ranges.

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TABLE D-I.1 CONCENTRATIONS OF GROSS BETA IN DRINKING WATER SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	Q9-1Q
12/26/01 - 01/30/02	1.8 \pm 0.8
01/30/02 - 02/27/02	1.3 \pm 0.8
02/27/02 - 03/27/02	2.6 \pm 0.8
03/27/02 - 04/24/02	1.8 \pm 0.8
04/24/02 - 05/29/02	< 1.6
05/29/02 - 07/03/02	2.1 \pm 0.9
07/03/02 - 07/31/02	1.7 \pm 0.7
07/31/02 - 08/28/02	2.8 \pm 1.1
08/28/02 - 09/25/02	2.3 \pm 1.0
09/25/02 - 10/30/02	< 1.5
10/30/02 - 11/26/02	2.4 \pm 1.0
11/26/02 - 12/31/02	< 1.5
MEAN	2.0 \pm 1.0

TABLE D-I.2 CONCENTRATIONS OF TRITIUM IN DRINKING WATER SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	Q9-1Q
12/26/01 - 01/30/02	< 100
01/30/02 - 02/27/02	< 109
02/27/02 - 03/27/02	< 93
03/27/02 - 04/24/02	< 136
04/24/02 - 05/29/02	< 136
05/29/02 - 07/03/02	< 130
07/03/02 - 07/31/02	< 140
07/31/02 - 08/28/02	< 130
08/28/02 - 09/25/02	< 180
09/25/02 - 10/30/02	< 150
10/30/02 - 11/26/02	< 150
11/26/02 - 12/31/02	< 130
MEAN	132 \pm 47

**TABLE D-I.3 CONCENTRATIONS OF IODINE-131 IN DRINKING WATER SAMPLES COLLECTED
IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	Q9-1Q
12/26/01 - 01/30/02	< 0.2
01/30/02 - 02/27/02	< 0.2
02/27/02 - 03/27/02	< 0.1
03/27/02 - 04/24/02	< 0.3
04/24/02 - 05/29/02	< 0.3
05/29/02 - 07/03/02	< 0.3
07/03/02 - 07/31/02	< 0.2
07/31/02 - 08/28/02	< 0.3
08/28/02 - 09/25/02	< 0.4
09/25/02 - 10/30/02	< 0.4
10/30/02 - 11/26/02	< 0.3
11/26/02 - 12/31/02	< 0.3
MEAN	0.3 \pm 0.2

TABLE D-I.4

**CONCENTRATIONS OF GAMMA EMITTERS IN DRINKING WATER SAMPLES COLLECTED IN THE VICINITY
OF THREE MILE ISLAND NUCLEAR STATION, 2002**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Zr-95	Nb-95	Cs-134	Cs-137	Ba-140	La-140
Q9-1Q	12/26/01 - 01/30/02	< 1.7	< 1.8	< 3.7	< 1.7	< 3.3	< 2.9	< 1.8	< 1.6	< 1.8	< 8.0	< 2.8
	01/30/02 - 02/27/02	< 4.1	< 4.1	< 8.1	< 4.0	< 9.4	< 6.7	< 4.0	< 4.5	< 4.9	< 20	< 6.3
	02/27/02 - 03/27/02	< 1.2	< 1.2	< 2.2	< 1.2	< 2.4	< 1.8	< 1.1	< 1.1	< 1.3	< 4.5	< 1.6
	03/27/02 - 04/24/02	< 1.8	< 1.0	< 5.2	< 1.8	< 2.9	< 3.1	< 1.2	< 1.6	< 2.0	< 7.8	< 1.9
	04/24/02 - 05/29/02	< 4.8	< 2.5	< 9.4	< 4.2	< 4.2	< 6.6	< 5.8	< 3.2	< 3.0	< 34	< 3.8
	05/29/02 - 07/03/02	< 4.3	< 5.5	< 8.8	< 3.7	< 6.4	< 6.0	< 5.3	< 6.3	< 4.5	< 33	< 9.8
	07/03/02 - 07/31/02	< 3.3	< 4.4	< 7.9	< 4.6	< 8.1	< 4.1	< 3.1	< 1.4	< 3.1	< 46	< 6.5
	07/31/02 - 08/28/02	< 2.6	< 2.2	< 5.2	< 2.4	< 3.4	< 4.5	< 1.4	< 2.5	< 2.7	< 9.9	< 3.6
	08/28/02 - 09/25/02	< 3.1	< 1.4	< 4.5	< 2.3	< 4.1	< 2.7	< 2.6	< 3.8	< 2.4	< 13	< 2.4
	09/25/02 - 10/30/02	< 3.9	< 3.9	< 8.1	< 4.6	< 7.3	< 6.2	< 4.8	< 3.2	< 5.4	< 19	< 4.5
	10/30/02 - 11/26/02	< 2.1	< 1.4	< 6.0	< 3.0	< 6.2	< 3.0	< 1.6	< 3.0	< 2.7	< 9.8	< 1.5
	11/26/02 - 12/31/02	< 3.7	< 2.2	< 2.6	< 2.3	< 5.3	< 5.5	< 3.4	< 3.4	< 4.1	< 10	< 3.2
	MEAN	3.1 \pm 2.3	2.6 \pm 3.0	6.0 \pm 4.9	3.0 \pm 2.4	5.3 \pm 4.5	4.4 \pm 3.4	3.0 \pm 3.3	3.0 \pm 3.0	3.2 \pm 2.6	18 \pm 26	4.0 \pm 4.9

TABLE D-I.5 CONCENTRATIONS OF TRITIUM, STRONTIUM, AND GAMMA EMITTERS IN GROUND WATER SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	H-3	Sr-90	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Zr-95	Nb-95	Cs-134	Cs-137	Ba-140	La-140
MS-2Q	06/10/02	190 \pm 90												
	12/19/02	380 \pm 100	0.7 \pm 0.4	< 2.8	< 1.9	< 6.4	< 3.2	< 4.4	< 2.6	< 3.0	< 1.5	< 3.3	< 1.7	< 2.5

TABLE D-I.6 CONCENTRATIONS OF STRONTIUM AND GAMMA EMITTERS IN FISH SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/KG WET \pm 2 SIGMA

STC	COLLECTION PERIOD	Sr-89	Sr-90	K-40	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Cs-134	Cs-137
INDPQ	09/24/02	< 7.0	< 4.0	2900 \pm 300	< 6.1	< 6.5	< 1.9	< 9.0	< 25.0	< 4.8	< 7.4

**TABLE D-I.7 CONCENTRATIONS OF GAMMA EMITTERS IN SEDIMENT SAMPLES
COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR
STATION, 2002**

RESULTS IN UNITS OF PCI/KG WET \pm 2 SIGMA

STC	COLLECTION PERIOD	K-40	Cs-134	Cs-137
J2-1Q	10/29/02	14500 \pm 830	< 41.0	160 \pm 50

**TABLE D-1.8 CONCENTRATIONS OF GAMMA EMITTERS AND STRONTIUM IN
FOOD PRODUCT SAMPLES COLLECTED IN THE VICINITY OF THREE MILE
ISLAND NUCLEAR STATION, 2002**

RESULTS IN UNITS OF PCI/KG WET \pm 2 SIGMA

STC	COLLECTION PERIOD	K-40	I-131	Cs-134	Cs-137	Sr-89	Sr-90
B10-2Q	08/01/02	1900 \pm 200	< 150	< 5.5	< 6.9	< 6.0	< 4.0

**TABLE D-II.1 CONCENTRATIONS OF GROSS BETA IN AIR PARTICULATE SAMPLES COLLECTED
IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002**

RESULTS IN UNITS OF E-3 PCI/CU METER \pm 2 SIGMA

COLLECTION PERIOD	E1-2Q
01/02/02 - 01/09/02	18 \pm 2
01/09/02 - 01/16/02	16 \pm 2
01/16/02 - 01/23/02	22 \pm 2
01/23/02 - 01/30/02	18 \pm 2
01/30/02 - 02/06/02	10 \pm 2
02/06/02 - 02/13/02	20 \pm 2
02/13/02 - 02/20/02	14 \pm 2
02/20/02 - 02/27/02	16 \pm 2
02/27/02 - 03/06/02	17 \pm 2
03/06/02 - 03/13/02	22 \pm 2
03/13/02 - 03/20/02	9 \pm 2
03/20/02 - 03/27/02	15 \pm 2
03/27/02 - 04/03/02	13 \pm 2
04/03/02 - 04/10/02	17 \pm 2
04/10/02 - 04/17/02	18 \pm 2
04/17/02 - 04/24/02	20 \pm 2
04/24/02 - 05/01/02	17 \pm 2
05/01/02 - 05/08/02	16 \pm 2
05/08/02 - 05/15/02	15 \pm 2
05/15/02 - 05/22/02	13 \pm 2
05/22/02 - 05/29/02	16 \pm 2
05/29/02 - 06/05/02	20 \pm 2
06/05/02 - 06/12/02	31 \pm 3
06/12/02 - 06/19/02	8 \pm 2
06/19/02 - 06/26/02	23 \pm 2
06/26/02 - 07/03/02	22 \pm 2
07/03/02 - 07/10/02	29 \pm 3
07/10/02 - 07/17/02	17 \pm 2
07/17/02 - 07/24/02	33 \pm 3
07/24/02 - 07/31/02	33 \pm 4
07/31/02 - 08/07/02	32 \pm 4
08/07/02 - 08/14/02	29 \pm 4
08/14/02 - 08/21/02	26 \pm 4
08/21/02 - 08/28/02	23 \pm 3
08/28/02 - 09/04/02	11 \pm 3
09/04/02 - 09/11/02	29 \pm 4
09/11/02 - 09/18/02	24 \pm 4
09/18/02 - 09/25/02	25 \pm 3
09/25/02 - 10/02/02	28 \pm 3
10/02/02 - 10/09/02	25 \pm 3
10/09/02 - 10/16/02	15 \pm 3
10/16/02 - 10/23/02	23 \pm 4
10/23/02 - 10/30/02	17 \pm 3
10/30/02 - 11/06/02	27 \pm 3
11/06/02 - 11/13/02	30 \pm 4
11/13/02 - 11/20/02	19 \pm 3
11/20/02 - 11/26/02	27 \pm 4
11/26/02 - 12/04/02	18 \pm 3
12/04/02 - 12/12/02	27 \pm 3
12/12/02 - 12/18/02	23 \pm 4
12/18/02 - 12/26/02	17 \pm 3
12/26/02 - 12/31/02	26 \pm 3
MEAN	21 \pm 13

**TABLE D-II.2 CONCENTRATIONS OF GAMMA EMITTERS IN AIR PARTICULATE SAMPLES
COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR
STATION, 2002**

RESULTS IN UNITS OF E-3 PCI/CU METER \pm 2 SIGMA

STC	COLLECTION PERIOD	Be-7	Cs-134	Cs-137
E1-2Q	01/02 - 04/03/02	72 \pm 34	< 0.2	< 0.2
	04/03 - 07/03/02	73 \pm 12	< 0.2	< 0.3
	07/03 - 10/02/02	77 \pm 14	< 0.7	< 0.4
	10/02 - 01/02/03	56 \pm 16	< 0.5	< 0.6
	MEAN	69 \pm 18	0.4 \pm 0.5	0.4 \pm 0.3

TABLE D-III.1 CONCENTRATIONS OF I-131 BY CHEMICAL SEPARATION, GAMMA EMITTERS, & STRONTIUM IN MILK SAMPLES COLLECTED IN THE VICINITY OF THREE MILE ISLAND NUCLEAR STATION, 2002

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	I-131	K-40	Cs-134	Cs-137	Ba-140	La-140	Sr-89	Sr-90
G2-1Q	01/30/02	< 0.1	1420 \pm 73	< 3.2	< 5.1	< 19	< 5.5		
	02/27/02	< 0.2	1400 \pm 76	< 6.0	< 5.6	< 27	< 8.5		
	03/13/02	< 0.1	1380 \pm 53	< 1.4	< 1.7	< 6.2	< 1.9		
	03/27/02	< 0.1	1300 \pm 51	< 1.5	< 2.0	< 6.1	< 1.9	< 2.0	0.7 \pm 0.2
	04/10/02	< 0.4	1280 \pm 103	< 3.0	< 2.6	< 11	< 2.9		
	04/24/02	< 0.3	1400 \pm 157	< 4.5	< 3.3	< 17	< 4.3		
	05/08/02	< 0.5	1490 \pm 120	< 3.7	< 3.3	< 46	< 5.2		
	05/22/02	< 0.5	1410 \pm 130	< 2.2	< 2.8	< 23	< 3.8		
	06/05/02	< 0.4	1270 \pm 170	< 7.6	< 5.0	< 28	< 3.4		
	06/19/02	< 0.3	1490 \pm 150	< 4.2	< 3.2	< 32	< 4.8	< 0.8	0.8 \pm 0.4
	07/03/02	< 0.5	1320 \pm 120	< 4.3	< 3.7	< 23	< 4.8		
	07/17/02	< 0.4	1650 \pm 110	< 2.5	< 2.3	< 41	< 11		
	07/31/02	< 0.2	1270 \pm 160	< 6.1	< 5.2	< 41	< 6.1		
	08/14/02	< 0.3	1370 \pm 190	< 6.4	< 5.7	< 42	< 12		
	08/28/02	< 0.3	1340 \pm 230	< 6.0	< 9.7	< 41	< 5.6		
	09/11/02	< 0.3	1260 \pm 180	< 3.7	< 4.6	< 19	< 4.5		
	09/25/02	< 0.4	1600 \pm 200	< 3.8	< 6.4	< 18	< 6.8	< 0.6	0.7 \pm 0.3
	10/09/02	< 0.3	1500 \pm 180	< 6.1	< 5.8	< 28	< 6.2		
	10/23/02	< 0.3	1570 \pm 220	< 8.0	< 7.3	< 26	< 3.3		
	11/06/02	< 0.4	1430 \pm 180	< 6.9	< 6.4	< 17	< 5.1		
	11/20/02	< 0.5	1240 \pm 160	< 6.2	< 5.0	< 15	< 2.8		
	12/12/02	< 0.3	1250 \pm 210	< 6.7	< 6.9	< 28	< 4.5	< 1.5	1.9 \pm 0.5
	MEAN	0.3 \pm 0.3	1393 \pm 237	4.7 \pm 3.9	4.7 \pm 4.0	25 \pm 23	52 \pm 52	12 \pm 1.3	1.0 \pm 1.2

FIGURE D-1
MONTHLY GROSS BETA CONCENTRATIONS IN
DRINKING WATER SAMPLES COLLECTED FROM TMINs LOCATION Q9-1, 2002

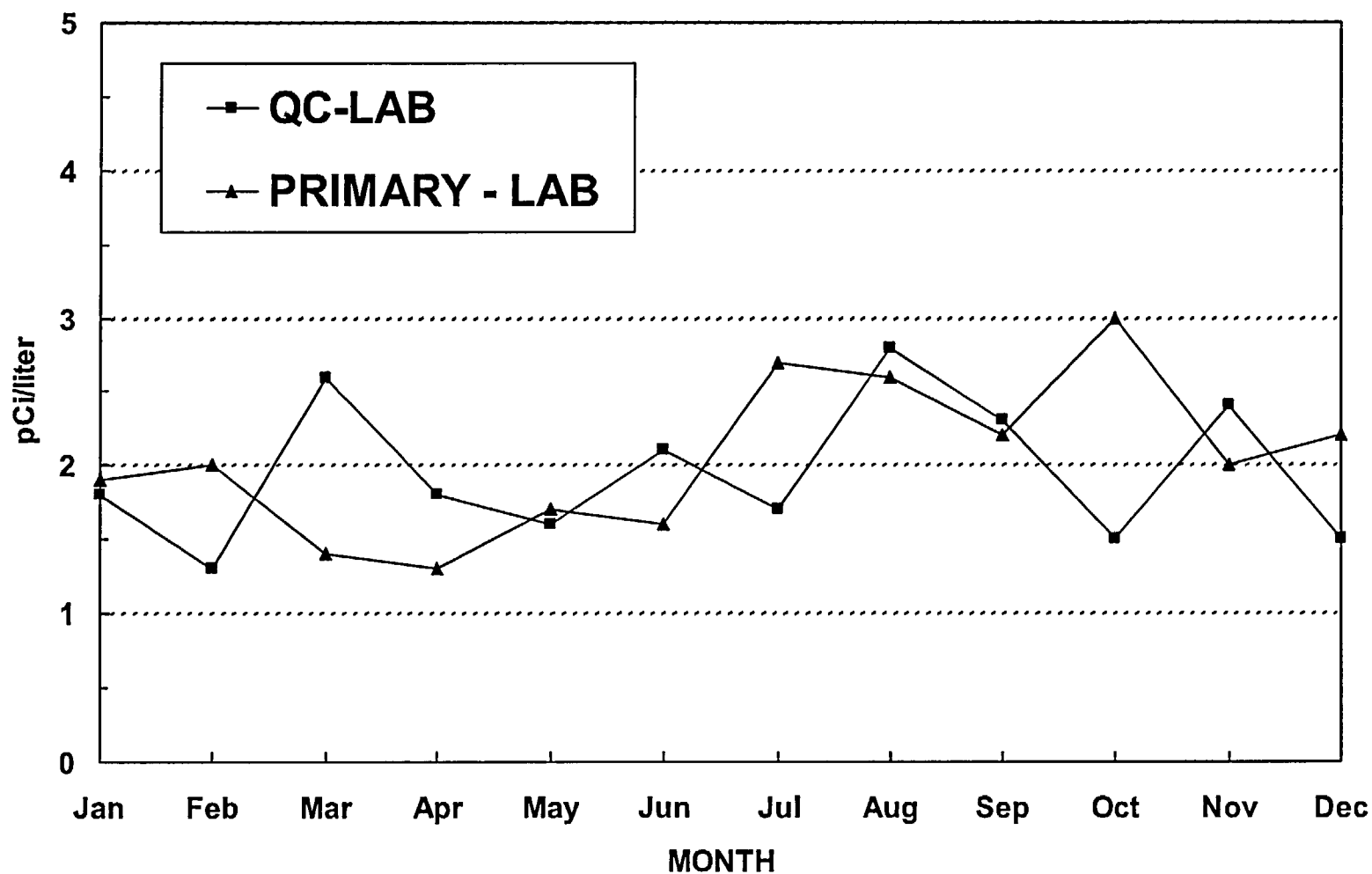
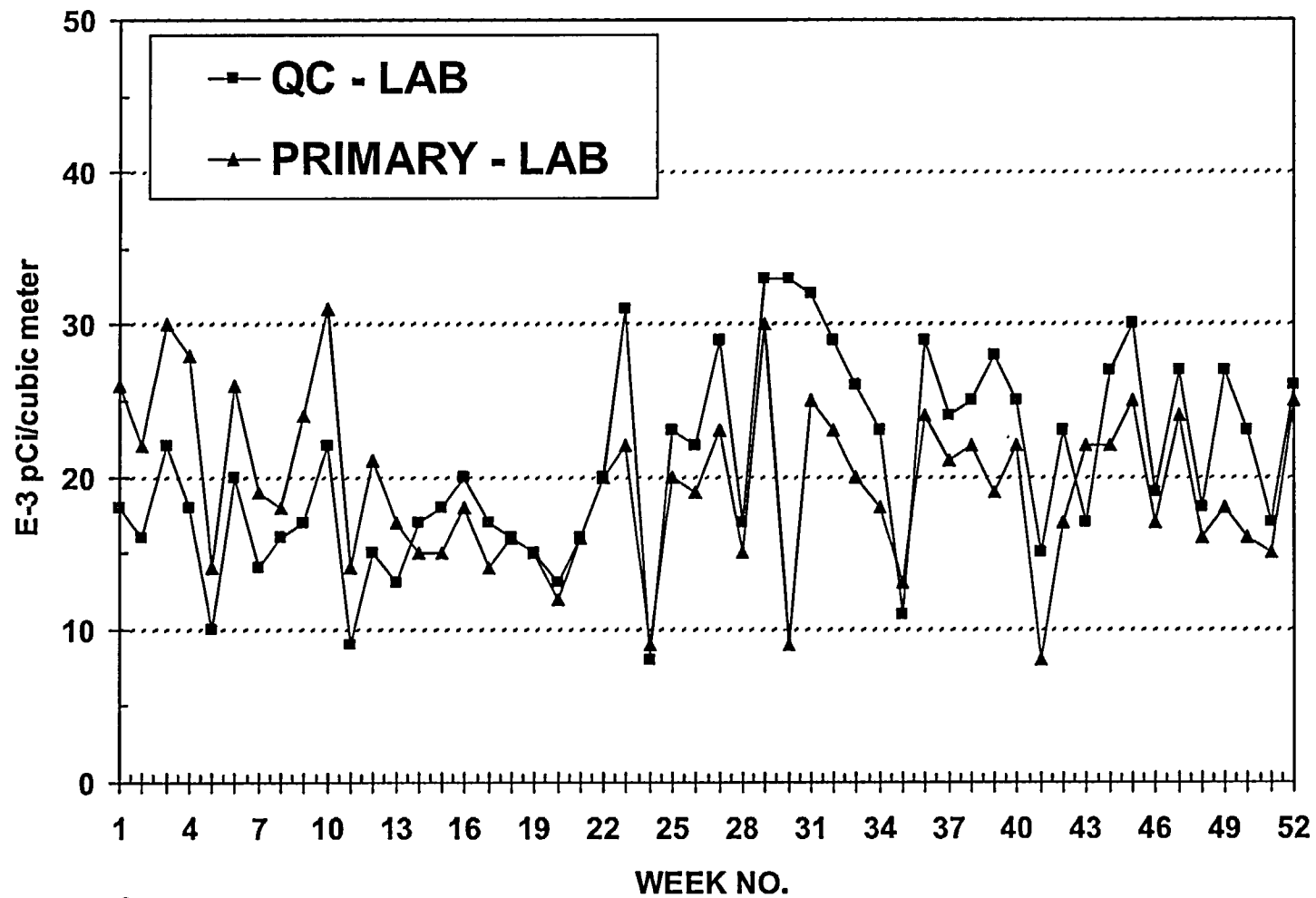


FIGURE D-2
WEEKLY GROSS BETA CONCENTRATIONS IN AIR PARTICULATE
SAMPLES COLLECTED FROM TMINS LOCATION E1-2, 2002



APPENDIX E

INTER-LABORATORY COMPARISON PROGRAM

TABLE E-1 ANALYTICS ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM
TELEDYNE BROWN ENGINEERING ENVIRONMENTAL SERVICES
(PAGE 1 OF 3)

Month/Year	Identification Number	Matrix	Nuclide (1)	Units	Reported Value (a)	Known Value (b)	Ratio (c) TBE/Analytics	Evaluation (d)
February, 2002	A15211-55	Liquid	Sr-89	uCi/mL	1.60E-03	2.03E-03	0.79	W
			Sr-90		2.90E-04	3.64E-04	0.80	A
	A15213-55	Liquid	H-3	uCi/mL	1.08E-03	1.19E-03	0.90	A
March, 2002	E3064-396	Milk	Sr-89	pCi/L	80	83	0.96	A
			Sr-90		28	27	1.04	A
	* E3065-396	Milk	I-131	pCi/L	86	92	0.93	A
			Ce-141		300	326	0.92	A
			Cr-51		256	267	0.96	A
			Cs-134		94	122	0.77	W
			Cs-137		252	266	0.95	A
			Mn-54		217	224	0.97	A
			Fe-59		108	116	0.93	A
			Zn-65		218	221	0.99	A
			Co-60		147	158	0.93	A
	E3067-396	AP	I-131	pCi	202	199	1.02	A
			Cr-51		166	163	1.02	A
			Cs-134		77	74	1.04	A
			Cs-137		162	162	1.00	A
			Mn-54		135	136	0.99	A
			Fe-59		70	70	1.00	A
			Zn-65		128	134	0.96	A
			Co-60		95	96	0.99	A
	E3066-396	Charcoal	I-131	pCi	66	77	0.86	A
May, 2002	A15521-55	Liquid	Gr-Alpha	uCi/mL	8.48E-04	7.15E-04	1.19	A
	A15520-55	Liquid	Sr-89	uCi/mL	2.63E-03	3.25E-03	0.81	A
			Sr-90		2.51E-04	2.70E-04	0.93	A
	A15522-55	Liquid	Tritium	uCi/mL	1.35E-03	1.46E-03	0.92	A

TABLE E-1 ANALYTICS ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM
TELEDYNE BROWN ENGINEERING ENVIRONMENTAL SERVICES
(PAGE 2 OF 3)

Month/Year	Identification Number	Matrix	Nuclide (1)	Units	Reported Value (a)	Known Value (b)	Ratio (c) TBE/Analytics	Evaluation (d)
June, 2002	E3220-396	Milk	I-131	pCi/L	86	87	0.99	A
			Ce-141		84	90	0.93	A
			Cr-51		197	235	0.84	A
			Cs-134		110	120	0.92	A
			Cs-137		96	91	1.05	A
			Co-58		95	100	0.95	A
			Mn-54		106	95	1.12	A
			Fe-59		95	81	1.17	A
			Zn-65		186	180	1.03	A
			Co-60		132	125	1.06	A
June, 2002	E3222-396	AP	Ce-141	pCi	85	75	1.13	A
			Cr-51		199	196	1.02	A
			Cs-134		96	100	0.96	A
			Cs-137		92	76	1.21	W
			Co-58		98	83	1.18	A
			Mn-54		87	79	1.10	A
			Fe-59		85	67	1.27	W
			Zn-65		182	150	1.21	W
			Co-60		121	104	1.16	A
August, 2002	A16018-55	Liquid	Sr-89	uCi/mL	4.12E-03	4.99E-03	0.83	A
			Sr-90		2.43E-04	2.64E-04	0.92	A
	A16020-55	Liquid	Tritium	uCi/mL	1.93E-03	2.00E-03	0.97	A
September, 2002	A15989-148	Liquid	Sr-89	uCi/mL	4.02E-03	4.99E-03	0.81	A
			Sr-90		2.49E-04	2.64E-04	0.94	A
	E3324-396	Milk	Sr-89	pCi/L	106	92	1.15	A
			Sr-90		39	39	1.00	A
September, 2002	E3325-396	Milk	I-131	pCi/L	84	80	1.05	A
			Ce-141		168	160	1.05	A
			Cr-51		210.5	227	0.93	A
			Cs-134		127	132	0.96	A
			Cs-137		136	127	1.07	A
			Co-58		93	97	0.96	A
			Mn-54		165	152	1.09	A
			Fe-59		90	89	1.01	A
			Zn-65		196	187	1.05	A
			Co-60		147	149	0.99	A

TABLE E-1 ANALYTICS ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM
TELEDYNE BROWN ENGINEERING ENVIRONMENTAL SERVICES
(PAGE 3 OF 3)

Month/Year	Identification Number	Matrix	Nuclide (1)	Units	Reported Value (a)	Known Value (b)	Ratio (c) TBE/Analytics	Evaluation (d)
September, 2002	E-3327-396	Filter	Ce-141	pCi	115	110	1.05	A
			Cr-51		163.6	156	1.05	A
			Cs-134		79	90	0.88	A
			Cs-137		95	87	1.09	A
			Co-58		71	67	1.06	A
			Mn-54		118	104	1.13	A
			Fe-59		76	61	1.25	A
			Zn-65		155	130	1.19	A
			Co-60		108	102	1.06	A
	E3326-396	Charcoal	I-131	pCi	73	85	0.86	A
December, 2002	E3520-396	Milk	Sr-89	pCi/L	88	68	1.29	W
			Sr-90		40	38	1.05	A
	E3521-396	Milk	I-131	pCi/L	97	86	1.13	A
			Ce-141		136	111	1.23	W
			Cr-51		347	346	1.00	A
			Cs-134		97	99	0.98	A
			Cs-137		229	220	1.04	A
			Co-58		143	139	1.03	A
			Mn-54		162	142	1.14	A
			Fe-59		80	72	1.11	A
			Zn-65		217	178	1.22	W
			Co-60		172	164	1.05	A
December, 2002	E3523-396	Filter	Ce-141	pCi	108	128	0.84	A
			Cr-51		370	398	0.93	A
			Cs-134		79	114	0.69	N (2)
			Cs-137		226	253	0.89	A
			Co-58		141	160	0.88	A
			Mn-54		152	163	0.93	A
			Fe-59		89	83	1.07	A
			Zn-65		196	206	0.95	A
			Co-60		170	189	0.90	A
	E3522-396	Charcoal	I-131	pCi	84	96	0.88	A

(1) Only analyses performed routinely for the REMP are included on this table

(2) Coincidental summing resulted in low Cesium-134 activity. Elimination of the coincidental summing resulted in an activity of 110 pCi
No further action required.

* Analytics known values were incorrectly calculated. Revised (as shown) evaluation was acceptable.

(a) Teledyne Brown Engineering reported result.

(b) The Analytics known value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation

(c) Ratio of Teledyne Brown Engineering to Analytics results.

(d) Analytics evaluation: A= Acceptable Reported result falls within ratio limits of 0.80-1.20 W=Acceptable with warning
Reported result falls within ratio limits of 0.70-0.79 and 1.21-1.30

TABLE E-2 DOE/EML ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM
TELEDYNE BROWN ENGINEERING ENVIRONMENTAL SERVICES
(PAGE 1 OF 2)

Month/Year	Identification Number	Media	Nuclide (1)	Units	Reported Value (a)	Known Value (b)	Ratio (c) TBE/EML	Evaluation (d)
June, 2002	QAP 56	AP	Co-60	Bq/filter	31.7	30.52	1.04	A
			Cs-137		30.4	28.23	1.08	A
			Gr-Beta		1.21	1.30	0.93	A
			Mn-54		38.3	38.53	0.99	A
			Sr-90		4.68	4.832	0.97	A
		Soil	Ac-228	Bq/kg	50	51.167	0.98	A
			Bi-212		35.9	53.43	0.67	A
			Bi-214		46.3	53.933	0.86	W
			Cs-137		1300	1326.67	0.98	A
			K-40		608	621.67	0.98	A
			Pb-212		49.4	51.1	0.97	A
			Pb-214		49.1	54.367	0.90	A
			Sr-90		46.6	53.756	0.87	A
		Vegetation	Co-60	Bq/kg	11.7	11.23	1.04	A
			Cs-137		346	313.667	1.10	A
			K-40		952	864.33	1.10	A
			Sr-90		477	586.28	0.81	A
June, 2002	QAP 56	Water	Co-60	Bq/L	367	347.33	1.06	A
			Cs-134		2.93	3.357	0.87	W
			Cs-137		59.6	56.067	1.06	A
			Gr-Beta		895	1030	0.87	A
			H-3		285	283.7	1.00	A
			Sr-90		5.78	7.579	0.76	W

TABLE E-2 DOE/EML ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM
TELEDYNE BROWN ENGINEERING ENVIRONMENTAL SERVICES
(PAGE 2 OF 2)

Month/Year	Identification Number	Media	Nuclide (1)	Units	Reported Value (a)	Known Value (b)	Ratio (c) TBE/EML	Evaluation (d)
December, 2002	QAP 57	AP	Co-60	Bq/filter	24.1	23.0	1.05	A
			Cs-137		36.1	32.5	1.11	A
			Gr-Beta		0.813	0.871	0.93	A
			Mn-54		58.3	52.2	1.12	A
			Sr-90		5.86	5.561	1.05	A
		Soil	Bi-212	Bq/kg	23.2	45.93	0.51	W
			Bi-214		32.4	33.63	0.96	A
			Cs-137		835	829.33	1.01	A
			K-40		671	637.67	1.05	A
			Pb-212		42.00	43.43	0.97	A
			Pb-214		44.46	35.2	1.26	A
			Sr-90		41.00	41.16	1.00	A
		Vegetation	Co-60	Bq/kg	11.5	9.66	1.19	A
			Cs-137		345	300.67	1.15	A
			K-40		1690	1480	1.14	A
			Sr-90		457	476.26	0.96	A
		Water	Am-241	Bq/L	2.89	3.043	0.95	A
			Co-60		303	268.67	1.13	W
			Cs-134		59	60.2	0.98	A
			Cs-137		85.8	81.43	1.05	A
			Gr-Beta		817	900	0.91	A
			H-3		353	227.3	1.55	W
			Sr-90		8.58	8.69	0.99	A

(1) Only analyses performed routinely for the REMP are included on this table.

(a) Teledyne Brown Engineering reported result

(b) The DOE/EML known value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation

(c) Ratio of Teledyne Brown Engineering to DOE/EML results

(d) DOE/EML evaluation A=acceptable, W=acceptable with warning, N=not acceptable

TABLE E-3 **ERA ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM**
TELEDYNE BROWN ENGINEERING ENVIRONMENTAL SERVICES
(PAGE 1 OF 1)

Month/Year	Identification Number	Media	Nuclide (1)	Units	Reported Value (a)	Known Value (b)	Ratio (c) TBE/ERA	Evaluation (d)
May, 2002	Rad 49	Water	Gr-Beta	pCi/L	162	189	0.86	A
			Co-60		39.3	39.1	1.01	A
			Cs-134		15.5	17.1	0.91	A
			Cs-137		52.2	52.1	1.00	A
			Sr-89		27.2	31.7	0.86	A
			Sr-90		25.1	28.3	0.89	A
			I-131		13.35	14.7	0.91	A
			H-3		14600	17400	0.84	A
November, 2002	Rad 51	Water	H-3	pCi/L	10100	10200	0.99	A
			I-131		7.94	6.76	1.17	A
			Gr-Beta		280	330	0.85	A
			Sr-89		41.7	47.6	0.88	A
			Sr-90		6.75	7.56	0.89	A
			Co-60		122	104	1.17	A
			Cs-134		60.0	55.5	1.08	A
			Cs-137		140	117	1.20	A

(1) Only analyses performed routinely for the REMP are included on this table

(a) Teledyne Brown Engineering reported result.

(b) The ERA known value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation.

(c) Ratio of Teledyne Brown Engineering to ERA results

(d) ERA evaluation: A=acceptable Reported result falls within the Warning Limits NA=not acceptable Reported result falls outside of the Control Limits CE=check for Error Reported result falls within the Control Limits and outside of the Warning Limit

TABLE E-4 MAPEP ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM
TELEDYNE BROWN ENGINEERING ENVIRONMENTAL SERVICES
(PAGE 1 OF 1)

Month/Year	Identification Number	Media	Nuclide (1)	Units	Reported Value (a)	Known Value (b)	Ratio (c) TBE/MAPEP	Evaluation (d)
March, 2002	01-W9	Water	Mn-54	Bq/L	253	246	172.20 - 319.80	A
			Co-57		141	143	100.10-185.90	A
			Co-60		143	141	98.70 - 183.30	A
			Cs-134		26.0	28.5	19.95 - 37.05	A
			Cs-137		270	286	200.20 - 371.80	A
			Sr-90		4.71	4.8	3.39 - 6.24	A
August, 2002	02-S9	Soil	Mn-54	Bq/kg	679	546	382.2 - 709.8	W
			Co-57		289	246	172.2 - 319.8	A
			Co-60		109	87.5	61.25 - 113.75	W
			Cs-134		948	862	603.4 - 1120.6	A
			Cs-137		131	111	77.7 - 144.3	A
			Zn-65		1020	809	556.3 - 1051.7	W
			K-40		722	652	456.4 - 847.6	A

(1) Only analyses performed routinely for the REMP are included on this table

(a) Teledyne Brown Engineering reported result

(b) The MAPEP known value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation

(c) Ratio of Teledyne Brown Engineering to DOE/MAPEP results

(d) DOE/MAPEP evaluation A=acceptable, W=acceptable with warning, N=not acceptable

TABLE E-5 DOE EML Cross Check Program Results for Environmental, Inc., 2002

Lab Code	Type	Date	Nuclide (A)	Environmental, Inc.		EML			
				Value (B & E)	Uncertainty (C & E)	Value (D & E)	Min Ratio	Max Ratio	Agreement (F)
STW-945	Water	03/01/02	Co-60	349.20	± 2.60	347.33	0.80	- 1.20	A
STW-945	Water	03/01/02	Cs-134	3.40	± 0.60	3.36	0.80	- 1.30	A
STW-945	Water	03/01/02	Cs-137	57.20	± 1.70	56.07	0.80	- 1.22	A
STW-945	Water	03/01/02	Sr-90	7.40	± 1.30	7.58	0.69	- 1.34	A
STW-946	Water	03/01/02	Gr. Beta	930.60	± 12.00	1030.00	0.61	- 1.43	A
STW-946	Water	03/01/02	H-3	226.30	± 32.70	283.70	0.78	- 2.45	A
STSO-947	Soil	03/01/02	Ac-228	55.00	± 5.50	51.17	0.80	- 1.38	A
STSO-947	Soil	03/01/02	Bi-212	49.20	± 12.40	53.43	0.50	- 1.34	A
STSO-947	Soil	03/01/02	Bi-214	46.60	± 3.10	53.93	0.78	- 1.42	A
STSO-947	Soil	03/01/02	Cs-137	1401.60	± 9.10	1326.67	0.80	- 1.25	A
STSO-947	Soil	03/01/02	K-40	613.10	± 28.10	621.67	0.80	- 1.32	A
STSO-947	Soil	03/01/02	Pb-212	51.60	± 2.60	51.10	0.78	- 1.32	A
STSO-947	Soil	03/01/02	Pb-214	52.00	± 3.60	54.37	0.76	- 1.46	A
STSO-947	Soil	03/01/02	Sr-90	52.10	± 6.30	53.76	0.67	- 2.90	A
STVE-948	Vegetation	03/01/02	Co-60	13.50	± 2.10	11.23	0.80	- 1.44	A
STVE-948	Vegetation	03/01/02	Cs-137	350.40	± 6.30	313.67	0.80	- 1.31	A
STVE-948	Vegetation	03/01/02	K-40	940.80	± 45.60	864.33	0.79	- 1.39	A
STVE-948	Vegetation	03/01/02	Sr-90	543.40	± 24.90	586.28	0.55	- 1.21	A
STAP-949	Air Filter	03/01/02	Co-60	30.10	± 0.30	30.52	0.80	- 1.26	A
STAP-949	Air Filter	03/01/02	Cs-137	29.90	± 0.30	28.23	0.80	- 1.32	A
STAP-949	Air Filter	03/01/02	Mn-54	40.40	± 0.40	38.53	0.80	- 1.35	A
STAP-949	Air Filter	03/01/02	Sr-90	3.40	± 0.40	4.83	0.53	- 1.84	A
STAP-950	Air Filter	03/01/02	Gr. Beta	1.34	± 0.05	1.30	0.76	- 1.36	A
STW-959	Water	09/01/02	Co-60	258.40	± 2.30	268.67	0.80	- 1.20	A
STW-959	Water	09/01/02	Cs-134	50.80	± 3.30	60.20	0.80	- 1.30	A
STW-959	Water	09/01/02	Cs-137	80.10	± 0.30	81.43	0.80	- 1.22	A
STW-959	Water	09/01/02	H-3	271.90	± 20.90	227.30	0.78	- 2.45	A
STW-959	Water	09/01/02	Sr-90	9.70	± 0.20	8.69	0.69	- 1.34	A
STW-960	Water	09/01/02	Gr. Beta	852.00	± 26.50	900.00	0.61	- 1.43	A
STSO-961	Soil	09/01/02	Ac-228	47.60	± 1.90	42.30	0.80	- 1.38	A
STSO-961	Soil	09/01/02	Bi-212	45.60	± 1.70	45.93	0.50	- 1.34	A
STSO-961 ^G	Soil	09/01/02	Bi-214	48.80	± 4.90	33.63	0.78	- 1.42	W
STSO-961	Soil	09/01/02	Cs-137	819.60	± 16.60	829.33	0.80	- 1.25	A
STSO-961	Soil	09/01/02	K-40	705.30	± 31.40	637.67	0.80	- 1.32	A
STSO-961	Soil	09/01/02	Pb-212	48.60	± 3.40	43.43	0.78	- 1.32	A
STSO-961	Soil	09/01/02	Pb-214	51.10	± 5.10	35.20	0.76	- 1.46	A
STSO-961	Soil	09/01/02	Sr-90	38.50	± 0.10	41.16	0.67	- 2.90	A
STVE-962	Vegetation	09/01/02	Co-60	11.80	± 1.50	9.66	0.80	- 1.44	A
STVE-962	Vegetation	09/01/02	Cs-137	340.30	± 16.80	300.67	0.80	- 1.31	A
STVE-962	Vegetation	09/01/02	K-40	1646.00	± 74.40	1480.00	0.79	- 1.39	A
STVE-962	Vegetation	09/01/02	Sr-90	345.60	± 97.80	476.26	0.55	- 1.21	A

TABLE E-5 DOE EML Cross Check Program Results for Environmental, Inc., 2002

Lab Code	Type	Date	Nuclide (A)	Environmental, Inc.		EML			
				Value (B & E)	Uncertainty (C & E)	Value (D & E)	Min Ratio	Max Ratio	Agreement (F)
STAP-963	Air Filter	09/01/02	Co-60	24.90	± 0.60	23.00	0.80	- 1.26	A
STAP-963	Air Filter	09/01/02	Cs-137	38.00	± 1.30	32.50	0.80	- 1.32	A
STAP-963	Air Filter	09/01/02	Mn-54	60.80	± 1.90	52.20	0.80	- 1.35	A
STAP-963	Air Filter	09/01/02	Sr-90	5.20	± 0.20	5.56	0.53	- 1.84	A
STAP-964	Air Filter	09/01/02	Gr. Beta	0.80	± 0.10	0.87	0.76	- 1.36	A

A Only analyses performed routinely for the REMP are included on this table.

B The Environmental, Inc value is the mean of 1 or 3 measurements/determinations

C. The Environmental, Inc. uncertainty is the 2-sigma counting uncertainty for one determination and one standard deviation for three determinations

D. The DOE EML value is the mean of replicate determinations for each radionuclide

E Reporting units are Bq/L for water, Bq/kg (dry) for soil, Bq/kg (wet) for vegetations and total Bq for air filters

F. The control limits (min ration and max ratio are established by DOE EML. Acceptable agreement is achieved if the ratio of the Environmental, Inc. value divided by the DOE EML value falls within the control limits

G. This naturally occurring radionuclide is present in the shield background. No follow-up actions were performed because all of the other gamma scan results were acceptable and the subject result was just outside of the upper control limit

The control limit concept was established from percentiles of historic data distributions (1982-1992). The evaluation of this historic data and the development of the control limits are presented in DOE report EML-564. The control limits listed in this table were developed from percentiles of data distribution for the years 1993-1999.

TABLE E-6 ERA STATISTICAL SUMMARY PROFICIENCY TESTING PROGRAM FOR ENVIRONMENTAL, Inc., 2002

Lab Code	Date	Nuclide (A)	Environmental, Inc.		ERA			
			Value (B & E)	Uncertainty (C & E)	Value (D)	Min Ratio	Max Ratio	Agreement (E)
STW-940	02/20/02	Sr-89	53.0	± 2.5	55.3	46.6	- 64.0	A
STW-940	02/20/02	Sr-90	16.6	± 0.5	15.9	7.2	- 24.6	A
STW-942	02/20/02	Gr. Beta	45.7	± 3.1	48.3	39.6	- 57.0	A
STW-944	02/20/02	Co-60	76.9	± 2.7	73.4	64.7	- 82.1	A
STW-944	02/20/02	Cs-134	38.7	± 1.6	42.1	33.4	- 50.8	A
STW-944	02/20/02	Cs-137	92.9	± 2.7	88.8	80.1	- 97.5	A
STW-944	02/20/02	Zn-65	361.0	± 9.2	359.0	298.0	- 420.0	A
STW-952	05/22/02	Co-60	37.9	± 0.7	39.1	30.4	- 47.8	A
STW-952	05/22/02	Cs-134	14.5	± 0.8	17.1	8.4	- 25.8	A
STW-952	05/22/02	Cs-137	50.0	± 2.0	52.1	43.4	- 60.8	A
STW-952	05/22/02	Gr. Beta	171.0	± 2.5	189.0	140.0	- 238.0	A
STW-952	05/22/02	Sr-89	28.4	± 4.8	31.7	23.0	- 40.4	A
STW-952	05/22/02	Sr-90	32.4	± 3.1	28.3	19.6	- 37.0	A
STW-953 ^F	05/22/02	H-3	13900.0	± 100.0	17400	14400	20400	W
STW-954	05/22/02	I-131	14.6	± 0.3	14.7	11.2	- 18.2	A
STW-965	08/21/02	Co-60	23.8	± 1.0	23.3	14.6	- 32.0	A
STW-965	08/21/02	Cs-134 ^G	62.9	± 1.2	71.7	63.0	- 80.4	A
STW-965	08/21/02	Cs-137	219.3	± 10.7	214.0	195.0	- 233.0	A
STW-965	08/21/02	Gr. Beta	26.7	± 0.4	21.9	13.2	- 30.6	W
STW-965	08/21/02	Sr-89	28.4	± 1.5	29.0	20.3	- 37.7	A
STW-965	08/21/02	Sr-90	36.5	± 1.1	36.4	27.7	- 45.1	A
STW-965	08/21/02	Zn-65	92.4	± 2.2	95.7	79.4	- 112.0	A
STW-966	11/20/02	Gr. Beta	44.7	± 1.0	47.0	38.3	- 55.7	A
STW-967	11/20/02	H-3	10100.0	± 38.7	10200	8440	12000	A
STW-969	11/20/02	I-131	6.0	± 0.4	6.8	3.3	- 10.2	A
STW-970	11/20/02	Co-60	104.0	± 7.1	104.0	95.0	- 113.0	A
STW-970	11/20/02	Cs-134	48.2	± 2.3	55.5	46.8	- 64.2	A
STW-970	11/20/02	Cs-137	109.0	± 12.6	117.0	107.0	- 127.0	A
STW-970	11/20/02	Gr. Beta	252.0	± 26.8	288.0	244.0	- 416.0	A
STW-970	11/20/02	Sr-89	43.2	± 0.7	47.6	38.9	- 56.3	A
STW-970	11/20/02	Sr-90	7.5	± 0.2	7.6	0.0	- 16.2	A

A Only analyses performed routinely for the REMP are included on this table

B The Environmental, Inc. value is the mean of 3 measurements/determinations

C The Environmental, Inc. uncertainty is the 2-sigma counting uncertainty for one determination and one standard deviation for three determinations

D The ERA value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation

E A= Acceptable - Reported Result falls within the Control Limits

NA = Not Acceptable - Reported Result falls outside of the Control Limits

F The analysis was repeated: result of reanalysis: 16114 ± 487 pCi/L.

G ERA acknowledged an unacceptably high percentage of failure for Cs-134 and questioned its own control limits
No problems were identified in the analysis

TABLE E-7 MAPEP Cross Check Program Results for Environmental, Inc., 2002

Lab Code	Type	Date	Nuclide (A)	Environmental, Inc.		MAPEP			
				Value (B & E)	Uncertainty (C & E)	Value (D & E)	Min Ratio	Max Ratio	Agreement (F)
STW-939	water	12/01/01	Co-57	138.9 ± 0.5		143 ± 14.3		100.1 - 185.9	
STW-939	water	12/01/01	Co-60	139.1 ± 0.5		141 ± 14.1		98.7 - 183.3	
STW-939	water	12/01/01	Cs-134	25.16 ± 0.2		28.5 ± 0.3		19.95 - 37.1	
STW-939	water	12/01/01	Cs-137	279.96 ± 0.9		286 ± 28.6		200.2 - 371.8	
STW-939	water	12/01/01	Mn-54	253.64 ± 0.9		246 ± 0.2		172.2 - 319.8	
STW-939	water	12/01/01	Sr-90	4.88 ± 0.3		4.8 ± 0.5		3.36 - 6.2	
STW-939	water	12/01/01	Zn-65	70.6 ± 1.1		67.3 ± 6.7		47.11 - 87.5	
STSO-955	soil	10/16/02	Co-57	210.58 ± 2.0		246 ± 24.6		172.2 - 319.8	
STSO-955	soil	10/16/02	Co-60	84.38 ± 0.9		87.5 ± 8.8		61.25 - 113.8	
STSO-955	soil	10/16/02	Cs-134	692.6 ± 2.1		862 ± 86.0		603.4 - 1120.6	
STSO-955	soil	10/16/02	Cs-137	96.98 ± 1.7		111 ± 11.1		77.7 - 144.3	
STSO-955	soil	10/16/02	Mn-54	509.74 ± 3.4		546 ± 54.6		382.2 - 709.8	
STSO-955	soil	10/16/02	Zn-65	783.59 ± 6.4		809 ± 80.9		566.3 - 1051.7	

- A. Only analyses performed routinely for the REMP are included on this table
 B. The Environmental, Inc. value is the mean of 1 or 3 measurements/determinations
 C. The Environmental, Inc. uncertainty is the 2-sigma counting uncertainty for one determination and one standard deviation for three determinations
 D. The DOE EML value is the mean of replicate determinations for each radionuclide
 E. Reporting units are Bq/L for water, Bq/kg (dry) for soil, Bq/kg (wet) for vegetations and total Bq for air filters
 F. The control limits (min ratio and max ratio) are established by DOE EML. Acceptable agreement is achieved if the ratio of the Environmental, Inc. value divided by the DOE EML value falls within the control limits

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