

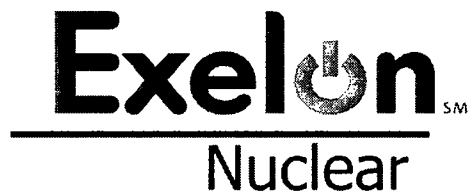
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OYSTER CREEK GENERATING STATION UNIT 1

Annual Radiological
Environmental Operating Report

1 January Through 31 December 2010

Prepared By
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Environmental Services



Oyster Creek Generating Station
Forked River, NJ 08731

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I. Summary and Conclusions

This report on the Radiological Environmental Monitoring Program (REMP) conducted for the Oyster Creek Generating Station (OCGS) by Exelon Nuclear covers the period 01 January 2010 through 31 December 2010. During that time period, 1527 analyses were performed on 1271 samples. In assessing all the data gathered for this report and comparing these results with historical data, it was concluded that the operation of OCGS had no adverse radiological impact on the environment.

REMP designated surface water samples were analyzed for concentrations of tritium and gamma emitting nuclides. No tritium and no fission or activation products were detected in any of the surface water samples collected as part of the Radiological Environmental Monitoring Program during 2010.

REMP designated drinking water samples were analyzed for concentrations of gross beta, tritium, and gamma emitting nuclides. The preoperational environmental monitoring program did not include analysis of drinking water for gross beta. No tritium and no fission or activation products were detected in any of the drinking water samples collected.

REMP designated groundwater samples were analyzed for concentrations of tritium and gamma emitting nuclides. No tritium and no fission or activation products were detected in REMP groundwater samples.

Fish (predator and bottom feeder), clams, crabs, and sediment samples were analyzed for concentrations of gamma emitting nuclides. No OCGS-produced fission or activation products were detected in fish, clams and crabs. Cesium-137 was detected in one sediment sample at a concentration of 222 pCi/kg dry. The investigative level for Cs-137 in sediment is 1,000 pCi/kg dry. No further action was necessary.

Air particulate samples were analyzed for concentrations of gross beta, gamma emitting nuclides, Strontium-89, and Strontium-90. Cosmogenic Be-7 was detected at levels consistent with those detected in previous years. No fission or activation products were detected. Strontium-89 and Strontium-90 analyses were performed on quarterly composites of air particulate samples. All Strontium-89 and Strontium-90 results were below the minimum detectable activity.

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

Vegetation samples were analyzed for gamma emitting nuclides, Strontium-89,

and Strontium-90. Concentrations of naturally occurring K-40 were consistent with those detected in previous years. All Strontium-89 results were below the minimum detectable activity. Strontium-90 activity was detected at levels consistent with those detected in previous years at both control and indicator stations, and can be attributed to historical nuclear weapons testing and the Chernobyl accident.

Environmental gamma radiation measurements were performed quarterly using thermoluminescent dosimeters. The maximum dose to any member of the public attributable to radioactive effluents and direct radiation from the OCGS was less than the 25 mrem/year limit established by the United States Environmental Protection Agency.

II. Introduction

The Oyster Creek Generating Station (OCGS), consisting of one boiling water reactor owned and operated by Exelon, is located on the Atlantic Coastal Plain Physiographic Province in Ocean County, New Jersey, about 60 miles south of Newark, 9 miles south of Toms River, and 35 miles north of Atlantic City. It lies approximately 2 miles inland from Barnegat Bay. The site, covering approximately 781 acres, is situated partly in Lacey Township and, to a lesser extent, in Ocean Township. Access is provided by U.S. Route 9, passing through the site and separating a 637-acre eastern portion from the balance of the property west of the highway. The station is about ¼ mile west of the highway and 1¼ miles east of the Garden State Parkway. The site property extends about 2½ miles inland from the bay; the maximum width in the north-south direction is almost 1 mile. The site location is part of the New Jersey shore area with its relatively flat topography and extensive freshwater and saltwater marshlands. The South Branch of Forked River runs across the northern side of the site and Oyster Creek partly borders the southern side.

A preoperational Radiological Environmental Monitoring Program (REMP) for OCGS was established in 1966, and continued for two years prior to the plant becoming operational in 1969. This report covers those analyses performed by Teledyne Brown Engineering (TBE), Mirion Technologies, and Environmental Inc. (Midwest Labs) on samples collected during the period 01 January 2010 through 31 December 2010.

A. Objectives of the REMP

The objectives of the REMP are to:

1. Determine whether any significant increase occurs in the concentration of radionuclides in major pathways.
2. Identify and evaluate the buildup, if any, of radionuclides in the local environment, or any changes in normal background radiation levels.
3. Verify the adequacy of the plant's controls for the release of radioactive materials.
4. Fulfill the obligations of the radiological surveillance sections of Oyster Creek's Offsite Dose Calculation Manual (ODCM).

B. Implementation of the Objectives

The implementation of the objectives is accomplished by:

1. Identifying significant exposure pathways.
2. Establishing baseline radiological data for 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.

C. Discussion

1. General Program

The Radiological Environmental Monitoring Program (REMP) was established in 1966, three years before the plant became operational. This preoperational surveillance program was established to describe and quantify the radioactivity, and its variability, in the area prior to the operation of OCGS. After OCGS became operational in 1969, the operational surveillance program continued to measure radiation and radioactivity in the surrounding areas.

A variety of environmental samples are collected as part of the REMP at OCGS. The selection of sample types is based on the established pathways for the transfer of radionuclides through the environment to humans. The selection of sampling locations is based on sample availability, local meteorological and hydrological characteristics, local population characteristics, and land usage in the area of interest. The selection of sampling frequencies for the various environmental media is based on the radionuclides of interest, their respective half-lives, and their behavior in both the biological and physical environment.

2. Preoperational Surveillance Program

The federal government requires nuclear facilities to conduct radiological environmental monitoring prior to constructing the facility. This preoperational surveillance program is aimed at collecting the data needed to identify pathways, including selection of the radioisotope and sample media combinations to be included in the environmental surveillance program conducted after facility

operation begins. Radiochemical analyses performed on the environmental samples should include not only those nuclides expected to be released during facility operation, but should also include typical radionuclides from nuclear weapons testing and natural background radioactivity. All environmental media with a potential to be affected by facility operation as well as those media directly in the major pathways, should be sampled on at least an annual basis during the preoperational phase of the environmental surveillance program.

The preoperational surveillance design, including nuclide/media combinations, sampling frequencies and locations, collection techniques, and radioanalyses performed, should be carefully considered and incorporated in the design of the operational surveillance program. In this manner, data can be compared in a variety of ways (for example, from year to year, location to location, etc.) in order to detect any radiological impact the facility has on the surrounding environment. Data collection during the preoperational phase should be planned to provide a comprehensive database for evaluating any future changes in the environment surrounding the nuclear facility.

OCGS began its preoperational environmental surveillance program three years before the plant began operating in 1969. Data accumulated during those early years provide an extensive database from which environmental monitoring personnel are able to identify trends in the radiological characteristics of the local environment. The environmental surveillance program at OCGS will continue after the plant has reached the end of its economically useful life and decommissioning has begun.

3. Consideration of Plant Effluents

Effluents are strictly monitored to ensure that radioactivity released to the environment is as low as reasonably achievable and does not exceed regulatory limits. Effluent control includes the operation of monitoring systems, in-plant and environmental sampling and analyses programs, quality assurance programs for effluent and environmental programs, and procedures covering all aspects of effluent and environmental monitoring.

Both radiological environmental and effluent monitoring indicate that the operation of OCGS does not result in significant radiation exposure of the people or the environment surrounding OCGS and is well below the applicable levels set by the Nuclear Regulatory

Commission (NRC) and the Environmental Protection Agency (EPA).

There were liquid radioactive effluent releases during 2010 of concentrations of tritium too low to detect at an LLD of 200 picocuries per liter (pCi/L) at the NJPDES permitted main condenser outfall. The releases were part of nearly continuous pumping of groundwater at approximately 70 gpm containing low levels of tritium and no detectable gamma. Exelon and the State of New Jersey Department of Environmental Protection (NJDEP) agreed to this remediation action after a period of natural attenuation to address concentrations of tritium in groundwater above the environmental LLD of 2,000 pCi/L. Well 73 and supporting equipment and piping were installed to pump groundwater to the intake structure at the inlet of the main circulating water pumps. Provisions were established for both batch and continuous releases of groundwater. Batch releases started October 21, 2010 and continuous releases commenced on November 17, 2010. Releases continued until the end of 2010 with a total of 4.56E+06 gallons of groundwater pumped resulting in 2.67E-01 Ci of tritium released to the discharge canal. The dose to the most limiting member of the public due to the release of groundwater was 2.55E-06 mrem.

Utilizing gaseous effluent data, the maximum hypothetical dose to any individual in the southeast sector of the plant (sector of predominant wind direction) during 2010 was calculated using a mathematical model, which is based on the methods defined by the U.S. Nuclear Regulatory Commission. These methods accurately determine the types and quantities of radioactive materials being released to the environment.

The maximum hypothetical calculated organ dose (Bone) from iodines and particulates to any individual due to gaseous effluents was 4.71E-01mrem (0.471mrem) which was approximately 3.14 percent of the annual limit. The organ dose from iodines and particulates is higher than previous years because the degraded stack sample line was repaired and carbon-14 was included for the first time . The maximum hypothetical calculated whole body dose to any individual due to noble gas effluents was 4.17E-02 mrem (0.0417 mrem) which was 0.834 percent of the annual limit. The whole body dose due to noble gas effluents is higher than previous years because the degraded stack sample line was repaired.

The total maximum hypothetical organ dose (Bone) due to all

radiological effluents of 4.71E-01 mrem (0.471 mrem) received by any individual from gaseous effluents from the Oyster Creek Generating Station for the reporting period is more than 637 times lower than the dose the average individual in the Oyster Creek area received from background radiation, including that from radon, during the same time period. The background radiation dose averages approximately 300 mrem per year in the Central New Jersey area, which includes approximately 200 mrem/year from naturally occurring radon gas.

During 2010, the maximum direct radiation dose to the most likely exposed MEMBER OF THE PUBLIC potentially attributable to the operation of Oyster Creek beyond the site boundary in the southeast sector, as shown by offsite thermoluminescent dosimeter (TLD) readings at stations 66, 109 and 11, was less than the dose at the control locations.

Environmental sampling of airborne iodine and particulates showed no radioactivity attributable to the operation of OCGS.

III. Program Description

A. Sample Collection

Samples for the OCGS REMP were collected for Exelon by on-site personnel and Normandeau Associates, Incorporated. This section describes the general collection methods used to obtain environmental samples for the OCGS REMP in 2010. Sample locations and descriptions can be found in Tables B-1 and B-2, and Figures B-1, B-2, and B-3, Appendix B. The collection procedures are listed in Table B-3.

Aquatic Environment

The aquatic environment was evaluated by performing radiological analyses on samples of surface water, drinking water, groundwater, fish, clams, crabs, and sediment. One gallon water samples were collected monthly from two surface locations (33 and 94), semiannually at two surface water locations (23 and 24), monthly from six drinking water wells (1N, 1S, 37, 38, 39, and 114) and quarterly from 2 groundwater stations (MW-24-3A and W-3C). Control locations were 94 and 37. All samples were collected in 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 three locations (33, 93 and 94 (control)). Clams were collected semiannually

from three locations (23, 24, and 94 (control)). Two annual crab samples were collected from two locations (33 and 93). Sediment samples were collected at four locations semiannually (23, 24, 33, and 94 (control)).

Atmospheric Environment

The atmospheric environment was evaluated by performing radiological analyses on samples of air particulate and airborne iodine. Airborne iodine and particulate samples were collected and analyzed weekly at eight locations (C, 3, 20, 66, 71, 72, 73, and 111). The control location was C. 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.

Terrestrial Environment

The terrestrial environment was evaluated by performing radiological analyses on samples of garden vegetation.

No commercial dairy operations and no dairy animals producing milk for human consumption are located within a 5 mile radius of the plant. Therefore, vegetation samples were collected in lieu of milk. Vegetation samples were collected, when available, at four locations (35, 36, 66, and 115). Station 36 was the control location. All samples were collected in 18" x 24" new unused plastic bags and shipped promptly to the laboratory.

Ambient Gamma Radiation

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

A site boundary ring consisting of 19 locations (1, T1, 51, 52, 53, 54, 55, 56, 57, 58, 59, 61, 62, 63, 64, 65, 66, 112, and 113) near the site boundary.

An intermediate distance ring consisting of 31 locations (4, 5, 6, 8, 9, 22, 46, 47, 48, 68, 73, 74, 75, 78, 79, 82, 84, 85, 86, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 109, and 110) extending to approximately 5 miles from the site designed to measure possible exposures to close-in population.

Special interest stations consisting of 9 locations (3, 11, 71, 72, 81, 88, 89, 90, and 92) representing special interest areas such as population centers, state parks, etc.

Background (Control) stations consisting of two locations (C and 14) greater than 20 miles distant from the site.

Indicator TLDs were placed systematically, with at least one station in each of 16 meteorological compass sectors in the general area of the site boundary. TLDs were also placed in each meteorological sector in the 1 to 5 mile range, where reasonable highway access would permit, in areas of public interest and population centers. Background locations were located greater than twenty miles distant from the OCGS and generally in an upwind direction from the OCGS.

Two TLDs – each comprised of three CaSO_4 thermoluminescent phosphors enclosed in plastic – were placed at each location approximately three to eight feet above ground level. The TLDs were exchanged quarterly and sent to Mirion Technologies for analysis.

B. Sample Analysis

This section describes the general analytical methodologies used by TBE and Environmental Inc. (Midwest Labs) to analyze the environmental samples for radioactivity for the OCGS REMP in 2010. 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 air particulates and drinking water.
2. Concentrations of gamma emitters in surface, drinking water, groundwater, fish, clams, crabs, sediment, air particulates, and vegetation.
3. Concentrations of tritium in REMP designated surface, drinking water and groundwater.
4. Concentrations of I-131 in air iodine cartridges.
5. Concentrations of strontium in air particulates and vegetation.
6. Ambient gamma radiation levels at various locations around the

OCGS.

C. Data Interpretation

For trending purposes, the radiological and direct radiation data collected during 2010 were compared with data from past years. The results of environmental sampling show that radioactivity levels have not increased from the background radioactivity detected prior to the operation of OCGS. The operation of OCGS continues to have no measurable radiological impact upon the environment.

Several factors were important in the interpretation of the data:

1. Lower Limit of Detection and Minimum Detectable Concentration

The lower limit of detection (LLD) is 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 is intended as a before the fact estimate of a system (including instrumentation, procedure and sample type) and not as an after the fact criterion for the presence of activity. All analyses were designed to achieve the required OCGS detection capabilities for environmental sample analysis.

The minimum detectable concentration (MDC) 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, which results in a negative number. An MDC 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 water, and groundwater 12 nuclides: Mn-54, Co-58, Fe-59, Co-60, Zn-65, Zr-95, Nb-95, I-131, 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 clams eight nuclides: K-40, Mn-54, Co-58, Fe-59, Co-60, Zn-65, Cs-134, and Cs-137 were reported.

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

For sediment seven nuclides: Be-7, 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 air iodine cartridges one nuclide: I-131 was reported.

For vegetation seven nuclides: Be-7, K-40, I-131, Cs-134, Cs-137, Ba-140, and La-140 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 2010 the OCGS REMP had a sample recovery rate in excess of 99%. Exceptions are listed below:

1. Both TLDs from stations 68, 99, 106-108 were missing due to road construction on the Garden State Parkway; these TLDs were replaced on 1/22/2010.
01/17/2010 – 01/22/2010
2. There was a small hole in the filter at station C and a small tear in each of the air particulate filters at stations 66 and 72. The damage to the filters could possibly be due to severe snow and wind in the area.
02/14/2010 – 02/20/2010
3. The air particulate filters collected from stations 71 and 66 had small tears in them. The air particulate filter from Station 66 was lighter in color than usual. The damage to the filters could possibly be due to severe rain and wind in the area.
03/14/2010 – 03/20/2010

4. Surface water samples were collected weekly from stations 33 and 94. Drinking water samples were collected weekly from Stations 37, 38, 39, and 114. A weekly sample from drinking water well 38 was unavailable. A weekly sample was taken from a different well in place of well 38 for the following period:
03/28/2010 – 04/03/2010
5. Surface water samples were collected weekly from stations 33 and 94. Drinking water samples were collected weekly from stations 37, 38, 39, and 114. A weekly sample from drinking water well 38 was unavailable. A weekly sample was taken from a different well in place of well 38 for the following period:
04/04/2010 – 04/10/2010
6. Surface water samples were collected weekly from stations 33 and 94. Drinking water samples were collected weekly from stations 37, 38, 39, and 114. A weekly sample from drinking water well 38 was unavailable. A weekly sample was taken from a different well in place of well 38 for the following period:
04/11/2010 – 04/17/2010
7. Both TLDs at station 108 were missing, per sample collector comments station has been removed.
04/11/2010.– 04/17/2010
8. Surface water samples were collected weekly from stations 33 and 94. Drinking water samples were collected weekly from stations 37, 38, 39, and 114. A weekly sample from drinking water well 38 was unavailable. A weekly sample was taken from a different well in place of well 38 for the following period:
04/18/2010 – 04/24/2010
9. The air particulate filter collected from Station 71 had a small tear. The damage to the filter was possibly due to the weather in the area.
04/25/2010 – 05/01/2010
10. Surface water samples were collected weekly from stations 33 and 94. Drinking water samples were collected weekly from stations 37, 38, 39, and 114. A weekly sample from drinking water well 38 was unavailable. A weekly sample was taken from a different well in place of well 38 for the following period:
05/02/2010 – 05/08/2010

11. Surface water samples were collected weekly from stations 33 and 94. Drinking water samples were collected weekly from stations 37, 38, 39, and 114. A weekly sample from drinking water well 38 was unavailable. A weekly sample was taken from a different well in place of well 38 for the following period:
05/09/2010 – 05/15/2010
12. Surface water samples were collected weekly from stations 33 and 94. Drinking water samples were collected weekly from stations 37, 38, 39, and 114. A weekly sample from drinking water well 38 was unavailable. A weekly sample was taken from a different well in place of well 38 for the following period:
05/16/2010 – 05/22/2010
13. Surface water samples were collected weekly from stations 33 and 94. Drinking water samples were collected weekly from stations 37, 38, 39, and 114. A weekly sample from drinking water well 38 was unavailable. A weekly sample was taken from a different well in place of well 38 for the following period:
05/23/2010 – 05/29/2010
14. Surface water samples were collected weekly from stations 33 and 94. Drinking water samples were collected weekly from stations 37, 38, 39, and 114. A weekly sample from drinking water well 38 was unavailable. A weekly sample was taken from a different well in place of well 38 for the following period:
05/30/2010 – 06/05/2010
15. Surface water samples were collected weekly from stations 33 and 94. Drinking water samples were collected weekly from stations 37, 38, 39, and 114. A weekly sample from drinking water well 38 was unavailable. A weekly sample was taken from a different well in place of well 38 for the following period:
06/06/2010 – 06/12/2010
16. Surface water samples were collected weekly from stations 33 and 94. Drinking water samples were collected weekly from stations 37, 38, 39, and 114. A weekly sample from drinking water well 38 was unavailable. A weekly sample was taken from a different well in place of well 38 for the following period:
06/13/2010 – 06/19/2010

17. Surface water samples were collected weekly from stations 33 and 94. Drinking water samples were collected weekly from stations 37, 38, 39, and 114. A weekly sample from drinking water well 38 was unavailable. A weekly sample was taken from a different well in place of well 38 for the following period:
06/20/2010 – 06/26/2010
18. Only two of three vegetation samples were taken at station 35 and 66 during the following period:
06/29/2010*
19. Both TLDs at station 108 (Garden State Parkway rest area) were missing, per collector comments the station has been removed. One of two TLDs at Station 63 was found on the ground. One of two TLDs at Station 22 was missing due to unknown reasons:
07/18/2010 – 07/24/2010
20. Surface water samples were collected weekly from stations 33 and 94. Drinking water samples were collected weekly from stations 37, 38, 39, and 114. Station 1N is a composite from 4 weeks of samples which includes the first week of August.
08/01/2010 – 08/07/2010
21. Both TLDs at station 98 (along Garden State Parkway) were missing. One of two TLDs at Station 63 was found on the ground:
10/10/2010 – 10/16/2010
22. TLDs were not placed at station 108, per collector comments station has been removed.
10/10/2010 – 10/16/2010
23. Both of the TLDs at station 98 were missing.
10/10/2010 – 10/16/2010
24. Only one of three vegetation samples were taken at station 66 during the following period:
10/25/2010*
25. Station 111 (Finniger Farm) was not running at time of replacement. The pump was replaced and operating correctly. The air particulate/air iodine samples were not sent to the lab because according to the procedure “sample is not valid if the pump is found inoperable but the timers (meters) are operating normally”, which they were:
10/31/2010 – 11/06/2010

26. Station 71 (Waretown Road) sample pump was not running at the time of filter replacement. The pump was replaced and operated correctly. According to procedure, the air particulate and air iodine samples were not sent to the lab for analysis because the pump was found inoperable.
12/05/2010 – 12/11/2010

27. Due to significant snowstorm on 12/26/10, NAI was unable to collect samples from tech spec air stations 20 and 3. The air samples not collected for Week 52 were collected the following week and read as a 2-week sample. There were no other deviations or problems.
12/26/2010 – 01/11/2011

*NOTE: Per the Oyster Creek ODCM, if garden vegetation samples are unobtainable due to any legitimate reason, the missed sample will be documented in the annual report, with no further actions necessary.

Program exceptions are tracked and investigated to understand the causes of the program exception. Sampling and maintenance errors are reviewed with the personnel involved to prevent recurrence.

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

E. Program Changes

Drinking water station 114 and vegetation station 115 were added to the REMP program in 2010.

Drinking water station 1 was split into two separate locations (1N and 1S) and collected separately starting in June of 2010.

Crab samples were collected at location 93 in October of 2010.

TLD location 108 was a temporary TLD location that was not a part of the REMP program and was removed after the 1st quarter 2010.

IV. Results and Discussion

A. Aquatic Environment

1. Surface Water

Samples were taken via grab sample methodology at two locations (33 and 94) on a monthly schedule. In addition, grab samples were collected semi-annually at two locations (23 and 24). Of these locations 23, 24, and 33, located downstream, could be affected by Oyster Creek's effluent releases. The following analyses were performed:

Tritium

Samples from all locations were analyzed for tritium activity (Table C–I.1, Appendix C). No tritium activity was detected. Data from this year indicates that surface water tritium concentrations remain very low and not significantly different from recent previous years.

Gamma Spectrometry

Samples from all locations were analyzed for gamma emitting nuclides (Table C–I.2, Appendix C). All nuclides were less than the MDC.

Surface water sampling began in 1966, and the samples were analyzed for tritium as well as other radioactivity. During this preoperational program, tritium was detected at an average concentration of $1.05\text{E}+3$ pCi/liter. At that time, counting instrumentation was not as sensitive as it now, and the minimum detectable concentration was $1\text{E}+3$ pCi/liter versus $2\text{E}+2$ pCi/liter used today. By comparing the 2010 sampling results to the decay corrected average preoperational concentration reported in the 2007 Annual Radiological Environmental Operating Report ($1.11\text{E}+2$ pCi/liter), it can be seen that the inventory of tritium in the environment is due to fallout from past atmospheric nuclear weapons testing and Chernobyl, and is decreasing with time.

2. Drinking water

Monthly samples were composited from monthly grab samples from seven drinking water wells (1N, 1S, 37, 38, 39, and 114). Station 1, because it is located on the OCGS site, could potentially be affected by radioactive releases from the plant. Station 1 was

split into two separate locations, 1N and 1S. Station 38, the Ocean Township Municipal Utility Authority Well, could potentially be affected by effluent releases from the OCGS. Given its distance from the facility (1.6 miles) and depth (approximately 360 feet), however, the probability of any OCGS related impacts is very small. Stations 37 and 39, Lacey Township Municipal Utility Authority wells, are not likely to be impacted by effluents from the OCGS. These wells are located generally up-gradient of the regional groundwater flow direction (southeast). In addition, because of their depth (> 200 feet) and distance from the site (2.2 and 3.5 miles respectively), they are unlikely to be affected by OCGS operations. The following analyses were performed:

Tritium

Monthly samples from all locations were analyzed for tritium activity (Table C-II.1, Appendix C). No tritium activity was detected.

Gross Beta

Monthly samples from all locations were analyzed for concentrations of total gross beta activity (Tables C-II.2, Appendix C). Gross beta was detected in 38 of 66 samples, and is expected due to natural sources and fallout residual from previous bomb testing. The values ranged from 1.8 to 13 pCi/l. The investigation level for gross beta in water is 15 pCi/l. Gross beta was detected at about the same concentration in both control and sample locations.

Gamma Spectrometry

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

Drinking water was sampled during the preoperational program and throughout the 42 years of the plant's operational program. Tritium sampling results during the preoperational years, yielded results all less than the minimum detectable concentration of $1E+3$ pCi/liter. 2010 results are all less than the current MDC of 200 pCi/liter.

3. Groundwater

The following analyses were performed:

Tritium

Samples from all locations were analyzed for tritium activity (Table C–III.1, Appendix C). No tritium activity was detected.

Gamma Spectrometry

Samples from both locations were analyzed for gamma emitting nuclides (Table C–III.2, Appendix C). All nuclides were less than the MDC.

4. Fish

Fish samples comprised of flounder, spot, and tautog (bottom feeder) and American eel, spotted sea trout, striped bass, sea bass, bluefish, herring, and perch (predator) were collected at three locations (33, 93, and 94) semiannually. Locations 93 and 33 could be affected by Oyster Creek's effluent releases. The following analysis was performed:

Gamma Spectrometry

The edible portions of fish samples from three locations were analyzed for gamma emitting nuclides (Table C–IV.1, Appendix C). Naturally occurring potassium-40 was found at all stations and ranged from 2,050 to 5,690 pCi/kg wet and was consistent with levels detected in previous years. No fission or activation products were found.

No fish were sampled during the preoperational sampling program for OCGS.

5. Clams and Crabs

Clams were collected at three locations (23, 24, and 94) semiannually. Crabs were collected at two locations (33 and 93) annually. Locations 23, 24, 33, and 93 could be affected by Oyster Creek's effluent releases. The following analysis was performed:

Gamma Spectrometry

The edible portions of clam samples from all three locations were analyzed for gamma emitting nuclides (Table C–IV.2, Appendix C). Naturally occurring potassium-40 was found at all stations and ranged from 730 to 1,750 pCi/kg wet and was consistent with levels detected in previous years. No fission or activation products were found. Historical levels of Co-60 in clams are shown in Figure C–1, Appendix C.

Preoperational clam sample results for potassium-40 ranged from 600 to 9,800 pCi/kg wet, which are consistent with current sample results.

The edible portions of crab samples from one location were analyzed for gamma emitting nuclides (Table C–IV.2, Appendix C). Naturally occurring potassium-40 was found at both stations and ranged from 2,410 to 2,520 pCi/kg wet and was consistent with levels detected in previous years. No fission or activation products were found.

Crabs were not sampled during the preoperational years of the OCGS environmental monitoring program.

5. Sediment

Aquatic sediment samples were collected at four locations (23, 24, 33, and 94) semiannually. Of these locations, stations 23, 24, and 33 located downstream, could be affected by Oyster Creek's effluent releases. The following analysis was performed:

Gamma Spectrometry

Sediment samples from all four locations were analyzed for gamma emitting nuclides (Table C–V.1, Appendix C).

Potassium-40 was found at all stations and ranged from 567 to 15,100 pCi/kg dry. Cesium-137 was detected in one sample at station 33 at a concentration of 222 pCi/kg dry. No other fission or activation products were found. Figure C–3, Appendix C graphs Cs-137 concentrations in sediment from 1984 through 2010 and figure C–2, Appendix C graphs Co-60 concentrations in sediment from 1984 through 2010.

Cs-137 was detected (222 pCi/kg,dry) in the sediment of the discharge canal which is below the investigation level of 1000 pCi/kg,dry.

The requirement for sampling sediment is a requirement of ODCM 3.12.1, Table 3.12.1-1.d. ODCM Table 3.12.1-2, Reporting Levels for Radioactive Concentrations in Environmental samples Reporting Levels does not include requirements for sediment. CY-AA-170-1000, Radiological Environmental Monitoring Program and Meteorological Program Implementation, Attachment 1, Analytical Results Investigation Levels, includes sediment investigation level for Cs-137 of 1000 pCi/kg, dry.

While aquatic sediment sampling was part of the preoperational program, samples were not analyzed for gamma emitting nuclides until 1981.

In conclusion, the 2010 aquatic monitoring results for surface water, drinking water, fish, clams and crabs showed only naturally occurring radioactivity and were consistent with levels measured prior to the operation of OCGS, and with levels measured in past years. No radioactivity attributable to activities at OCGS was detected in any aquatic samples during 2010 and no adverse long-term trends are shown in the aquatic monitoring data.

B. Atmospheric Environment

1. Airborne

a. Air Particulates

Continuous air particulate samples were collected from eight locations on a weekly basis. The eight locations were separated into three groups: Group I represents locations near the OCGS site boundary (20, 66 and 111), Group II represents the locations at an intermediate distance from the OCGS site (71, 72, and 73), and Group III represents the control and locations at a remote distance from OCGS (C and 3). The following analyses were performed:

Gross Beta

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

Detectable gross beta activity was observed at all locations. Comparison of results among the three groups aids in determining the effects, if any, resulting from the operation of OCGS. The results from the Site Boundary locations (Group I) ranged from 6 to 28 E-3 pCi/m³ with a mean of 15 E-3 pCi/m³. The results from the Intermediate Distance locations (Group II) ranged from 6 to 30 E-3 pCi/m³ with a mean of 15 E-3 pCi/m³. The results from the Distant locations (Group III) ranged from 6 to 28 E-3 pCi/m³ with a mean of 15 E-3 pCi/m³. The similarity of the results from the three groups indicates that there is no relationship between gross beta activity and distance from the OCGS. These results are consistent with data from previous years and indicate no effects from the operation of OCGS (Figures C-4 and C-5, Appendix C).

Air sample filters have been analyzed for gross beta activity since the inception of the preoperational environmental monitoring program in 1966. The preoperational data values ranged from 1.90E-2 to 2.77E-1 pCi/m³. 2010 gross beta activity values ranged from <6E-3 to 30E-3 pCi/m³. The 2010 results are consistent with historical operational data (Figure C-5, Appendix C) and fall within the range of results observed during the preoperational period.

Strontium-89 and Strontium-90

Weekly samples were composited quarterly and analyzed for strontium-89 and strontium-90 (Table C-VI.3, Appendix C). No strontium was detected in any of the samples. These results are consistent with historical operational data. The preoperational environmental monitoring program did not include analysis of air samples for strontium-89 and strontium-90.

Gamma Spectrometry

Weekly samples were composited quarterly and analyzed for gamma emitting nuclides (Table C-VI.4, Appendix C). Naturally occurring Be-7 due to cosmic ray activity was detected in all samples. The values ranged from 48 to 97 E-3 pCi/m³. All other nuclides were less than the MDC. These results are consistent with historical operational data. The preoperational environmental monitoring program did not include analysis of air samples for gamma emitting

nuclides.

b. Airborne Iodine

Continuous air samples were collected from eight (C, 3, 20, 66, 71, 72, 73, 111) locations and analyzed weekly for I-131 (Table C-VII.1, Appendix C). Consistent with historical operational data, all results were less than the MDC.

The preoperational environmental monitoring program for OCGS did not include analysis of air media for iodine-131.

In conclusion, the atmospheric monitoring data are consistent with preoperational and prior operational data and show no long-term trends in the environment attributable to the operation of OCGS.

2. Terrestrial

a. Vegetation

Samples were collected from four locations (35, 36, 66, and 115) when available. The following analyses were performed:

Strontium-89 and Strontium-90

Vegetation samples from all locations were analyzed for concentrations of strontium-89 and strontium-90 (Table C-VIII.1, Appendix C). All strontium-89 results were less than the MDC. Strontium-90 was detected in 25 of 56 samples. The values ranged from 3.3 to 19.7 pCi/kg wet, which is consistent with historical data.

Gamma Spectrometry

Vegetation samples from locations 35, 36, 66, and 115 were analyzed for concentrations of gamma emitting nuclides (Table C-VIII.1, Appendix C). Naturally occurring K-40 activity was found in all samples and ranged from 2,570 to 12,200 pCi/kg wet. Naturally occurring Be-7 was detected in 19 of 56 samples and ranged from 93 to 441 pCi/kg wet. These results are consistent with historical operational data. All other nuclides were less than the MDC.

Preoperational vegetation sample analyses did not include strontium analyses, or gamma spectroscopy.

In conclusion, terrestrial monitoring results for vegetation samples during 2010 showed only naturally occurring radioactivity and radioactivity associated with fallout from past atmospheric nuclear weapons testing and Chernobyl. The radioactivity levels detected were consistent with levels measured in past years, and no radioactivity attributable to activities at OCGS was detected in any terrestrial samples. The terrestrial monitoring data show no adverse long-term trends in the terrestrial environment.

C. Ambient Gamma Radiation

Ambient gamma radiation levels were measured utilizing Panasonic Model 814 (CaSO₄) thermoluminescent dosimeters. Sixty-two TLD locations were monitored around the site. Results of non-background corrected TLD measurements are summarized in Tables C-IX.1 to C-IX.3 and Figures C-6 and C-7.

The non-background corrected TLD measurements ranged from 9.9 to 21.6 mR/standard quarter. In order to correct these results for background radiation, the mean of the dose rates measured at the background TLD stations (C and 14) was subtracted from the dose measured at each indicator station. The maximum annual background corrected dose was at Station 55, located near the site boundary, 0.3 miles west of the OCGS. This TLD is located in an area where public access is restricted. All background corrected TLD measurements were less than the 40 CFR 190 limit of 25 mR/year.

Similar to previous years, there was no strong relationship between dose measured with TLDs and distance from the OCGS, and the mean background dose exceeded the mean indicator dose in one of the four quarterly monitoring periods during 2010.

The preoperational environmental monitoring program utilized film badges, the results of which are not comparable with the doses measured using thermoluminescent dosimeters during the operational REMP.

In conclusion, the 2010 TLD results are consistent with past operational measurements of direct radiation, and demonstrate that the OCGS continues to be in compliance with the 40 CFR 190 limit on maximum dose to the public.

D. Land Use Survey

A Land Use Survey, conducted during 2010 around the Oyster Creek Generating Station (OCGS), was performed by Normandeau Associates, Inc. for Exelon Nuclear. The purpose of the survey is to identify within a distance of 5 miles the location in each of the 16 meteorological sectors of the nearest milk animal, the nearest residence and the nearest garden of greater than 500 ft² producing broad leaf vegetation. The census shall also identify within a distance of 3 miles the location in each of the 16 meteorological sectors all milk animal and all gardens greater than 500 square feet producing broadleaf vegetation. For animals producing milk for human consumption in each of the sixteen meteorological sectors out to a distance of 5 miles from the OCGS, none were observed. The distance and direction of all locations from the OCGS Reactor Building were determined using Global Positioning System (GPS) technology. There were no changes required to the OCGS REMP, as a result of this survey. The results of this survey are summarized below.

Distance in Miles from the OCGS Reactor Building			
Sector		Residence (ft)	Garden* (ft)
1	N	5,796	9,212
2	NNE	3,347	6,137
3	NE	3,658	5,332
4	ENE	5,717	6,486
5	E	6,529	1,667
6	ESE	3,835	1,988
7	SE	3,034	2,198
8	SSE	4,521	5,096
9	S	8,189	8,864
10	SSW	8,222	19,992
11	SW	9,189	None
12	WSW	10,674	23,866
13	W	22,250	None
14	WNW	None	None
15	NW	27,863	None
16	NNW	7,658	14,646

*Greater than 500 ft² in size producing broad leaf vegetation

E. Summary of Results – Inter-laboratory Comparison Program

The primary and secondary laboratories analyzed Performance Evaluation (PE) samples of air particulate, air iodine, milk, soil, vegetation

and water matrices (Appendix F). The PE samples, supplied by Analytics Inc., Environmental Resource Associates (ERA) and DOE's Mixed Analyte Performance Evaluation Program (MAPEP), were evaluated against the following pre-set acceptance criteria:

1. Analytics Evaluation Criteria

Analytics' evaluation report provides a ratio of TBE's result and Analytics' known value. Since flag values are not assigned by Analytics, TBE-ES evaluates the reported ratios based on internal QC requirements, which are based on the DOE MAPEP criteria.

2. ERA Evaluation Criteria

ERA's evaluation report provides an acceptance range for control and warning limits with associated flag values. ERA's acceptance limits are established per the USEPA, NELAC, state specific PT program requirements or ERA's SOP for the Generation of Performance Acceptance Limits, as applicable. The acceptance limits are either determined by a regression equation specific to each analyte or a fixed percentage limit promulgated under the appropriate regulatory document.

3. DOE Evaluation Criteria

MAPEP's evaluation report provides an acceptance range with associated flag values.

The MAPEP defines three levels of performance: Acceptable (flag = "A"), Acceptable with Warning (flag = "W"), and Not Acceptable (flag = "N"). Performance is considered acceptable when a mean result for the specified analyte is $\pm 20\%$ of the reference value. Performance is acceptable with warning when a mean result falls in the range from $\pm 20\%$ to $\pm 30\%$ of the reference value (i.e., $20\% < \text{bias} < 30\%$). If the bias is greater than 30%, the results are deemed not acceptable.

For the primary laboratory, 16 out of 18 analytes met the specified acceptance criteria. Two analytes did not meet the specified acceptance criteria for the following reasons:

1. Teledyne Brown Engineering's ERA November 2010 Sr-89 in water result of 77.8 pCi/L was higher than the known value of 68.5 pCi/L, resulting in a found to known ratio of 1.14. NCR 10-09 was

initiated to investigate this failure. Since the ratio of 1.14 fell within an acceptance range of 20%, Teledyne considers this an acceptable result.

2. Teledyne Brown Engineering's ERA November 2010 Zn-65 in water result of 11.0 pCi/L was lower than the known value of 102 pCi/L. NCR 10-09 was initiated to investigate this failure. The Zn-65 result of 111 was incorrectly reported as 11.0.

For the secondary laboratory, Environmental, Inc., 14 out of 14 analytes met the specified acceptance criteria.

The Inter-Laboratory Comparison Program provides evidence of "in control" counting systems and methods, and that the laboratories are producing accurate and reliable data.

V. References

1. Exelon Nuclear. Offsite Dose Calculation Manual for Oyster Creek Generating Station, Procedure CY-OC-170-301.
2. United States Nuclear Regulatory Commission Branch Technical Position, An Acceptable Radiological Environmental Monitoring Program, Revision 1, November 1979.
3. Pre-Operational Environmental Radiation Survey, Oyster Creek Nuclear Electric Generating Station, Jersey Central Power and Light Company, March 1968.

APPENDIX A

RADIOLOGICAL ENVIRONMENTAL MONITORING REPORT SUMMARY

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE OYSTER CREEK GENERATING STATION, 2010**

Name of Facility: OYSTER CREEK GENERATING STATION				DOCKET NUMBER: 50-219				
Location of Facility: OCEAN COUNTY NJ				REPORTING PERIOD: 2010				
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSIS PERFORMED	NUMBER OF ANALYSIS PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN (M)		
				LOCATIONS	LOCATION	MEAN (M)	STATION #	NUMBER OF
				MEAN (M)	MEAN (M)	MEAN (M)	NAME	NONROUTINE
				RANGE	RANGE	RANGE	DISTANCE AND DIRECTION	REPORTED
								MEASUREMENTS
SURFACE WATER (PC/LITER)	H-3	28	200	<LLD	<LLD	-		0
	GAMMA MN-54	28	15	<LLD	<LLD	-		0
	CO-58		15	<LLD	<LLD	-		0
	FE-59		30	<LLD	<LLD	-		0
	CO-60		15	<LLD	<LLD	-		0
	ZN-65		30	<LLD	<LLD	-		0
	NB-95		15	<LLD	<LLD	-		0
	ZR-95		30	<LLD	<LLD	-		0

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE OYSTER CREEK GENERATING STATION, 2010**

Name of Facility: OYSTER CREEK GENERATING STATION				DOCKET NUMBER: 50-219				
Location of Facility: OCEAN COUNTY NJ				REPORTING PERIOD: 2010		LOCATION WITH HIGHEST ANNUAL MEAN (M)		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSIS PERFORMED	NUMBER OF ANALYSIS PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL			
				LOCATIONS MEAN (M) (F) RANGE	LOCATION MEAN (M) (F) RANGE	MEAN (M) (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
SURFACE WATER (PCI/LITER)	I-131		15	<LLD	<LLD	-		0
	CS-134		15	<LLD	<LLD	-		0
	CS-137		18	<LLD	<LLD	-		0
	BA-140		60	<LLD	<LLD	-		0
	LA-140		15	<LLD	<LLD	-		0
DRINKING WATER (PCI/LITER)	H-3	66	200	<LLD	<LLD	-		0
	GR-B	66	4	3.9 (32/54) (2.1/12.5)	2.4 (6/12) (1.8/3.8)	5.8 (3/6) (2.4/12.5)	1S INDICATOR ON-SITE DOMESTIC WELL AT OCGS 0.2 MILES S OF SITE	0
	GAMMA MN-54	66	15	<LLD	<LLD	-		0

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

A-2

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE OYSTER CREEK GENERATING STATION, 2010**

Name of Facility: OYSTER CREEK GENERATING STATION				DOCKET NUMBER: 50-219				
Location of Facility: OCEAN COUNTY NJ				REPORTING PERIOD: 2010		LOCATION WITH HIGHEST ANNUAL MEAN (M)		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSIS PERFORMED	NUMBER OF ANALYSIS PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR MEAN (M) (F) RANGE	CONTROL MEAN (M) (F) RANGE	MEAN (M) (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
DRINKING WATER (PCI/LITER)	CO-58		15	<LLD	<LLD	-		0
	FE-59		30	<LLD	<LLD	-		0
	CO-60		15	<LLD	<LLD	-		0
	ZN-65		30	<LLD	<LLD	-		0
	NB-95		15	<LLD	<LLD	-		0
	ZR-95		30	<LLD	<LLD	-		0
	I-131		15	<LLD	<LLD	-		0
	CS-134		15	<LLD	<LLD	-		0

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

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THE OYSTER CREEK GENERATING STATION, 2010**

Name of Facility: OYSTER CREEK GENERATING STATION				DOCKET NUMBER: 50-219				
Location of Facility: OCEAN COUNTY NJ				REPORTING PERIOD: 2010		LOCATION WITH HIGHEST ANNUAL MEAN (M)		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSIS PERFORMED	NUMBER OF ANALYSIS PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR MEAN (M) (F) RANGE	CONTROL LOCATION MEAN (M) (F) RANGE	MEAN (M) (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
DRINKING WATER (PCI/LITER)	CS-137		18	<LLD	<LLD	-		0
	BA-140		60	<LLD	<LLD	-		0
	LA-140		15	<LLD	<LLD	-		0
GROUNDWATER (PCI/LITER)	H-3	8	200	<LLD	NA	-		0
	GAMMA MN-54	8	15	<LLD	NA	-		0
	CO-58		15	<LLD	NA	-		0
	FE-59		30	<LLD	NA	-		0
	CO-60		15	<LLD	NA	-		0

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE OYSTER CREEK GENERATING STATION, 2010**

Name of Facility: OYSTER CREEK GENERATING STATION				DOCKET NUMBER: 50-219				
Location of Facility: OCEAN COUNTY NJ				REPORTING PERIOD:	2010			
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSIS PERFORMED	NUMBER OF ANALYSIS PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN (M)		
				LOCATIONS	LOCATION	MEAN (M)	STATION #	NUMBER OF
				MEAN (M)	MEAN (M)	MEAN (M)	NAME	NONROUTINE
				(F)	(F)	(F)	DISTANCE AND DIRECTION	REPORTED
				RANGE	RANGE	RANGE		MEASUREMENTS
GROUNDWATER (PCI/LITER)	ZN-65		30	<LLD	NA	-		0
	NB-95		15	<LLD	NA	-		0
	ZR-95		30	<LLD	NA	-		0
	I-131		15	<LLD	NA	-		0
	CS-134		15	<LLD	NA	-		0
	CS-137		18	<LLD	NA	-		0
	BA-140		60	<LLD	NA	-		0
	LA-140		15	<LLD	NA	-		0

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

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Name of Facility: OYSTER CREEK GENERATING STATION				DOCKET NUMBER: 50-219				
Location of Facility: OCEAN COUNTY NJ				REPORTING PERIOD: 2010				
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSIS PERFORMED	NUMBER OF ANALYSIS PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN (M)		
				MEAN (M) (F) RANGE	MEAN (M) (F) RANGE	MEAN (M) (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
BOTTOM FEEDER (PCI/KG WET)	GAMMA K-40	7	NA	4148 (5/5) (3670/4560)	3600 (2/2) (3130/4070)	4215 (4/4) (3670/4560)	93 INDICATOR OCGS DISCHARGE CANAL 0.1 MILES WSW OF SITE	0
	MN-54		130	<LLD	<LLD	-		0
	CO-58		130	<LLD	<LLD	-		0
	FE-59		260	<LLD	<LLD	-		0
	CO-60		130	<LLD	<LLD	-		0
	ZN-65		260	<LLD	<LLD	-		0
	CS-134		130	<LLD	<LLD	-		0
	CS-137		150	<LLD	<LLD	-		0

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES
FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES (F)

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE OYSTER CREEK GENERATING STATION, 2010**

Name of Facility: OYSTER CREEK GENERATING STATION Location of Facility: OCEAN COUNTY NJ				DOCKET NUMBER: 50-219		REPORTING PERIOD: 2010		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSIS PERFORMED	NUMBER OF ANALYSIS PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN (M)		
				LOCATIONS	LOCATION	MEAN (M)	STATION #	NUMBER OF
				MEAN (M) (F) RANGE	MEAN (M) (F) RANGE	MEAN (M) (F) RANGE	NAME DISTANCE AND DIRECTION	NONROUTINE REPORTED MEASUREMENTS
PREDATOR (PCI/KG WET)	GAMMA K-40	16	NA	4189 (10/10) (3260/5670)	4313.3 (6/6) (2050/5690)	4322.5 (4/4) (3260/5670)	33 INDICATOR EAST OF RT 9 BRIDGE IN OCGS DISCHARGE 0.4 MILES ESE OF SITE	0
	MN-54		130	<LLD	<LLD	-		0
	CO-58		130	<LLD	<LLD	-		0
	FE-59		260	<LLD	<LLD	-		0
	CO-60		130	<LLD	<LLD	-		0
	ZN-65		260	<LLD	<LLD	-		0
	CS-134		130	<LLD	<LLD	-		0
	CS-137		150	<LLD	<LLD	-		0

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Name of Facility: OYSTER CREEK GENERATING STATION				DOCKET NUMBER: 50-219					
Location of Facility: OCEAN COUNTY NJ				REPORTING PERIOD: 2010					
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSIS PERFORMED	NUMBER OF ANALYSIS PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN (M)			
				LOCATIONS	LOCATION	MEAN (M) (F)	MEAN (M) (F)	MEAN (M) (F)	STATION # NAME DISTANCE AND DIRECTION
CLAMS (PCI/KG WET)	GAMMA	6							
	K-40		NA	1315 (4/4) (1040/1620)	1215 (2/2) (1190/1240)	1335 (2/2) (1050/1620)	23 INDICATOR BARNEGAT BAY OFF STOUTS CREEK 3.6 MILES ENE OF SITE	0	
	MN-54		130	<LLD	<LLD	-		0	
	CO-58		130	<LLD	<LLD	-		0	
	FE-59		260	<LLD	<LLD	-		0	
	CO-60		130	<LLD	<LLD	-		0	
	ZN-65		260	<LLD	<LLD	-		0	
	CS-134		100	<LLD	<LLD	-		0	
CS-137	100	<LLD	<LLD	-		0			

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

**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE OYSTER CREEK GENERATING STATION, 2010**

Name of Facility: OYSTER CREEK GENERATING STATION				DOCKET NUMBER: 50-219					
Location of Facility: OCEAN COUNTY NJ				REPORTING PERIOD: 2010					
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSIS PERFORMED	NUMBER OF ANALYSIS PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN (M)			
				LOCATIONS	LOCATION	MEAN (M) (F)	MEAN (M) (F)	MEAN (M) (F)	STATION # NAME DISTANCE AND DIRECTION
CRABS (PCI/KG WET)	GAMMA K-40	2	NA	2465 (2/2) (2410/2520)	NA	2520 (1/1)	33 INDICATOR EAST OF RT 9 BRIDGE IN OCGS DISCHARGE 0.4 MILES ESE OF SITE		0
	MN-54		130	<LLD	NA	-			0
	CO-58		130	<LLD	NA	-			0
	FE-59		260	<LLD	NA	-			0
	CO-60		130	<LLD	NA	-			0
	ZN-65		260	<LLD	NA	-			0
	CS-134		100	<LLD	NA	-			0
	CS-137		100	<LLD	NA	-			0

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**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE OYSTER CREEK GENERATING STATION, 2010**

Name of Facility: OYSTER CREEK GENERATING STATION				DOCKET NUMBER: 50-219				
Location of Facility: OCEAN COUNTY NJ				REPORTING PERIOD: 2010		LOCATION WITH HIGHEST ANNUAL MEAN (M)		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSIS PERFORMED	NUMBER OF ANALYSIS PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	MEAN (M) (F) RANGE	CONTROL MEAN (M) (F) RANGE	MEAN (M) (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
SEDIMENT (PCI/KG DRY)	GAMMA BE-7	8	NA	<LLD	805 (1/2)	805 (1/2)	94 CONTROL GREAT BAY/LITTLE EGG HARBOR 20.0 MILES SSW OF SITE	0
	K-40		NA	2732 (6/6) (567/6100)	11145 (2/2) (7190/15100)	11145 (2/2) (7190/15100)	94 CONTROL GREAT BAY/LITTLE EGG HARBOR 20.0 MILES SSW OF SITE	0
	MN-54		NA	<LLD	<LLD	-		0
	CO-58		NA	<LLD	<LLD	-		0
	CO-60		NA	<LLD	<LLD	-		0
	CS-134		150	<LLD	<LLD	-		0
	CS-137		180	222 (1/6)	<LLD	222 (1/2)	33 INDICATOR EAST OF RT 9 BRIDGE IN OCGS DISCHARGE 0.4 MILES ESE OF SITE	0
AIR PARTICULATE (E-3 PCI/CU.METER)	GR-B	412	10	15 (276/309) (6/30)	15 (97/103) (6/28)	16 (49/52) (7/26)	C CONTROL JCP&L OFFICE - COOKSTOWN NJ 24.7 MILES NW OF SITE	0

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**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE OYSTER CREEK GENERATING STATION, 2010**

Name of Facility: OYSTER CREEK GENERATING STATION				DOCKET NUMBER: 50-219				
Location of Facility: OCEAN COUNTY NJ				REPORTING PERIOD: 2010		LOCATION WITH HIGHEST ANNUAL MEAN (M)		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSIS PERFORMED	NUMBER OF ANALYSIS PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR MEAN (M) (F) RANGE	CONTROL MEAN (M) (F) RANGE	MEAN (M) (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
AIR PARTICULATE (E-3 PCI/CU.METER)	SR-89	32	10	<LLD	<LLD	-		0
	SR-90	32	10	<LLD	<LLD	-		0
	GAMMA BE-7	32	NA	70 (24/24) (51/97)	70 (8/8) (48/84)	80 (4/4) (75/84)	3 CONTROL COAST GUARD STATION - ISLAND BEACH ST PK 6.0 MILES E OF SITE	0
	MN-54		NA	<LLD	<LLD	-		0
	CO-58		NA	<LLD	<LLD	-		0
	CO-60		NA	<LLD	<LLD	-		0
	CS-134		50	<LLD	<LLD	-		0
	CS-137		60	<LLD	<LLD	-		0

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**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE OYSTER CREEK GENERATING STATION, 2010**

Name of Facility: OYSTER CREEK GENERATING STATION				DOCKET NUMBER: 50-219				
Location of Facility: OCEAN COUNTY NJ				REPORTING PERIOD: 2010		LOCATION WITH HIGHEST ANNUAL MEAN (M)		
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSIS PERFORMED	NUMBER OF ANALYSIS PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	MEAN (M) (F) RANGE	CONTROL MEAN (M) (F) RANGE	MEAN (M) (F) RANGE	STATION # NAME DISTANCE AND DIRECTION	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
AIR IODINE (E-3 PCI/CU.METER)	GAMMA I-131	412	70	<LLD	<LLD	-		0
VEGETATION (PCI/KG WET)	SR-89	56	25	<LLD	<LLD	-		0
	SR-90	56	5	9.7 (18/41) (3.3/19.7)	5.4 (7/15) (3.4/7.1)	11.5 (12/15) (3.3/19.7)	115 INDICATOR EAST OF SITE ON FINNINGER FARM 0.3 MILES E OF SITE	0
	GAMMA BE-7	56	NA	187 (15/41) (93/438)	310 (4/15) (182/441)	310 (4/15) (182/441)	36 CONTROL U-PICK FARM - NEW EGYPT NJ 23.1 MILES NW OF SITE	0
	K-40		NA	5842 (41/41) (2570/12200)	4721 (15/15) (2690/6470)	6967 (15/15) (4530/12200)	115 INDICATOR EAST OF SITE ON FINNINGER FARM 0.3 MILES E OF SITE	0
	I-131		60	<LLD	<LLD	-		0
	CS-134		60	<LLD	<LLD	-		0
	CS-137		80	<LLD	<LLD	-		0

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**TABLE A-1 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY FOR
THE OYSTER CREEK GENERATING STATION, 2010**

Name of Facility: OYSTER CREEK GENERATING STATION				DOCKET NUMBER: 50-219					
Location of Facility: OCEAN COUNTY NJ				REPORTING PERIOD: 2010					
MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPES OF ANALYSIS PERFORMED	NUMBER OF ANALYSIS PERFORMED	REQUIRED LOWER LIMIT OF DETECTION (LLD)	INDICATOR	CONTROL	LOCATION WITH HIGHEST ANNUAL MEAN (M)			NUMBER OF NONROUTINE REPORTED MEASUREMENTS
				LOCATIONS	LOCATION	MEAN (M)	STATION #	DISTANCE AND DIRECTION	
				MEAN (M) (F) RANGE	MEAN (M) (F) RANGE	MEAN (M) (F) RANGE			
VEGETATION (PCI/KG WET)	BA-140		NA	<LLD	<LLD	-			0
	LA-140		NA	<LLD	<LLD	-			0
DIRECT RADIATION (MILLI-ROENTGEN/STD.MO.)	TLD-QUARTERLY	242	NA	14.0 (234/234) (9.9/21.6)	14.9 (8/8) (13.2/17.7)	19.1 (4/4) (17.1/21.6)	55 INDICATOR	SOUTHERN AREA STORES SECURITY FENCE 0.3 MILES W	0

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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 Oyster Creek Generating Station

Sample Medium	–	APT = Air Particulate AIO = Air Iodine DW = Drinking Water VEG = Vegetation SWA = Surface Water AQS = Aquatic Sediment	Clam = Clam TLD = Thermoluminescent Dosimetry Fish = Fish Crab = Crab
Station Code	–	Station's Designation	
Distance	–	Distance from the OCGS in miles	
Azimuth	–	Azimuth with respect to the OCGS in degrees	
Description	–	Meteorological sector in which the station is located and a narrative description	

TABLE B-2: Radiological Environmental Monitoring Program – Sampling Locations, Distance and Direction,
Oyster Creek Generating Station, 2010

<u>Sample Medium</u>	<u>Station Code</u>	<u>Distance (miles)</u>	<u>Azimuth (degrees)</u>	<u>Description</u>
TLD	1	0.4	219	SW of site at OCGS Fire Pond, Forked River, NJ
DW	1S	0.1	209	On-site southern domestic well at OCGS, Forked River, NJ
DW	1N	0.2	349	On-site northern domestic well at OCGS, Forked River, NJ
APT, AIO, TLD	3	6.0	97	East of site, near old Coast Guard Station, Island Beach State Park
TLD	4	4.6	213	SSW of site, Route 554 and Garden State Parkway, Barnegat, NJ
TLD	5	4.2	353	North of site, at Garden State Parkway Rest Area, Forked River, NJ
TLD	6	2.1	13	NNE of site, Lane Place, behind St. Pius Church, Forked River, NJ
TLD	8	2.3	177	South of site, Route 9 at the Waretown Substation, Waretown, NJ
TLD	9	2.0	230	SW of site, where Route 532 and the Garden State Parkway meet, Waretown, NJ
APT, AIO, TLD	C	24.7	313	NW of site, JCP&L office in rear parking lot, Cookstown, NJ
TLD	11	8.2	152	SSE of site, 80 th and Anchor Streets, Harvey Cedars, NJ
TLD	14	20.8	2	North of site, Larrabee Substation on Randolph Road, Lakewood, NJ
APT, AIO	20	0.7	95	East of site, on Finninger Farm on south side of access road, Forked River, NJ
TLD	22	1.6	145	SE of site, on Long John Silver Way, Skippers Cove, Waretown, NJ
SWA, CLAM, AQS	23	3.6	64	ENE of site, Barnegat Bay off Stouts Creek, approximately 400 yards SE of "Flashing Light 1"
SWA, CLAM, AQS	24	2.1	101	East of site, Barnegat Bay, approximately 250 yards SE of "Flashing Light 3"
SWA, AQS, FISH, CRAB	33	0.4	123	ESE of site, east of Route 9 Bridge in OCGS Discharge Canal
VEG	35	0.4	111	ESE of site, east of Route 9 and north of the OCGS Discharge Canal, Forked River, NJ
VEG	36	23.1	319	NW of site, at "U-Pick" Farm, New Egypt, NJ

TABLE B-2: Radiological Environmental Monitoring Program – Sampling Locations, Distance and Direction,
Oyster Creek Generating Station, 2010

<u>Sample Medium</u>	<u>Station Code</u>	<u>Distance (miles)</u>	<u>Azimuth (degrees)</u>	<u>Description</u>
DW	37	2.2	18	NNE of Site, off Boox Road at Lacey MUA Pumping Station, Forked River, NJ
DW	38	1.6	197	SSW of Site, on Route 532, at Ocean Township MUA Pumping Station, Waretown, NJ
DW	39	3.5	353	North of Site, Trenton Ave. off Lacey Rd, Lacey Twp. MUA Pump Station, Forked River, NJ
TLD	46	5.6	323	NW of site, on Lacey Road, adjacent to utility pole BT 259 65, Forked River, NJ
TLD	47	4.6	26	NNE of site, Route 9 and Harbor Inn Road, Bayville, NJ
TLD	48	4.5	189	South of site, at intersection of Brook and School Streets, Barnegat, NJ
TLD	51	0.4	358	North of site, on the access road to Forked River site, Forked River, NJ
TLD	52	0.3	333	NNW of site, on the access road to Forked River site, Forked River, NJ
TLD	53	0.3	309	NW of site, at sewage lift station on the access road to the Forked River site, Forked River, NJ
TLD	54	0.3	288	WNW of site, on the access road to Forked River site, Forked River, NJ
TLD	55	0.3	263	West of site, on Southern Area Stores security fence, west of OCGS Switchyard, Forked River, NJ
TLD	56	0.3	249	WSW of site, on utility pole east of Southern Area Stores, west of the OCGS Switchyard, Forked River, NJ
TLD	57	0.2	206	SSW of site, on Southern Area Stores access road, Forked River, NJ
TLD	58	0.2	188	South of site, on Southern Area Stores access road, Forked River, NJ
TLD	59	0.3	166	SSE of site, on Southern Area Stores access road, Waretown, NJ
TLD	61	0.3	104	ESE of site, on Route 9 south of OCGS Main Entrance, Forked River, NJ

TABLE B-2: Radiological Environmental Monitoring Program – Sampling Locations, Distance and Direction,
Oyster Creek Generating Station, 2010

<u>Sample Medium</u>	<u>Station Code</u>	<u>Distance (miles)</u>	<u>Azimuth (degrees)</u>	<u>Description</u>
TLD	62	0.2	83	East of site, on Route 9 at access road to OCGS Main Gate, Forked River, NJ
TLD	63	0.2	70	ENE of site, on Route 9, between main gate and OCGS North Gate access road, Forked River, NJ
TLD	64	0.3	42	NE of site, on Route 9 North at entrance to Finninger Farm, Forked River, NJ
TLD	65	0.4	19	NNE of site, on Route 9 at Intake Canal Bridge, Forked River, NJ
APT, AIO, TLD, VEG	66	0.4	133	SE of site, east of Route 9 and south of the OCGS Discharge Canal, inside fence, Waretown, NJ
TLD	68	1.3	266	West of site, on Garden State Parkway North at mile marker 71.7, Lacey Township, NJ
APT, AIO, TLD	71	1.6	164	SSE of site, on Route 532 at the Waretown Municipal Building, Waretown, NJ
APT, AIO, TLD	72	1.9	25	NNE of site, on Lacey Road at Knights of Columbus Hall, Forked River, NJ
APT, AIO, TLD	73	1.8	108	ESE of site, on Bay Parkway, Sands Point Harbor, Waretown, NJ
TLD	74	1.8	88	East of site, Orlando Drive and Penguin Court, Forked River, NJ
TLD	75	2.0	71	ENE of site, Beach Blvd. and Maui Drive, Forked River, NJ
TLD	78	1.8	2	North of site, 1514 Arient Road, Forked River, NJ
TLD	79	2.9	160	SSE of site, Hightide Drive and Bonita Drive, Waretown, NJ
TLD	81	3.5	201	SSW of site, on Rose Hill Road at intersection with Barnegat Boulevard, Barnegat, NJ
TLD	82	4.4	36	NE of site, Bay Way and Clairmore Avenue, Lanoka Harbor, NJ
TLD	84	4.4	332	NNW of site, on Lacey Road, 1.3 miles west of the Garden State Parkway on siren pole, Lacey Township, NJ
TLD	85	3.9	250	WSW of site, on Route 532, just east of Wells Mills Park, Waretown, NJ
TLD	86	5.0	224	SW of site, on Route 554, 1 mile west of the Garden State Parkway, Barnegat, NJ
TLD	88	6.6	125	SE of site, eastern end of 3 rd Street, Barnegat Light, NJ
TLD	89	6.1	108	ESE of site, Job Francis residence, Island Beach State Park

TABLE B-2: Radiological Environmental Monitoring Program – Sampling Locations, Distance and Direction,
Oyster Creek Generating Station, 2010

<u>Sample Medium</u>	<u>Station Code</u>	<u>Distance (miles)</u>	<u>Azimuth (degrees)</u>	<u>Description</u>
TLD	90	6.3	75	ENE of site, parking lot A-5, Island Beach State Park
TLD	92	9.0	46	NE of site, at Guard Shack/Toll Booth, Island Beach State Park
FISH, CRAB	93	0.1	242	WSW of site, OCGS Discharge Canal between Pump Discharges and Route 9, Forked River, NJ
SWA, AQS, CLAM, FISH	94	20.0	198	SSW of site, in Great Bay/Little Egg Harbor
TLD	98	1.6	318	NW of site, on Garden State Parkway North at mile marker 73, Lacey Township, NJ
TLD	99	1.5	310	NW of site, on Garden State Parkway at mile marker 72.8, Lacey Township, NJ
TLD	100	1.4	43	NE of site, Yacht Basin Plaza South off Lakeside Dr., Lacey Township, NJ
TLD	101	1.7	49	NE of site, end of Lacey Rd. East, Lacey Township, NJ
TLD	102	1.6	344	NNW of site, end of Sheffield Dr., Barnegat Pines, Lacey Township, NJ
TLD	103	2.4	337	NNW of site, Llewellyn Pkwy., Barnegat Pines, Lacey Township, NJ
TLD	104	1.8	221	SW of site, Rt. 532 West, before Garden State Parkway, Ocean Township, NJ
TLD	105	2.8	222	SW of site, Garden State Parkway North beside mile marker 69.6, Ocean Township, NJ
TLD	106	1.2	288	NW of site, Garden State Parkway North beside mile marker 72.2, Lacey Township, NJ
TLD	107	1.3	301	NW of site, Garden State Parkway North beside mile marker 72.5, Lacey Township, NJ
TLD	108	4.3	354	N, end of parking lot at GPS north rest stop; Temporary location that was not included in the REMP program and was removed after the first quarter of 2010.
TLD	109	1.2	141	SE of site, Lighthouse Dr., Waretown, Ocean Township, NJ
TLD	110	1.5	127	SE of site, Tiller Dr. and Admiral Way, Waretown, Ocean Township, NJ
APT, AIO	111	0.3	64	ENE of site, Finninger Farm property along access road, Lacey Township, NJ
TLD	112	0.2	178	S of site, along southern access road

TABLE B-2: Radiological Environmental Monitoring Program – Sampling Locations, Distance and Direction,
Oyster Creek Generating Station, 2010

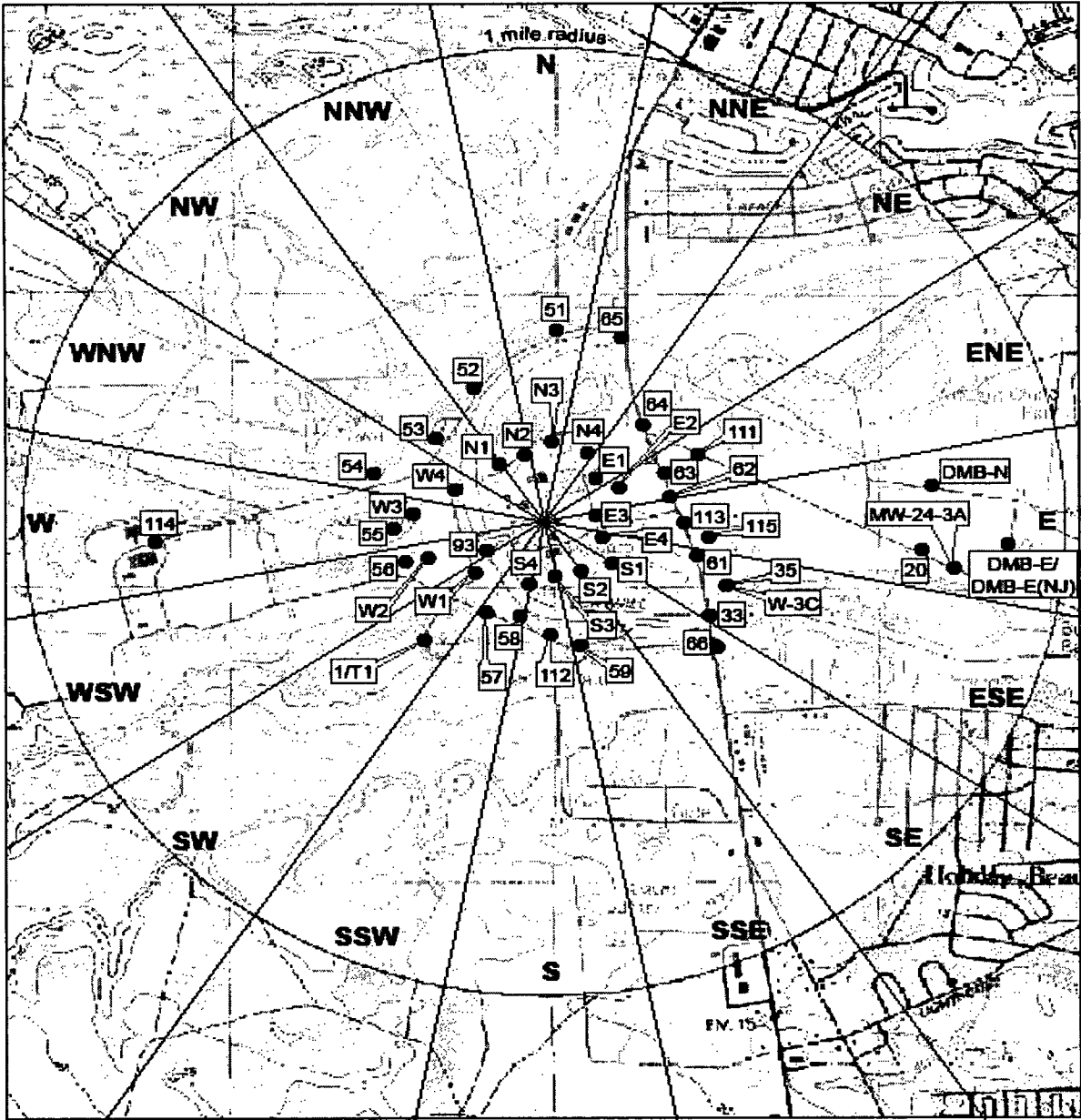
<u>Sample Medium</u>	<u>Station Code</u>	<u>Distance (miles)</u>	<u>Azimuth (degrees)</u>	<u>Description</u>
TLD	113	0.3	90	E of site, along Rt. 9, North
DW	114	0.8	267	Well at Bldg 25 on Forked River site
VEG	115	0.3	96	E of Site, on Finninger Farm
TLD	T1	0.4	219	SW of site, at OCGS Fire Pond, Forked River, NJ
GW	MW-24-3A	0.8	97	ESE of site, Finninger Farm on South side of access road, Lacey Township, NJ
GW	W-3C	0.4	112	ESE of site, Finninger Farm adjacent to Station 35, Lacey Township, NJ

TABLE B-3: Radiological Environmental Monitoring Program – Summary of Sample Collection and Analytical Methods, Oyster Creek Generating Station, 2010

Sample Medium	Analysis	Sampling Method	Collection Procedure Number	Sample Size	Analytical Procedure Number
Drinking Water	Gamma Spectroscopy	Monthly samples composited quarterly	ER-OCGS-10, Collection of well water samples for radiological analysis CY-OC-120-1200, REMP sample collection procedure – well water	1 gallon	TBE, TBE-2007 Gamma emitting radioisotopes analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Drinking Water	Tritium	Monthly samples composited quarterly	ER-OCGS-10, Collection of well water samples for radiological analysis CY-OC-120-1200, REMP sample collection procedure – well water	1 gallon	TBE, TBE-2010 Tritium and carbon-13 analysis by liquid scintillation Env. Inc., T-02 Determination of tritium in water (direct method)
Surface Water	Gamma Spectroscopy	Grab Sample	ER-OCGS-06, Collection of surface water samples for radiological analysis	1 gallon	TBE, TBE-2007 Gamma emitting radioisotopes analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Surface Water	Tritium	Grab Sample	ER-OCGS-06, Collection of surface water samples for radiological analysis	1 gallon	TBE, TBE-2010 Tritium and carbon-13 analysis by liquid scintillation Env. Inc., T-02 Determination of tritium in water (direct method)
Fish	Gamma Spectroscopy	Semi-annual samples collected via hook and line technique and traps	ER-OCGS-14, Collection of fish samples for radiological analysis	250 grams (wet)	TBE, TBE-2007 Gamma emitting radioisotopes analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Clams and Crabs	Gamma Spectroscopy	Semi-annual and annual samples collected using clam tongs and traps.	ER-OCGS-16, Collection of clam and crab samples for radiological analysis	300 grams (wet)	TBE, TBE-2007 Gamma emitting radioisotopes analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Sediment	Gamma Spectroscopy	Semi-annual grab samples	ER-OCGS-03, Collection of aquatic sediment samples for radiological analysis	1000 grams (dry)	TBE, TBE-2007 Gamma emitting radioisotopes analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy

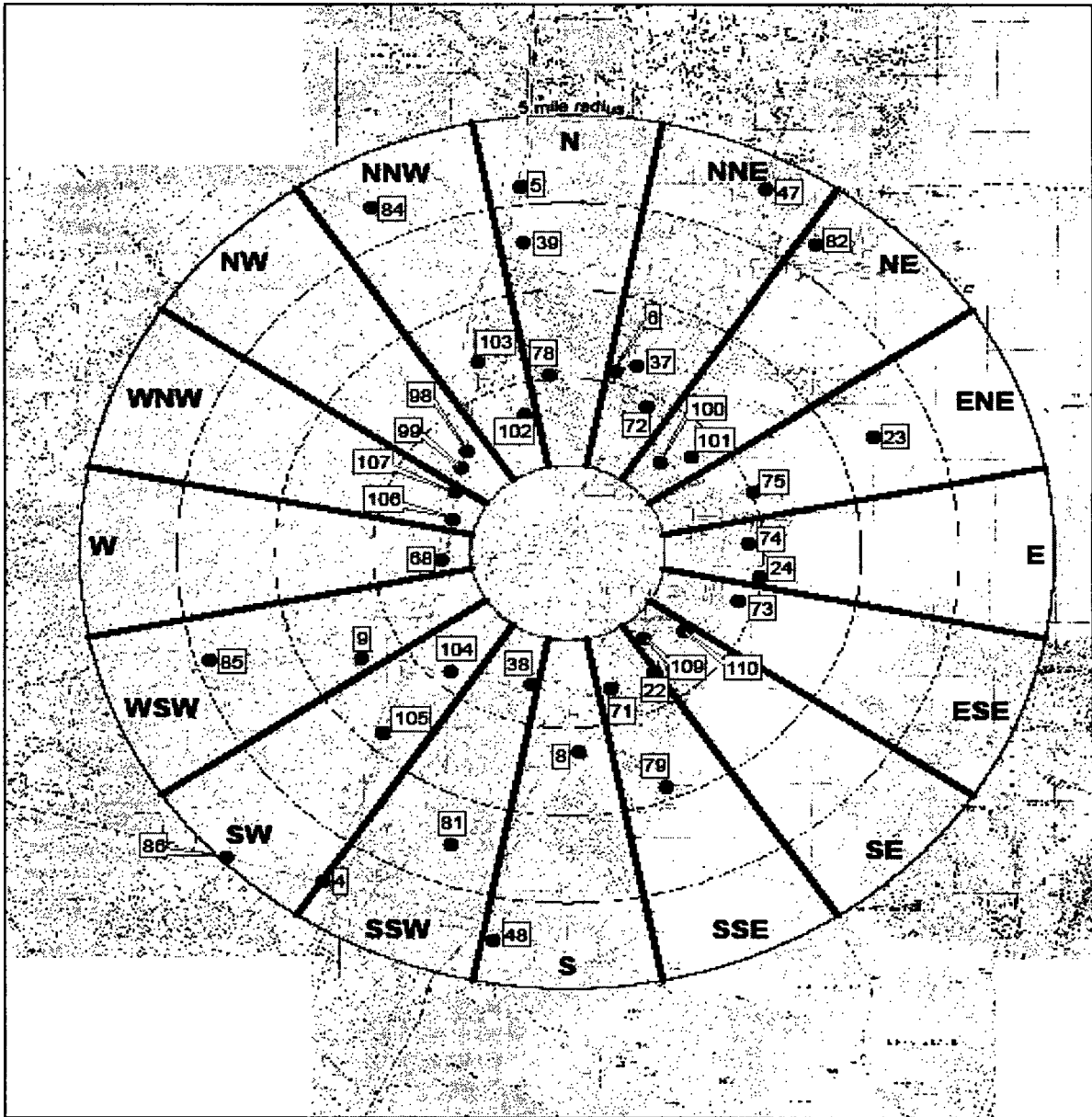
TABLE B-3: Radiological Environmental Monitoring Program – Summary of Sample Collection and Analytical Methods, Oyster Creek Generating Station, 2010

Sample Medium	Analysis	Sampling Method	Collection Procedure Number	Sample Size	Analytical Procedure Number
Air Particulates	Gross Beta	One-week composite of continuous air sampling through glass fiber filter paper	ER-OCGS-05, Collection of air iodine and air particulate samples for radiological analysis	1 filter (approximately 300 cubic meters weekly)	TBE, TBE-2008 Gross alpha and/or beta activity in various matrices) Env. Inc., AP-02 Determination of gross alpha and/or gross beta in air particulate filters
Air Particulates	Gamma Spectroscopy	Quarterly composite of each station	TBE, TBE-2023 Compositing of samples Env. Inc., AP-03 Procedure for compositing air particulate filters for gamma spectroscopic analysis	13 filters (approximately 4000 cubic meters)	TBE, TBE-2007 Gamma emitting radioisotopes analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Air Particulates	Strontium-89/90	Quarterly composite of each station	ER-OCGS-05, Collection of air iodine and air particulate samples for radiological analysis	13 filters (approximately 4000 cubic meters)	TBE, TBE-2019 Radiostrontium analysis by ion exchange
Air Iodine	Gamma Spectroscopy	One-week composite of continuous air sampling through charcoal filter	ER-OCGS-05, Collection of air iodine and air particulate samples for radiological analysis	1 filter (approximately 300 cubic meters weekly)	TBE, TBE-2007 Gamma emitting radioisotopes analysis Env. Inc., I-131-02 Determination of I-131 in charcoal canisters by gamma spectroscopy (batch method)
Vegetation	Gamma Spectroscopy	Grab sample during growing season	ER-OCGS-04, Collection of food products and broadleaf vegetation samples for radiological analysis	1000 grams	TBE, TBE-2007 Gamma emitting radioisotopes analysis Env. Inc., GS-01 Determination of gamma emitters by gamma spectroscopy
Vegetation	Strontium-89/90	Grab sample during growing season	ER-OCGS-04, Collection of food products and broadleaf vegetation samples for radiological analysis	1000 grams	TBE, TBE-2019 Radiostrontium analysis by ion exchange
TLD	Thermoluminescence Dosimetry	Quarterly TLDs comprised of two Panasonic 814 (containing 3 each CaSO ₄ elements)	ER OCGS-02, Collection of thermoluminescent dosimeters (TLDs) for radiological analysis	2 dosimeters	Mirion Technologies, Inc. TLD Processing Procedures



<p style="text-align: center;">Oyster Creek Generating Station REMP Stations within a 1 mile radius 2010</p>	<p>N</p>	<div style="display: flex; align-items: center;"> <div> <p>NORMANDEAU ASSOCIATES ENVIRONMENTAL CONSULTANTS 400 Oak Road, P.O. Box A, Suite 101, Exton, PA 19341</p> </div> </div> <p style="font-size: small; margin-top: 5px;"> date: 10/10/10 rev date: prepared by: s.sherman checked by: d.wilman project: 20577 file name: OC_REMP_2010_1mile.mxd </p>
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Figure B-1
Locations of REMP Stations within a 1-mile radius
of the Oyster Creek Generating Station




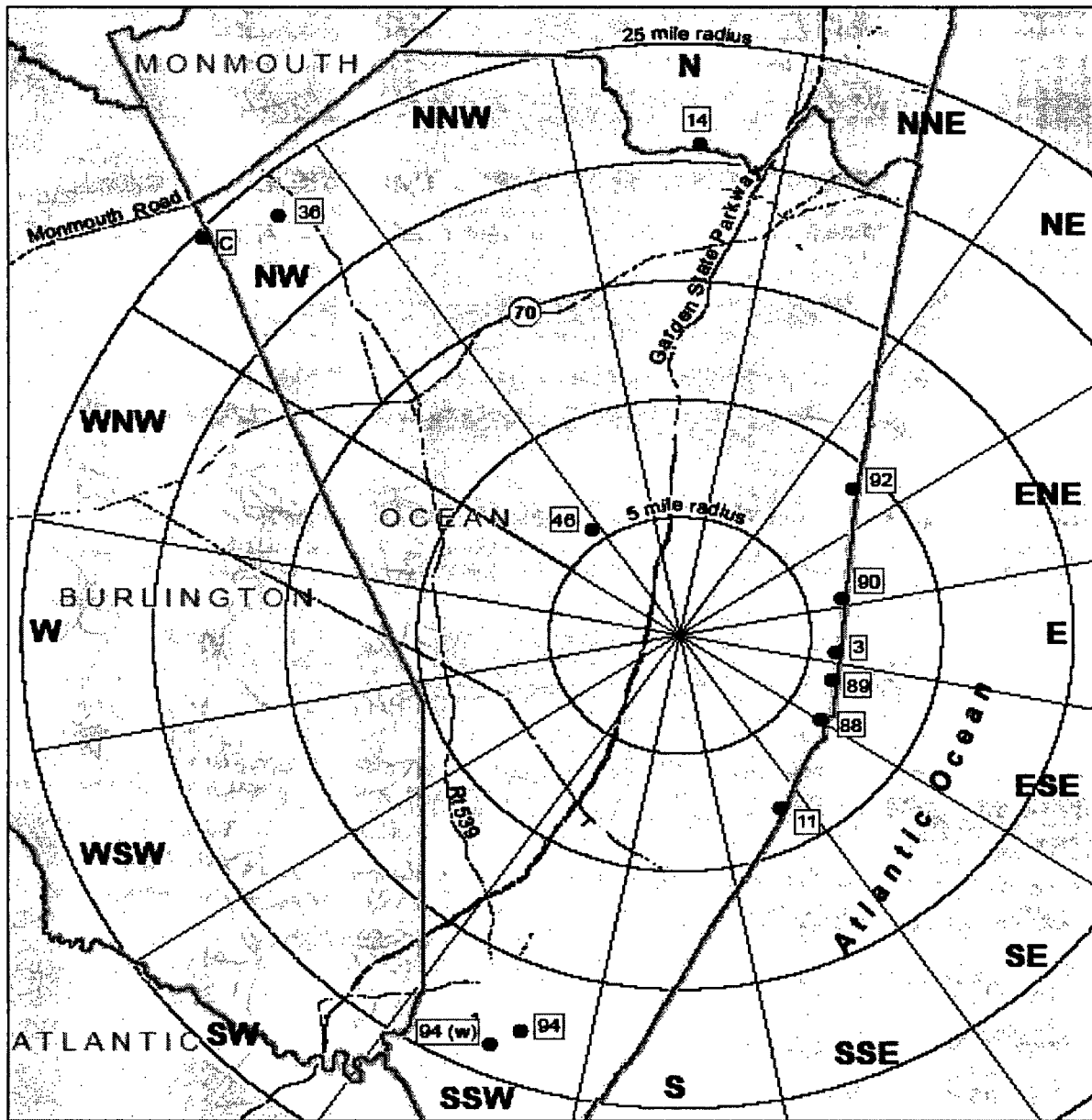
<p>Oyster Creek Generating Station REMP Stations within a 1 to 5 mile radius 2010</p>	<p style="text-align: center;">N</p>  <p>NORMANDEAU ASSOCIATES ENVIRONMENTAL CONSULTANTS 400 Oak Road, P.O. Box 101, Glenside, PA 19038</p> <p>date: 10/09/10 prepared by: a.ahernan project: 20077</p> <p>rev: 001 checked by: d.farmer file name: OC_REMSP_2010_Settle.mxd</p>
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Figure B-2.
Locations of REMP Stations within a 1 to 5-mile radius
of the Oyster Creek Generating Station



<p>Oyster Creek Generating Station REMP Stations greater than 5 mile radius 2010</p>	<p>N ↑ S ↓</p>		<p>NORMANDEAU ASSOCIATES ENVIRONMENTAL CONSULTANTS 420 Old Reading Pike, 3rd Fl., Suite 101, Dover, PA 17018</p>
		<p>date: 10/09/10 prepared by: s.aheman project: 20577</p>	<p>rev. date: checked by: d.88man file name: CC_2010_overrides.mxd</p>

Figure B-3.
Locations of REMP Stations greater than 5 miles
from the Oyster Creek Generating Station

APPENDIX C

DATA TABLES AND FIGURES PRIMARY LABORATORY

TABLE C-I.1

**CONCENTRATIONS OF TRITIUM IN SURFACE WATER SAMPLES COLLECTED
IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

COLLECTION PERIOD	23	24	33	94
01/07/10 - 01/28/10			< 164	< 165
02/04/10 - 02/23/10			< 165	< 171
03/04/10 - 04/01/10			< 179 (1)	< 179 (1)
04/13/10 - 04/13/10	< 154	< 157	< 165 (1)	< 167 (1)
05/06/10 - 05/27/10			< 155 (1)	< 161 (1)
06/04/10 - 07/01/10			< 169 (1)	< 165 (1)
07/08/10 - 07/29/10			< 161 (1)	< 168 (1)
08/05/10 - 08/26/10			< 165	< 168
09/02/10 - 09/29/10			< 189	< 189
10/11/10 - 10/11/10	< 150	< 152	< 158	< 186
11/03/10 - 11/23/10			< 153	< 153
12/02/10 - 12/28/10			< 153	< 150
MEAN	-	-	-	-

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-1.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF
OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
23	04/13/10 - 04/13/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 15	< 1	< 2	< 23	< 8
	10/11/10 - 10/11/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 16	< 6
	MEAN	-	-	-	-	-	-	-	-	-	-	-	-
24	04/13/10 - 04/13/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 14	< 1	< 1	< 19	< 6
	10/11/10 - 10/11/10	< 4	< 4	< 11	< 5	< 9	< 5	< 8	< 9	< 4	< 4	< 25	< 9
	MEAN	-	-	-	-	-	-	-	-	-	-	-	-
33	01/07/10 - 01/28/10	< 9	< 8	< 19	< 8	< 17	< 10	< 15	< 13	< 9	< 8	< 36	< 12
	02/04/10 - 02/23/10	< 5	< 5	< 10	< 5	< 12	< 6	< 9	< 11	< 6	< 5	< 28	< 8
	03/04/10 - 04/01/10 (1)	< 5	< 5	< 11	< 5	< 9	< 6	< 10	< 12	< 6	< 6	< 28	< 6
	04/08/10 - 04/28/10 (1)	< 3	< 4	< 7	< 3	< 8	< 4	< 6	< 11	< 4	< 4	< 25	< 7
	05/06/10 - 05/27/10 (1)	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 6	< 1	< 1	< 9	< 3
	06/02/10 - 06/30/10 (1)	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 7	< 2	< 2	< 14	< 4
	07/08/10 - 07/29/10 (1)	< 4	< 4	< 10	< 4	< 9	< 5	< 8	< 11	< 4	< 4	< 27	< 8
	08/05/10 - 08/26/10	< 2	< 3	< 5	< 3	< 4	< 3	< 4	< 12	< 2	< 2	< 22	< 6
	09/02/10 - 09/29/10	< 4	< 5	< 10	< 4	< 8	< 6	< 8	< 13	< 3	< 4	< 29	< 10
	10/06/10 - 10/28/10	< 2	< 2	< 6	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 20	< 6
	11/03/10 - 11/23/10	< 5	< 6	< 12	< 5	< 12	< 6	< 12	< 14	< 5	< 7	< 34	< 10
12/02/10 - 12/28/10	< 5	< 5	< 14	< 6	< 11	< 7	< 11	< 14	< 5	< 6	< 32	< 11	
MEAN	-	-	-	-	-	-	-	-	-	-	-	-	

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-1.2

CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
94	01/07/10 - 01/28/10	< 5	< 5	< 10	< 4	< 11	< 5	< 9	< 9	< 4	< 6	< 24	< 7
	02/04/10 - 02/23/10	< 4	< 4	< 11	< 6	< 10	< 5	< 8	< 9	< 4	< 5	< 23	< 8
	03/04/10 - 04/01/10 (1)	< 4	< 5	< 9	< 4	< 9	< 5	< 8	< 8	< 4	< 5	< 22	< 8
	04/08/10 - 04/29/10 (1)	< 2	< 3	< 7	< 3	< 6	< 3	< 5	< 8	< 2	< 3	< 18	< 5
	05/06/10 - 05/27/10 (1)	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 9	< 1	< 1	< 14	< 4
	06/04/10 - 07/01/10 (1)	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 6	< 2	< 2	< 15	< 5
	07/08/10 - 07/29/10 (1)	< 4	< 4	< 8	< 4	< 7	< 4	< 7	< 11	< 4	< 4	< 28	< 8
	08/05/10 - 08/26/10	< 2	< 2	< 5	< 2	< 5	< 2	< 4	< 12	< 2	< 2	< 20	< 6
	09/02/10 - 09/29/10	< 3	< 4	< 7	< 4	< 7	< 4	< 6	< 10	< 3	< 3	< 23	< 7
	10/06/10 - 10/28/10	< 2	< 2	< 5	< 2	< 4	< 3	< 4	< 12	< 2	< 2	< 20	< 7
	11/03/10 - 11/23/10	< 5	< 5	< 12	< 6	< 13	< 7	< 8	< 12	< 6	< 5	< 27	< 10
	12/02/10 - 12/28/10	< 5	< 5	< 11	< 5	< 8	< 5	< 9	< 11	< 4	< 5	< 27	< 8
	MEAN	-	-	-	-	-	-	-	-	-	-	-	-

C-3

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-II.1 CONCENTRATIONS OF TRITIUM IN DRINKING WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

COLLECTION PERIOD	1	1N	1S	37	38	39	114
01/07/10 - 01/27/10	< 163			< 164	< 164	< 166	< 162 (1)
02/04/10 - 02/23/10	< 170			< 170	< 168	< 166	< 170
03/09/10 - 03/30/10	< 179			< 178 (2)	< 180 (2)	< 179 (2)	< 178 (2)
04/08/10 - 04/29/10	< 171			< 168 (2)	< 165 (2)	< 162 (2)	< 168 (2)
05/06/10 - 05/27/10	< 159 (1)			< 158 (2)	< 155 (2)	< 157 (2)	< 155 (2)
06/04/10 - 07/01/10		< 172 (1)	< 166 (1)	< 170 (2)	< 170 (2)	< 169 (2)	< 169 (2)
07/08/10 - 07/29/10		< 174	(2)	< 164 (2)	< 165 (2)	< 168 (2)	< 167 (2)
08/18/10 - 08/23/10		< 169	< 167	< 167	< 165	< 168	< 168
09/02/10 - 09/29/10		< 188	< 184	< 186	< 187	< 186	< 184
10/05/10 - 10/25/10		< 185	< 162	< 168	< 170	< 170	< 170
11/03/10 - 11/23/10		< 153	< 161	< 161	< 161	< 163	< 164
12/02/10 - 12/21/10		< 171	< 166	< 151	< 153	< 150	< 153
MEAN	-	-	-	-	-	-	-

TABLE C-II.2 CONCENTRATIONS OF GROSS BETA IN DRINKING WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

COLLECTION PERIOD	1	1N	1S	37	38	39	114
01/07/10 - 01/27/10	2.7 ± 1.3			3.8 ± 1.3	3.1 ± 1.3	3.7 ± 1.3	5.7 ± 1.5 (1)
02/04/10 - 02/23/10	2.6 ± 1.3			< 1.9	3.2 ± 2.1	< 1.9	4.6 ± 1.6
03/09/10 - 03/30/10	3.3 ± 2.0			< 2.6 (2)	< 2.7 (2)	< 2.6 (2)	4.7 ± 2.2 (2)
04/08/10 - 04/29/10	< 2.3			< 2.0 (2)	3.3 ± 1.4 (2)	< 1.9 (2)	4.6 ± 1.7 (2)
05/06/10 - 05/27/10	< 2.4 (1)			< 1.8 (2)	< 1.8 (2)	< 1.8 (2)	3.8 ± 1.5 (2)
06/04/10 - 07/01/10		< 2.2 (1)	< 2.4 (1)	< 2.0 (2)	< 2.0 (2)	< 2.0 (2)	4.6 ± 1.6 (2)
07/08/10 - 07/29/10		3.9 ± 1.3	(2)	1.9 ± 1.2 (2)	3.4 ± 1.3 (2)	3.3 ± 1.3 (2)	3.6 ± 1.4 (2)
08/18/10 - 08/23/10		5.0 ± 1.6	2.5 ± 1.4	2.0 ± 1.2	2.1 ± 1.2	3.2 ± 1.2	3.3 ± 1.4
09/02/10 - 09/29/10		< 1.9	13 ± 2.0	2.2 ± 1.3	2.3 ± 1.1	2.1 ± 1.4	4.0 ± 1.4
10/06/10 - 10/28/10		7.4 ± 2.3	< 2.8	< 2.7	< 2.7	< 2.6	3.5 ± 1.9
11/03/10 - 11/23/10		< 1.8	2.4 ± 1.2	1.8 ± 1.1	2.4 ± 1.2	< 1.6	3.4 ± 1.3
12/02/10 - 12/21/10		< 3.1	< 2.8	3.0 ± 1.7	< 2.7	< 2.7	3.4 ± 2.0
MEAN	2.9 ± 0.8	5.4 ± 3.6	5.8 ± 12	2.4 ± 1.6	2.8 ± 1.1	3.1 ± 1.4	4.1 ± 1.5

* THE MEAN AND 2 STANDARD DEVIATION ARE CALCULATED USING THE POSITIVE VALUES

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

(2) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-II.3

CONCENTRATIONS OF GAMMA EMITTERS IN DRINKING WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
1	01/05/10 - 01/26/10	< 6	< 4	< 11	< 5	< 11	< 6	< 7	< 9	< 5	< 6	< 28	< 6
	02/02/10 - 03/02/10	< 6	< 6	< 12	< 6	< 13	< 5	< 11	< 12	< 5	< 5	< 38	< 11
	03/09/10 - 03/30/10	< 6	< 6	< 12	< 6	< 12	< 6	< 11	< 14	< 6	< 6	< 35	< 11
	04/06/10 - 04/27/10	< 4	< 4	< 8	< 4	< 8	< 4	< 6	< 13	< 4	< 5	< 29	< 8
	05/04/10 - 05/24/10 (1)	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 10	< 1	< 1	< 15	< 5
MEAN	-	-	-	-	-	-	-	-	-	-	-	-	-
1N	06/01/10 - 06/28/10 (1)	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 8	< 2	< 2	< 16	< 6
	07/06/10 - 08/02/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 8	< 1	< 2	< 14	< 4
	08/02/10 - 08/16/10	< 1	< 1	< 3	< 1	< 2	< 2	< 3	< 14	< 1	< 1	< 19	< 6
	08/30/10 - 09/28/10	< 4	< 4	< 8	< 4	< 8	< 3	< 7	< 11	< 3	< 4	< 26	< 7
	10/05/10 - 10/25/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 12	< 1	< 2	< 19	< 6
	11/02/10 - 11/23/10	< 6	< 6	< 11	< 7	< 9	< 7	< 9	< 13	< 5	< 5	< 32	< 8
	11/30/10 - 12/29/10	< 3	< 3	< 9	< 4	< 7	< 4	< 7	< 14	< 3	< 3	< 30	< 9
MEAN	-	-	-	-	-	-	-	-	-	-	-	-	-
1S	06/01/10 - 06/30/10 (1)	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 6	< 1	< 2	< 11	< 3
	07/06/10 - 08/02/10 (2)	-	-	-	-	-	-	-	-	-	-	-	-
	08/18/10 - 08/23/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 13	< 2	< 2	< 23	< 7
	08/30/10 - 09/28/10	< 4	< 4	< 8	< 3	< 7	< 5	< 6	< 12	< 3	< 4	< 28	< 9
	10/05/10 - 10/25/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 14	< 2	< 2	< 23	< 7
	11/02/10 - 11/23/10	< 5	< 7	< 12	< 6	< 12	< 6	< 11	< 12	< 6	< 6	< 35	< 12
	11/30/10 - 12/29/10	< 4	< 5	< 8	< 4	< 8	< 4	< 6	< 9	< 4	< 5	< 27	< 7
MEAN	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

(2) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-II.3

**CONCENTRATIONS OF GAMMA EMITTERS IN DRINKING WATER SAMPLES COLLECTED IN THE VICINITY OF
OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140	
37	01/07/10 - 01/27/10	< 5	< 6	< 12	< 5	< 11	< 6	< 10	< 9	< 5	< 6	< 31	< 11	
	02/04/10 - 02/23/10	< 4	< 4	< 9	< 4	< 7	< 4	< 6	< 7	< 4	< 4	< 19	< 8	
	03/04/10 - 04/01/10 (2)	< 5	< 4	< 9	< 4	< 8	< 6	< 9	< 14	< 6	< 5	< 32	< 8	
	04/08/10 - 04/29/10 (2)	< 4	< 3	< 8	< 4	< 7	< 4	< 7	< 9	< 3	< 4	< 21	< 8	
	05/06/10 - 05/27/10 (2)	< 1	< 1	< 3	< 1	< 2	< 2	< 3	< 12	< 1	< 1	< 18	< 5	
	06/04/10 - 07/01/10 (2)	< 3	< 3	< 6	< 2	< 5	< 3	< 5	< 9	< 3	< 3	< 19	< 6	
	07/08/10 - 07/29/10 (2)	< 4	< 4	< 8	< 4	< 10	< 5	< 8	< 13	< 5	< 4	< 30	< 7	
	08/05/10 - 08/26/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 9	< 1	< 2	< 15	< 4	
	09/02/10 - 09/29/10	< 4	< 5	< 10	< 4	< 9	< 5	< 9	< 13	< 4	< 5	< 30	< 10	
	10/06/10 - 10/28/10	< 2	< 3	< 5	< 2	< 4	< 3	< 4	< 13	< 2	< 2	< 22	< 6	
	11/03/10 - 11/23/10	< 5	< 5	< 12	< 5	< 11	< 6	< 10	< 13	< 6	< 6	< 30	< 7	
	12/02/10 - 12/28/10	< 5	< 5	< 12	< 5	< 10	< 5	< 10	< 10	< 5	< 5	< 28	< 8	
	MEAN	-	-	-	-	-	-	-	-	-	-	-	-	-
	38	01/07/10 - 01/28/10	< 6	< 6	< 14	< 6	< 12	< 7	< 12	< 10	< 6	< 8	< 29	< 10
02/04/10 - 02/24/10		< 5	< 4	< 6	< 3	< 9	< 4	< 8	< 9	< 4	< 4	< 26	< 8	
03/04/10 - 04/01/10 (2)		< 3	< 4	< 8	< 5	< 8	< 5	< 7	< 10	< 4	< 4	< 26	< 8	
04/08/10 - 04/29/10 (2)		< 4	< 4	< 8	< 4	< 8	< 4	< 7	< 11	< 3	< 4	< 24	< 7	
05/06/10 - 05/27/10 (2)		< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 8	< 1	< 1	< 13	< 4	
06/04/10 - 06/30/10 (2)		< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 8	< 2	< 2	< 14	< 5	
07/08/10 - 07/28/10 (2)		< 4	< 4	< 10	< 3	< 9	< 4	< 8	< 13	< 4	< 4	< 28	< 9	
08/05/10 - 08/26/10		< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 14	< 2	< 2	< 23	< 6	
09/02/10 - 09/29/10		< 4	< 4	< 10	< 4	< 8	< 5	< 9	< 13	< 4	< 5	< 27	< 10	
10/06/10 - 10/27/10		< 2	< 2	< 6	< 2	< 4	< 3	< 4	< 11	< 2	< 2	< 20	< 7	
11/03/10 - 11/23/10		< 6	< 5	< 11	< 5	< 10	< 6	< 9	< 12	< 4	< 5	< 30	< 10	
12/02/10 - 12/28/10		< 5	< 5	< 12	< 5	< 11	< 6	< 10	< 10	< 4	< 5	< 31	< 10	
MEAN		-	-	-	-	-	-	-	-	-	-	-	-	-

(2) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-II.3

CONCENTRATIONS OF GAMMA EMITTERS IN DRINKING WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
39	01/07/10 - 01/27/10	< 6	< 6	< 12	< 7	< 13	< 7	< 12	< 12	< 6	< 5	< 25	< 10
	02/04/10 - 02/23/10	< 4	< 4	< 9	< 4	< 9	< 5	< 7	< 9	< 4	< 5	< 25	< 7
	03/04/10 - 04/01/10 (2)	< 4	< 5	< 10	< 5	< 9	< 5	< 8	< 12	< 4	< 5	< 28	< 10
	04/08/10 - 04/29/10 (2)	< 3	< 3	< 6	< 3	< 6	< 3	< 6	< 9	< 3	< 3	< 21	< 6
	05/06/10 - 05/27/10 (2)	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 8	< 1	< 1	< 13	< 4
	06/04/10 - 07/01/10 (2)	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 7	< 2	< 2	< 14	< 4
	07/08/10 - 07/29/10 (2)	< 3	< 4	< 8	< 3	< 6	< 3	< 6	< 10	< 3	< 4	< 21	< 7
	08/05/10 - 08/26/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 21	< 7
	09/02/10 - 09/29/10	< 4	< 5	< 9	< 4	< 9	< 5	< 8	< 13	< 4	< 4	< 30	< 9
	10/06/10 - 10/28/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 9	< 2	< 2	< 16	< 5
	11/03/10 - 11/23/10	< 5	< 6	< 12	< 5	< 10	< 7	< 12	< 15	< 5	< 6	< 35	< 12
	12/02/10 - 12/21/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 11	< 2	< 3	< 22	< 6
	MEAN		-	-	-	-	-	-	-	-	-	-	-
114	01/07/10 - 01/28/10 (1)	< 6	< 7	< 13	< 5	< 15	< 7	< 10	< 11	< 6	< 8	< 31	< 10
	02/04/10 - 02/23/10	< 5	< 5	< 8	< 5	< 10	< 5	< 8	< 10	< 4	< 4	< 24	< 7
	03/04/10 - 04/01/10 (2)	< 4	< 4	< 8	< 4	< 8	< 4	< 8	< 11	< 4	< 5	< 29	< 8
	04/08/10 - 04/29/10 (2)	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 8	< 3	< 3	< 17	< 7
	05/06/10 - 05/27/10 (2)	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 7	< 1	< 1	< 11	< 3
	06/04/10 - 07/01/10 (2)	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 7	< 2	< 2	< 15	< 5
	07/08/10 - 07/29/10 (2)	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 6	< 1	< 1	< 10	< 4
	08/05/10 - 08/26/10	< 2	< 2	< 4	< 2	< 3	< 2	< 4	< 12	< 2	< 2	< 20	< 6
	09/02/10 - 09/29/10	< 4	< 4	< 7	< 3	< 9	< 4	< 7	< 11	< 3	< 4	< 26	< 9
	10/06/10 - 10/28/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 22	< 7
	11/03/10 - 11/23/10	< 5	< 6	< 13	< 7	< 11	< 7	< 11	< 12	< 5	< 6	< 29	< 13
	12/02/10 - 12/28/10	< 6	< 5	< 12	< 6	< 11	< 4	< 8	< 14	< 5	< 6	< 29	< 10
	MEAN		-	-	-	-	-	-	-	-	-	-	-

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

(2) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-III.1**CONCENTRATIONS OF TRITIUM IN GROUNDWATER SAMPLES COLLECTED
IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010**RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	MW-24-3A	W-3C
03/02/10 - 03/02/10	< 168	< 171
04/27/10 - 04/27/10	< 170	< 169
09/08/10 - 09/08/10	< 168	< 169
11/04/10 - 11/04/10	< 152	< 158
MEAN	-	-

TABLE C-III.2

**CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF
OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-24-3A	03/02/10 - 03/02/10	< 4	< 4	< 9	< 5	< 10	< 5	< 11	< 13	< 4	< 5	< 30	< 10
	04/27/10 - 04/27/10	< 3	< 4	< 7	< 4	< 7	< 4	< 7	< 15	< 3	< 4	< 31	< 9
	09/08/10 - 09/08/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 22	< 6
	11/04/10 - 11/04/10	< 5	< 6	< 13	< 5	< 11	< 6	< 10	< 15	< 5	< 5	< 35	< 12
	MEAN	-	-	-	-	-	-	-	-	-	-	-	-
W-3C	03/02/10 - 03/02/10	< 5	< 5	< 9	< 5	< 9	< 5	< 9	< 14	< 5	< 6	< 28	< 11
	04/27/10 - 04/27/10	< 3	< 4	< 9	< 5	< 9	< 5	< 8	< 15	< 4	< 4	< 29	< 8
	09/08/10 - 09/08/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 10	< 2	< 2	< 17	< 6
	11/04/10 - 11/04/10	< 4	< 5	< 12	< 5	< 11	< 6	< 9	< 14	< 5	< 5	< 31	< 11
	MEAN	-	-	-	-	-	-	-	-	-	-	-	-

TABLE C-IV.1

**CONCENTRATIONS OF GAMMA EMITTERS IN PREDATOR AND BOTTOM FEEDER (FISH)
SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010**

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
33	PREDATOR								
	04/13/10	5670 \pm 1480	< 91	< 103	< 226	< 98	< 230	< 95	< 89
	04/15/10	4160 \pm 663	< 68	< 80	< 161	< 76	< 159	< 76	< 67
	10/12/10	4200 \pm 889	< 43	< 52	< 109	< 64	< 105	< 50	< 62
	10/12/10	3260 \pm 779	< 49	< 32	< 108	< 40	< 88	< 37	< 40
	MEAN	4323 \pm 1995	-	-	-	-	-	-	-
33	BOTTOM FEEDER								
	10/12/10	3880 \pm 837	< 60	< 43	< 109	< 62	< 115	< 51	< 48
	MEAN	3880 \pm 0	-	-	-	-	-	-	-
93	PREDATOR								
	04/14/10	3690 \pm 814	< 64	< 77	< 159	< 51	< 136	< 71	< 71
	04/14/10	4400 \pm 673	< 38	< 43	< 89	< 35	< 62	< 32	< 40
	04/14/10	3640 \pm 847	< 65	< 61	< 170	< 65	< 168	< 66	< 68
	10/12/10	4560 \pm 700	< 18	< 20	< 42	< 18	< 54	< 22	< 22
	10/12/10	4100 \pm 1040	< 62	< 47	< 142	< 69	< 126	< 55	< 65
	10/31/10	4210 \pm 994	< 56	< 44	< 135	< 69	< 108	< 55	< 61
	MEAN	4100 \pm 745	-	-	-	-	-	-	-
93	BOTTOM FEEDER								
	04/14/10	4110 \pm 644	< 47	< 47	< 116	< 50	< 110	< 51	< 47
	10/13/10	4520 \pm 1350	< 72	< 58	< 140	< 56	< 159	< 64	< 74
	10/13/10	4560 \pm 1240	< 55	< 53	< 131	< 70	< 116	< 65	< 62
	10/31/10	3670 \pm 697	< 35	< 36	< 87	< 46	< 86	< 34	< 39
	MEAN	4215 \pm 833	-	-	-	-	-	-	-

TABLE C-IV.1 CONCENTRATIONS OF GAMMA EMITTERS IN PREDATOR AND BOTTOM FEEDER (FISH) SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/KG WET ± 2 SIGMA

STC COLLECTION PERIOD	K-40	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Cs-134	Cs-137
94 PREDATOR								
04/13/10	2050 ± 668	< 45	< 42	< 121	< 34	< 93	< 46	< 50
04/13/10	3800 ± 748	< 44	< 49	< 126	< 44	< 88	< 39	< 45
04/13/10	5690 ± 875	< 62	< 49	< 133	< 50	< 125	< 53	< 66
10/12/10	5060 ± 920	< 45	< 41	< 101	< 45	< 88	< 33	< 36
10/12/10	4440 ± 1020	< 65	< 71	< 170	< 63	< 144	< 75	< 63
10/12/10	4840 ± 1160	< 69	< 79	< 132	< 62	< 154	< 71	< 70
MEAN	4313.3 ± 2551	-	-	-	-	-	-	-
94 BOTTOM FEEDER								
04/13/10	3130 ± 671	< 37	< 45	< 102	< 34	< 92	< 38	< 40
10/12/10	4070 ± 821	< 44	< 44	< 76	< 56	< 85	< 39	< 43
MEAN	3600 ± 1329	-	-	-	-	-	-	-

TABLE C-IV.2 CONCENTRATIONS OF GAMMA EMITTERS IN CLAM AND CRAB SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/KG WET ± 2 SIGMA

STC	COLLECTION PERIOD	K-40	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Cs-134	Cs-137
23	CLAMS								
	04/13/10	1040 ± 449	< 27	< 33	< 77	< 32	< 61	< 34	< 31
	10/11/10	730 ± 557	< 54	< 55	< 134	< 47	< 103	< 49	< 50
	MEAN	885 ± 438	-	-	-	-	-	-	-
24	CLAMS								
	04/13/10	1100 ± 524	< 35	< 37	< 81	< 40	< 69	< 36	< 31
	10/11/10	1500 ± 673	< 63	< 49	< 77	< 57	< 137	< 48	< 51
	MEAN	1300 ± 566	-	-	-	-	-	-	-
33	CRABS								
	10/12/10	2520 ± 593	< 40	< 46	< 72	< 36	< 83	< 34	< 42
	MEAN	-	-	-	-	-	-	-	-
93	CRABS								
	10/13/10 (1)	2410 ± 697	< 42	< 55	< 85	< 37	< 90	< 36	< 51
	MEAN	-	-	-	-	-	-	-	-
94	CLAMS								
	04/13/10	1340 ± 571	< 45	< 46	< 106	< 39	< 79	< 38	< 43
	10/12/10	1750 ± 598	< 54	< 52	< 98	< 54	< 91	< 53	< 59
	MEAN	1545 ± 580	-	-	-	-	-	-	-

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

TABLE C-V.1 CONCENTRATIONS OF GAMMA EMITTERS IN SEDIMENT SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/KG DRY ± 2 SIGMA

STC	COLLECTION PERIOD	Be-7	K-40	Mn-54	Co-58	Co-60	Cs-134	Cs-137
23	04/13/10	< 270	776 ± 266	< 21	< 29	< 19	< 23	< 25
	10/11/10	< 382	2650 ± 623	< 39	< 41	< 37	< 38	< 42
	MEAN	-	1713 ± 2650	-	-	-	-	-
24	04/13/10	< 340	567 ± 303	< 26	< 32	< 16	< 24	< 25
	10/11/10	< 942	6100 ± 1110	< 90	< 102	< 102	< 120	< 99
	MEAN	-	3334 ± 7825	-	-	-	-	-
33	04/13/10	< 542	5700 ± 791	< 45	< 56	< 45	< 38	222 ± 60
	10/11/10	< 471	596 ± 473	< 40	< 55	< 41	< 34	< 39
	MEAN	-	3148 ± 7218	-	-	-	-	-
94	04/13/10	805 ± 650	7190 ± 1010	< 61	< 77	< 63	< 50	< 65
	10/12/10	< 580	15100 ± 1600	< 65	< 69	< 86	< 58	< 77
	MEAN	-	11145 ± 11186	-	-	-	-	-

TABLE C-VI.1 CONCENTRATIONS OF GROSS BETA IN AIR PARTICULATE SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

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

COLLECTION PERIOD	GROUP I			GROUP II			GROUP III	
	20	66	111	71	72	73	3	C
12/29/09 - 01/06/10	15 ± 4	11 ± 4	14 ± 4	10 ± 4	13 ± 4	12 ± 4	19 ± 4	18 ± 5
01/06/10 - 01/13/10	17 ± 4	20 ± 4	16 ± 4	18 ± 4	19 ± 4	16 ± 4	23 ± 4	20 ± 4
01/13/10 - 01/20/10	25 ± 5	18 ± 4	23 ± 5	10 ± 4	22 ± 5	25 ± 5	23 ± 5	26 ± 5
01/20/10 - 01/27/10	15 ± 5	20 ± 5	15 ± 5	14 ± 5	12 ± 5	12 ± 5	11 ± 5	21 ± 5
01/27/10 - 02/03/10	18 ± 5	12 ± 5	20 ± 5	11 ± 5	18 ± 5	18 ± 5	17 ± 5	17 ± 5
02/03/10 - 02/09/10	18 ± 5	11 ± 5	(1) 16 ± 5	12 ± 5	15 ± 5	(1) 14 ± 5	13 ± 5	17 ± (1)
02/09/10 - 02/17/10	8 ± 4	< 6	7 ± 4	8 ± 4	8 ± 4	6 ± 4	11 ± 4	11 ± 4
02/17/10 - 02/24/10	6 ± 4	12 ± 5	6 ± 4	8 ± 4	8 ± 4	6 ± 4	10 ± 4	7 ± 4
02/24/10 - 03/02/10	< 7	< 8	< 7	< 7	< 8	< 8	< 8	< 8
03/02/10 - 03/10/10	17 ± 4	19 ± 4	20 ± 4	21 ± 4	18 ± 4	21 ± 4	16 ± 4	18 ± 4
03/10/10 - 03/17/10	16 ± 5	12 ± 5	15 ± 5	8 ± 5	14 ± 5	< 7	7 ± 5	14 ± 5
03/17/10 - 03/24/10	14 ± 5	10 ± 5	(1) 9 ± 4	11 ± 5	(1) 18 ± 5	12 ± 5	10 ± 4	19 ± 5
03/24/10 - 03/31/10	13 ± 5	12 ± 5	12 ± 5	10 ± 5	13 ± 5	13 ± 5	9 ± 4	9 ± 4
03/31/10 - 04/07/10	9 ± 4	12 ± 4	8 ± 4	14 ± 4	10 ± 4	< 7	7 ± 4	7 ± 4
04/07/10 - 04/15/10	14 ± 4	13 ± 4	16 ± 5	12 ± 4	12 ± 4	9 ± 4	13 ± 4	14 ± 4
04/15/10 - 04/21/10	14 ± 5	13 ± 5	15 ± 5	17 ± 6	16 ± 6	13 ± 5	11 ± 5	12 ± 5
04/21/10 - 04/28/10	13 ± 5	12 ± 5	17 ± 5	12 ± 5	18 ± 5	12 ± 5	17 ± 5	17 ± 5
04/28/10 - 05/05/10	11 ± 5	13 ± 5	14 ± 5	16 ± 5	14 ± 5	19 ± 5	11 ± 4	12 ± 5
05/05/10 - 05/12/10	< 6	< 6	9 ± 4	16 ± 5	7 ± 4	< 6	7 ± 4	< 6
05/12/10 - 05/19/10	8 ± 5	9 ± 5	7 ± 5	11 ± 5	< 7	9 ± 5	9 ± 5	8 ± 5
05/19/10 - 05/26/10	11 ± 4	14 ± 5	9 ± 4	13 ± 5	8 ± 4	13 ± 5	11 ± 4	10 ± 4
05/26/10 - 06/02/10	< 7	13 ± 5	8 ± 4	14 ± 5	10 ± 5	11 ± 5	18 ± 5	8 ± 4
06/02/10 - 06/09/10	8 ± 5	11 ± 5	< 7	12 ± 5	< 7	12 ± 5	< 7	10 ± 5
06/09/10 - 06/16/10	17 ± 5	14 ± 5	15 ± 5	17 ± 5	14 ± 5	13 ± 5	13 ± 5	16 ± 5
06/16/10 - 06/23/10	14 ± 5	17 ± 5	12 ± 5	12 ± 5	11 ± 5	12 ± 5	11 ± 5	12 ± 5
06/23/10 - 06/30/10	19 ± 4	9 ± 4	24 ± 5	21 ± 4	12 ± 4	22 ± 4	21 ± 4	23 ± 4
06/30/10 - 07/07/10	18 ± 5	17 ± 5	18 ± 5	20 ± 5	14 ± 5	22 ± 5	17 ± 5	18 ± 5
07/07/10 - 07/14/10	7 ± 5	16 ± 5	15 ± 5	13 ± 5	13 ± 5	17 ± 5	13 ± 5	14 ± 5
07/14/10 - 07/21/10	17 ± 5	17 ± 5	19 ± 5	19 ± 5	14 ± 5	18 ± 5	22 ± 5	19 ± 5
07/21/10 - 07/28/10	18 ± 5	17 ± 5	13 ± 5	20 ± 5	18 ± 5	17 ± 5	18 ± 5	18 ± 5
07/28/10 - 08/04/10	12 ± 5	15 ± 5	15 ± 5	13 ± 5	13 ± 5	15 ± 5	13 ± 5	20 ± 5
08/04/10 - 08/11/10	19 ± 5	23 ± 6	20 ± 6	19 ± 6	17 ± 5	25 ± 6	21 ± 6	22 ± 6
08/11/10 - 08/18/10	11 ± 5	16 ± 5	12 ± 5	11 ± 5	10 ± 5	14 ± 5	8 ± 5	16 ± 5
08/18/10 - 08/25/10	18 ± 4	22 ± 5	20 ± 5	19 ± 4	22 ± 5	23 ± 5	20 ± 4	25 ± 5
08/25/10 - 09/01/10	26 ± 5	26 ± 5	28 ± 5	27 ± 5	20 ± 4	23 ± 4	28 ± 5	23 ± 4
09/01/10 - 09/08/10	25 ± 6	25 ± 6	21 ± 6	20 ± 6	15 ± 5	28 ± 6	24 ± 6	25 ± 6
09/08/10 - 09/15/10	15 ± 5	13 ± 5	14 ± 5	12 ± 5	< 7	9 ± 5	9 ± 5	8 ± 5
09/15/10 - 09/22/10	24 ± 5	21 ± 4	22 ± 5	30 ± 5	22 ± 5	22 ± 5	24 ± 5	23 ± 5
09/22/10 - 09/29/10	24 ± 5	< 6	20 ± 4	20 ± 4	24 ± 5	20 ± 4	22 ± 4	18 ± 4
09/29/10 - 10/06/10	< 7	< 7	< 7	< 7	< 7	< 7	< 7	< 7
10/06/10 - 10/13/10	26 ± 5	25 ± 5	27 ± 5	22 ± 5	18 ± 4	25 ± 5	27 ± 5	22 ± 4
10/13/10 - 10/20/10	23 ± 5	23 ± 5	17 ± 4	19 ± 4	19 ± 4	18 ± 4	22 ± 5	25 ± 5
10/20/10 - 10/27/10	13 ± 4	11 ± 4	9 ± 4	9 ± 4	9 ± 4	11 ± 4	13 ± 4	14 ± 4
10/27/10 - 11/03/10	< 6	< 6	(1) < 6	< 6	< 6	< 6	9 ± 4	12 ± 4
11/03/10 - 11/10/10	12 ± 4	8 ± 4	9 ± 4	10 ± 4	6 ± 4	8 ± 4	6 ± 4	8 ± 4
11/10/10 - 11/17/10	18 ± 5	17 ± 5	17 ± 5	14 ± 5	13 ± 5	16 ± 5	7 ± 4	15 ± 5
11/17/10 - 11/23/10	25 ± 6	25 ± 6	23 ± 6	29 ± 6	19 ± 6	25 ± 6	22 ± 6	23 ± 6
11/23/10 - 11/30/10	12 ± 4	12 ± 4	13 ± 4	12 ± 4	12 ± 4	11 ± 4	14 ± 4	15 ± 4
11/30/10 - 12/08/10	12 ± 3	12 ± 4	11 ± 3	(1)	8 ± 3	8 ± 3	11 ± 3	13 ± 3
12/08/10 - 12/15/10	9 ± 5	11 ± 5	9 ± 5	13 ± 5	12 ± 5	13 ± 5	9 ± 5	11 ± 5
12/15/10 - 12/21/10	22 ± 6	18 ± 6	21 ± 6	18 ± 6	15 ± 6	20 ± 6	20 ± 6	23 ± 6
12/21/10 - 12/28/10	(1) < 9	< 9	7 ± 5	< 7	< 7	< 7	(1)	8 ± 5
MEAN	16 ± 11	15 ± 10	15 ± 11	15 ± 11	14 ± 9	16 ± 11	15 ± 12	16 ± 11

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES
 (1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-VI.2

MONTHLY AND YEARLY MEAN VALUES OF GROSS BETA CONCENTRATIONS IN AIR PARTICULATE SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

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

GROUP I - ON-SITE LOCATIONS				GROUP II - INTERMEDIATE DISTANCE LOCATIONS				GROUP III - CONTROL LOCATIONS			
COLLECTION PERIOD	MIN	MAX	MEAN ± 2SD	COLLECTION PERIOD	MIN	MAX	MEAN ± 2SD	COLLECTION PERIOD	MIN	MAX	MEAN ± 2SD
12/29/09 - 02/03/10	11	25	17 ± 8	12/29/09 - 02/03/10	10	25	15 ± 9	12/29/09 - 02/03/10	11	26	19 ± 8
02/03/10 - 03/02/10	6	18	10 ± 9	02/03/10 - 03/02/10	6	15	9 ± 6	02/03/10 - 03/02/10	7	17	11 ± 6
03/02/10 - 03/31/10	9	20	14 ± 7	03/02/10 - 03/31/10	8	21	15 ± 9	03/02/10 - 03/31/10	7	19	13 ± 9
03/31/10 - 04/28/10	8	17	13 ± 5	03/31/10 - 04/28/10	9	18	13 ± 5	03/31/10 - 04/28/10	7	17	12 ± 8
04/28/10 - 06/02/10	7	14	11 ± 5	04/28/10 - 06/02/10	7	19	12 ± 7	04/28/10 - 06/02/10	7	18	10 ± 7
06/02/10 - 06/30/10	8	24	14 ± 9	06/02/10 - 06/30/10	11	22	14 ± 8	06/02/10 - 06/30/10	10	23	15 ± 10
06/30/10 - 07/28/10	7	19	16 ± 6	06/30/10 - 07/28/10	13	22	17 ± 6	06/30/10 - 07/28/10	13	22	17 ± 5
07/28/10 - 09/01/10	11	28	19 ± 11	07/28/10 - 09/01/10	10	27	18 ± 10	07/28/10 - 09/01/10	8	28	20 ± 12
09/01/10 - 09/29/10	13	25	20 ± 9	09/01/10 - 09/29/10	9	30	20 ± 13	09/01/10 - 09/29/10	8	25	19 ± 14
10/06/10 - 10/27/10	9	27	19 ± 14	10/06/10 - 10/27/10	9	25	17 ± 12	10/06/10 - 11/03/10	9	27	18 ± 14
11/03/10 - 11/30/10	8	25	16 ± 12	11/03/10 - 11/30/10	6	29	15 ± 13	11/03/10 - 11/30/10	6	23	14 ± 13
11/30/10 - 12/28/10	7	22	13 ± 10	11/30/10 - 12/21/10	8	20	13 ± 9	11/30/10 - 12/28/10	8	23	14 ± 11
12/29/09 - 12/28/10	6	28	15 ± 10	12/29/09 - 12/28/10	6	30	15 ± 10	12/29/09 - 12/28/10	6	28	15 ± 12

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* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES

TABLE C-VI.3

**CONCENTRATIONS OF STRONTIUM IN AIR PARTICULATE SAMPLES
COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010**

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

STC	COLLECTION PERIOD	SR-89	SR-90	STC	COLLECTION PERIOD	SR-89	SR-90
3	12/29/09 - 03/31/10	< 7	< 1	72	12/29/09 - 03/31/10	< 6	< 1
	03/31/10 - 06/30/10	< 7	< 6		03/31/10 - 06/30/10	< 7	< 4
	06/30/10 - 09/29/10	< 8	< 3		06/30/10 - 09/29/10	< 8	< 2
	09/29/10 - 12/21/10	< 3	< 3		09/29/10 - 12/28/10	< 4	< 2
	MEAN	-	-		MEAN	-	-
20	12/29/09 - 03/31/10	< 7	< 1	73	12/29/09 - 03/31/10	< 6	< 1
	03/31/10 - 06/30/10	< 8	< 4		03/31/10 - 06/30/10	< 8	< 6
	06/30/10 - 09/29/10	< 9	< 4		06/30/10 - 09/29/10	< 9	< 3
	09/29/10 - 12/21/10	< 3	< 1		09/29/10 - 12/28/10	< 3	< 1
	MEAN	-	-		MEAN	-	-
66	12/29/09 - 03/31/10	< 6	< 1	111	12/29/09 - 03/31/10	< 7	< 1
	03/31/10 - 06/30/10	< 6	< 3		03/31/10 - 06/30/10	< 9	< 8
	06/30/10 - 09/29/10	< 8	< 3		06/30/10 - 09/29/10	< 8	< 3
	09/29/10 - 12/28/10	< 3	< 1		09/29/10 - 12/28/10	< 3	< 1
	MEAN	-	-		MEAN	-	-
71	12/29/09 - 03/31/10	< 6	< 1	C	12/29/09 - 03/31/10	< 7	< 1
	03/31/10 - 06/30/10	< 7	< 4		03/31/10 - 06/30/10	< 8	< 4
	06/30/10 - 09/29/10	< 7	< 2		06/30/10 - 09/29/10	< 10	< 3
	09/29/10 - 12/28/10	< 3	< 1		09/29/10 - 12/28/10	< 3	< 1
	MEAN	-	-		MEAN	-	-

TABLE C-VI.4

**CONCENTRATIONS OF GAMMA EMITTERS IN AIR PARTICULATE SAMPLES
COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010**

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
3	12/29/09 - 03/31/10	80 \pm 26	< 3	< 5	< 4	< 4	< 4
	03/31/10 - 06/30/10	75 \pm 28	< 5	< 4	< 4	< 4	< 4
	06/30/10 - 09/29/10	82 \pm 27	< 2	< 4	< 3	< 3	< 3
	09/29/10 - 12/21/10	84 \pm 28	< 3	< 5	< 5	< 4	< 3
	MEAN	80 \pm 8	-	-	-	-	-
20	12/29/09 - 03/31/10	78 \pm 27	< 4	< 5	< 4	< 4	< 4
	03/31/10 - 06/30/10	86 \pm 48	< 5	< 6	< 4	< 5	< 5
	06/30/10 - 09/29/10	52 \pm 31	< 3	< 3	< 3	< 3	< 3
	09/29/10 - 12/21/10	62 \pm 24	< 3	< 3	< 3	< 3	< 2
	MEAN	69 \pm 31	-	-	-	-	-
66	12/29/09 - 03/31/10	77 \pm 27	< 4	< 5	< 4	< 3	< 3
	03/31/10 - 06/30/10	51 \pm 27	< 2	< 5	< 4	< 3	< 3
	06/30/10 - 09/29/10	65 \pm 26	< 3	< 3	< 2	< 2	< 2
	09/29/10 - 12/28/10	63 \pm 21	< 2	< 3	< 3	< 3	< 3
	MEAN	64 \pm 22	-	-	-	-	-
71	12/29/09 - 03/31/10	63 \pm 21	< 3	< 3	< 3	< 3	< 2
	03/31/10 - 06/30/10	77 \pm 36	< 4	< 4	< 3	< 4	< 4
	06/30/10 - 09/29/10	60 \pm 20	< 3	< 3	< 2	< 3	< 3
	09/29/10 - 12/28/10	66 \pm 23	< 3	< 4	< 3	< 3	< 2
	MEAN	67 \pm 14	-	-	-	-	-
72	12/29/09 - 03/31/10	97 \pm 25	< 3	< 3	< 3	< 3	< 2
	03/31/10 - 06/30/10	81 \pm 30	< 3	< 3	< 3	< 3	< 4
	06/30/10 - 09/29/10	79 \pm 31	< 3	< 3	< 3	< 3	< 3
	09/29/10 - 12/28/10	58 \pm 21	< 3	< 2	< 3	< 3	< 3
	MEAN	79 \pm 32	-	-	-	-	-
73	12/29/09 - 03/31/10	87 \pm 37	< 3	< 3	< 3	< 3	< 2
	03/31/10 - 06/30/10	69 \pm 34	< 4	< 5	< 4	< 4	< 4
	06/30/10 - 09/29/10	75 \pm 24	< 3	< 4	< 3	< 3	< 3
	09/29/10 - 12/28/10	54 \pm 30	< 3	< 4	< 2	< 3	< 3
	MEAN	71 \pm 28	-	-	-	-	-
111	12/29/09 - 03/31/10	61 \pm 22	< 4	< 5	< 4	< 3	< 3
	03/31/10 - 06/30/10	83 \pm 37	< 5	< 6	< 4	< 4	< 5
	06/30/10 - 09/29/10	67 \pm 20	< 2	< 3	< 3	< 2	< 2
	09/29/10 - 12/28/10	69 \pm 37	< 4	< 4	< 4	< 3	< 3
	MEAN	70 \pm 19	-	-	-	-	-
C	12/29/09 - 03/31/10	58 \pm 30	< 3	< 4	< 3	< 3	< 3
	03/31/10 - 06/30/10	77 \pm 31	< 2	< 4	< 4	< 3	< 3
	06/30/10 - 09/29/10	56 \pm 21	< 2	< 4	< 2	< 2	< 2
	09/29/10 - 12/28/10	48 \pm 16	< 2	< 3	< 4	< 3	< 2
	MEAN	60 \pm 24	-	-	-	-	-

TABLE C-VII.1 CONCENTRATIONS OF I-131 IN AIR IODINE SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

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

COLLECTION PERIOD	GROUP I			GROUP II			GROUP III	
	20	66	111	71	72	73	3	C
12/29/09 - 01/06/10	< 46	< 40	< 39	< 39	< 48	< 40	< 48	< 49
01/06/10 - 01/13/10	< 46	< 61	< 47	< 60	< 48	< 62	< 26	< 53
01/13/10 - 01/20/10	< 66	< 69	< 67	< 38	< 26	< 70	< 59	< 61
01/20/10 - 01/27/10	< 29	< 17	< 30	< 30	< 45	< 17	< 44	< 20
01/27/10 - 02/03/10	< 35	< 32	< 31	< 31	< 37	< 32	< 37	< 28
02/03/10 - 02/09/10	< 42	< 51 (1)	< 49	< 50	< 44 (1)	< 51	< 44	< 48 (1)
02/09/10 - 02/17/10	< 28	< 30	< 29	< 30	< 29	< 30	< 29	< 39
02/17/10 - 02/24/10	< 39	< 30	< 29	< 29	< 40	< 30	< 40	< 33
02/24/10 - 03/02/10	< 35	< 55	< 54	< 54	< 37	< 56	< 37	< 39
03/02/10 - 03/10/10	< 9	< 9	< 9	< 4	< 7	< 9	< 7	< 7
03/10/10 - 03/17/10	< 67	< 55	< 53	< 53	< 69	< 55	< 68	< 68
03/17/10 - 03/24/10	< 23	< 24 (1)	< 24	< 24 (1)	< 24	< 12	< 23	< 23
03/24/10 - 03/31/10	< 38	< 32	< 31	< 32	< 39	< 31	< 38	< 38
03/31/10 - 04/07/10	< 27	< 12	< 28	< 28	< 30	< 28	< 29	< 29
04/07/10 - 04/15/10	< 31	< 22	< 22	< 22	< 31	< 22	< 30	< 29
04/15/10 - 04/21/10	< 36	< 37	< 20	< 37	< 52	< 37	< 52	< 53
04/21/10 - 04/28/10	< 30	< 36	< 36	< 36	< 31	< 36	< 30	< 30
04/28/10 - 05/05/10	< 16	< 38	< 38	< 38	< 33	< 38	< 32	< 32
05/05/10 - 05/12/10	< 27	< 14	< 14	< 14	< 27	< 14	< 27	< 27
05/12/10 - 05/19/10	< 34	< 27	< 26	< 26	< 15	< 26	< 34	< 34
05/19/10 - 05/26/10	< 26	< 27	< 26	< 16	< 23	< 26	< 41	< 41
05/26/10 - 06/02/10	< 37	< 36	< 36	< 36	< 38	< 36	< 16	< 37
06/02/10 - 06/09/10	< 47	< 43	< 43	< 43	< 48	< 43	< 47	< 46
06/09/10 - 06/16/10	< 35	< 36	< 36	< 20	< 30	< 36	< 29	< 29
06/16/10 - 06/23/10	< 51	< 42	< 42	< 42	< 52	< 42	< 51	< 51
06/23/10 - 06/30/10	< 36	< 30	< 30	< 30	< 37	< 30	< 36	< 33
06/30/10 - 07/07/10	< 35	< 36	< 36	< 20	< 44	< 36	< 43	< 42
07/07/10 - 07/14/10	< 31	< 33	< 33	< 33	< 32	< 33	< 31	< 33
07/14/10 - 07/21/10	< 28	< 28	< 28	< 16	< 42	< 28	< 39	< 38
07/21/10 - 07/28/10	< 27	< 28	< 28	< 17	< 22	< 28	< 22	< 23
07/28/10 - 08/04/10	< 38	< 38	< 38	< 21	< 33	< 38	< 32	< 32
08/04/10 - 08/11/10	< 27	< 24	< 24	< 24	< 27	< 24	< 27	< 27
08/11/10 - 08/18/10	< 38	< 38	< 38	< 38	< 39	< 38	< 37	< 36
08/18/10 - 08/25/10	< 46	< 29	< 47	< 47	< 28	< 47	< 28	< 28
08/25/10 - 09/01/10	< 41	< 61	< 60	< 60	< 42	< 60	< 41	< 41
09/01/10 - 09/08/10	< 39	< 33	< 18	< 32	< 40	< 32	< 39	< 39
09/08/10 - 09/15/10	< 55	< 48	< 47	< 47	< 56	< 47	< 55	< 30
09/15/10 - 09/22/10	< 16	< 30	< 30	< 30	< 35	< 30	< 35	< 35
09/22/10 - 09/29/10	< 36	< 36	< 36	< 20	< 39	< 36	< 37	< 37
09/29/10 - 10/06/10	< 68	< 45	< 69	< 45	< 25	< 45	< 69	< 47
10/06/10 - 10/13/10	< 46	< 36	< 36	< 36	< 47	< 35	< 44	< 48
10/13/10 - 10/20/10	< 45	< 59	< 46	< 59	< 46	< 59	< 26	< 48
10/20/10 - 10/27/10	< 41	< 67	< 67	< 67	< 42	< 67	< 41	< 41
10/27/10 - 11/03/10	< 53	< 54	(1)	< 54	< 66	< 54	< 65	< 29
11/03/10 - 11/10/10	< 48	< 52	< 52	< 51	< 49	< 51	< 47	< 47
11/10/10 - 11/17/10	< 52	< 58	< 53	< 58	< 53	< 58	< 54	< 53
11/17/10 - 11/23/10	< 69	< 68	< 68	< 67	< 69	< 67	< 68	< 68
11/23/10 - 11/30/10	< 42	< 43	< 43	< 43	< 43	< 43	< 42	< 65
11/30/10 - 12/08/10	< 29	< 30	< 30	(1)	< 30	< 16	< 17	< 39
12/08/10 - 12/15/10	< 68	< 70	< 70	< 38	< 51	< 69	< 50	< 50
12/15/10 - 12/21/10	< 68	< 69	< 68	< 68	< 70	< 68	< 69	< 68
12/21/10 - 12/28/10	< 33	< 59	< 44	< 46	< 45	< 28	< 32	< 40
12/28/10 - 01/05/11	(1)	< 36	< 37	< 36	< 62	< 36	(1)	< 62
MEAN	-	-	-	-	-	-	-	-

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-VIII.1

**CONCENTRATIONS OF STRONTIUM AND GAMMA EMITTERS IN VEGETATION SAMPLES
COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010**

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

STC	COLLECTION PERIOD		SR-89	SR-90	Be-7	K-40	I-131	Cs-134	Cs-137	Ba-140	La-140
35	06/29/10	Cabbage	< 15	< 3.5	< 243	6960 \pm 768	< 31	< 27	< 27	< 124	< 38
	06/29/10	Collards (1)	-	-	-	-	-	-	-	-	-
	06/29/10	Kale	< 15	14.1 \pm 3.2	< 264	9880 \pm 896	< 32	< 29	< 37	< 128	< 30
	07/27/10	Cabbage	< 17	< 2.4	133 \pm 41	7410 \pm 191	< 26	< 10	< 9	< 60	< 17
	07/27/10	Collards	< 21	< 3.4	115 \pm 57	7190 \pm 212	< 20	< 7	< 8	< 47	< 13
	07/27/10	Kale	< 20	< 3.8	< 177	9030 \pm 516	< 46	< 16	< 21	< 117	< 31
	08/23/10	Cabbage	< 12	4.7 \pm 2.0	178 \pm 138	3790 \pm 435	< 31	< 19	< 21	< 80	< 20
	08/23/10	Collards	< 12	< 3.5	< 218	5180 \pm 413	< 44	< 24	< 23	< 118	< 25
	08/23/10	Kale	< 13	< 3.0	< 195	4000 \pm 503	< 39	< 18	< 25	< 97	< 23
	09/15/10	Cabbage	< 14	4.2 \pm 2.5	154 \pm 72	4690 \pm 191	< 44	< 4	< 5	< 61	< 14
	09/15/10	Collards	< 14	< 3.5	93 \pm 46	6690 \pm 159	< 60	< 5	< 6	< 83	< 19
	09/15/10	Kale	< 15	5.0 \pm 2.6	< 68	7820 \pm 247	< 50	< 5	< 6	< 75	< 18
	10/25/10	Cabbage	< 10	< 3.6	102 \pm 61	5750 \pm 230	< 30	< 9	< 10	< 66	< 18
	10/25/10	Collards	< 9	< 4.8	118 \pm 48	4880 \pm 177	< 23	< 7	< 8	< 50	< 15
	10/25/10	Kale	< 10	< 3.7	< 78	7160 \pm 248	< 26	< 8	< 9	< 60	< 18
	MEAN		-	7.0 \pm 9.5	128 \pm 60	6459 \pm 3651	-	-	-	-	-

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-VIII.1

CONCENTRATIONS OF STRONTIUM AND GAMMA EMITTERS IN VEGETATION SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/KG WET ± 2 SIGMA

STC	COLLECTION PERIOD		SR-89	SR-90	Be-7	K-40	I-131	Cs-134	Cs-137	Ba-140	La-140
36	06/29/10	Cabbage	< 16	< 3.6	< 209	3210 ± 578	< 33	< 20	< 29	< 80	< 24
	06/29/10	Collards	< 15	< 3.3	< 285	5970 ± 666	< 40	< 38	< 36	< 132	< 29
	06/29/10	Kale	< 15	5.1 ± 2.7	< 223	4260 ± 637	< 33	< 27	< 31	< 117	< 22
	07/27/10	Cabbage	< 17	6.3 ± 2.0	< 215	3030 ± 319	< 57	< 23	< 23	< 141	< 36
	07/27/10	Collards	< 20	3.4 ± 2.3	< 186	5380 ± 512	< 59	< 20	< 21	< 133	< 42
	07/27/10	Kale	< 17	5.8 ± 2.2	< 194	6320 ± 352	< 58	< 21	< 20	< 125	< 31
	08/23/10	Cabbage	< 14	< 3.4	< 162	2690 ± 449	< 38	< 19	< 23	< 119	< 32
	08/23/10	Collards	< 16	6.3 ± 3.3	250 ± 142	4260 ± 398	< 28	< 12	< 16	< 74	< 23
	08/23/10	Kale	< 14	< 4.0	441 ± 227	5460 ± 565	< 44	< 25	< 28	< 104	< 26
	09/15/10	Cabbage	< 15	3.5 ± 2.2	< 54	3190 ± 148	< 51	< 5	< 5	< 71	< 19
	09/15/10	Collards	< 14	7.1 ± 2.4	< 45	5990 ± 203	< 42	< 4	< 4	< 61	< 15
	09/15/10	Kale	< 14	< 4.8	< 193	5330 ± 504	< 58	< 23	< 23	< 138	< 36
	10/25/10	Cabbage	< 11	< 4.5	< 61	3000 ± 149	< 21	< 6	< 7	< 47	< 13
	10/25/10	Collards	< 10	< 3.6	182 ± 69	6470 ± 218	< 32	< 9	< 10	< 68	< 17
	10/25/10	Kale	< 12	< 3.4	367 ± 144	6250 ± 429	< 48	< 15	< 15	< 102	< 30
	MEAN		-	5.4 ± 2.9	310 ± 232	4437 ± 3715	-	-	-	-	-

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES

TABLE C-VIII.1

**CONCENTRATIONS OF STRONTIUM AND GAMMA EMITTERS IN VEGETATION SAMPLES
COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010**

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

STC	COLLECTION PERIOD		SR-89	SR-90	Be-7	K-40	I-131	Cs-134	Cs-137	Ba-140	La-140
66	06/29/10	Cabbage	< 19	< 3.7	< 365	3640 \pm 891	< 57	< 44	< 49	< 178	< 57
	06/29/10	Collards (1)	-	-	-	-	-	-	-	-	-
	06/29/10	Kale	< 16	< 4.2	< 354	4540 \pm 688	< 36	< 33	< 37	< 135	< 27
	07/27/10	Cabbage	< 20	< 2.6	< 83	3660 \pm 173	< 24	< 7	< 9	< 55	< 17
	07/27/10	Collards	< 20	< 3.0	< 73	3150 \pm 173	< 22	< 7	< 9	< 52	< 17
	07/27/10	Kale	< 18	< 3.1	< 98	3730 \pm 210	< 26	< 10	< 12	< 64	< 22
	08/23/10	Cabbage	< 13	< 3.8	< 199	3110 \pm 376	< 36	< 19	< 24	< 99	< 29
	08/23/10	Collards	< 12	< 3.4	310 \pm 227	3690 \pm 470	< 49	< 23	< 27	< 138	< 41
	08/23/10	Kale	< 15	3.7 \pm 2.3	< 288	3630 \pm 484	< 47	< 23	< 31	< 124	< 38
	09/15/10	Cabbage	< 15	< 3.2	< 445	2570 \pm 652	< 32	< 33	< 42	< 571	< 171
	09/15/10	Collards	< 17	5.3 \pm 2.6	< 513	3990 \pm 758	< 58	< 45	< 51	< 786	< 295
	09/15/10	Kale	< 12	< 2.6	174 \pm 66	4450 \pm 166	< 38	< 4	< 5	< 60	< 16
	10/25/10	Cabbage (1)	-	-	-	-	-	-	-	-	-
	10/25/10	Collards (1)	-	-	-	-	-	-	-	-	-
	10/25/10	Kale	< 9	< 3.8	438 \pm 76	4440 \pm 188	< 26	< 8	< 8	< 56	< 16
	MEAN		-	4.5 \pm 2.2	307 \pm 264	3717 \pm 1181	-	-	-	-	-

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-VIII.1

CONCENTRATIONS OF STRONTIUM AND GAMMA EMITTERS IN VEGETATION SAMPLES
COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/KG WET ± 2 SIGMA

STC	COLLECTION PERIOD		SR-89	SR-90	Be-7	K-40	I-131	Cs-134	Cs-137	Ba-140	La-140
115	06/29/10	Cabbage (2)	< 12	< 2.5	< 198	6540 ± 675	< 23	< 21	< 22	< 82	< 30
	06/29/10	Collards	< 16	14.0 ± 3.3	< 193	6850 ± 644	< 26	< 24	< 25	< 94	< 19
	06/29/10	Kale	< 14	6.0 ± 2.3	< 262	8460 ± 849	< 36	< 27	< 36	< 129	< 26
	07/27/10	Cabbage	< 19	< 3.1	< 194	6360 ± 556	< 54	< 18	< 21	< 112	< 34
	07/27/10	Collards	< 20	19.7 ± 3.6	220 ± 131	12200 ± 574	< 59	< 19	< 24	< 134	< 29
	07/27/10	Kale	< 20	11.8 ± 2.8	< 182	10100 ± 485	< 46	< 18	< 20	< 125	< 36
	08/23/10	Cabbage	< 15	11.0 ± 3.0	< 285	4550 ± 661	< 45	< 23	< 32	< 122	< 37
	08/23/10	Collards	< 13	7.5 ± 2.9	< 292	5750 ± 586	< 53	< 39	< 32	< 135	< 51
	08/23/10	Kale	< 16	11.1 ± 3.3	< 241	4720 ± 594	< 37	< 22	< 20	< 128	< 34
	09/15/10	Cabbage	< 15	7.1 ± 3.0	< 40	5630 ± 160	< 39	< 3	< 4	< 54	< 15
	09/15/10	Collards	< 16	10.1 ± 3.1	147 ± 91	9080 ± 249	< 48	< 5	< 5	< 72	< 15
	09/15/10	Kale	< 18	19.5 ± 3.0	183 ± 77	7670 ± 191	< 59	< 5	< 6	< 88	< 21
	10/25/10	Cabbage	< 9	3.3 ± 2.0	< 63	4530 ± 163	< 23	< 6	< 7	< 47	< 13
	10/25/10	Collards	< 8	16.5 ± 2.3	266 ± 71	6800 ± 224	< 27	< 8	< 9	< 61	< 16
	10/25/10	Kale	< 15	< 4.6	167 ± 74	5270 ± 199	< 26	< 8	< 9	< 58	< 14
	MEAN		-	11.5 ± 10.4	197 ± 94	6967 ± 4406	-	-	-	-	-

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES
(2) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

TABLE C-IX.1 QUARTERLY TLD RESULTS FOR OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF MILLI-ROENTGEN/STD. QUARTER ± STANDARD DEVIATIONS

STATION CODE	MEAN ± 2 S.D.	JAN - MAR	APR - JUN	JUL - SEP	OCT - DEC
1	14.7 ± 4.0	17.4 ± 2.4	12.6 ± 1.5	14.7 ± 1.5	14.1 ± 1.2
3	13.2 ± 4.0	15.9 ± 1.2	11.1 ± 0.9	12.9 ± 1.5	12.9 ± 2.1
4	13.2 ± 3.0	15.0 ± 1.2	11.4 ± 1.8	12.9 ± 1.2	13.5 ± 1.2
5	17.8 ± 3.4	20.1 ± 2.4	16.2 ± 2.1	18.0 ± 1.8	16.8 ± 1.2
6	13.7 ± 3.0	15.6 ± 1.2	12.0 ± 2.1	13.5 ± 0.6	13.5 ± 1.5
8	13.7 ± 3.2	15.9 ± 1.8	12.3 ± 3.3	13.8 ± 2.7	12.9 ± 1.2
9	12.6 ± 3.4	15.0 ± 2.4	11.4 ± 0.9	12.6 ± 1.2	11.4 ± 1.8
C	14.1 ± 2.3	15.8 ± 1.8	13.2 ± 2.0	14.0 ± 1.7	13.5 ± 1.8
11	13.8 ± 3.7	16.2 ± 1.8	11.7 ± 0.6	13.5 ± 1.2	13.8 ± 1.2
14	15.7 ± 3.0	17.7 ± 1.2	14.4 ± 2.1	15.9 ± 2.1	14.7 ± 0.9
22	13.5 ± 3.5	15.9 ± 3.0	11.7 ± 1.2	13.2 ± 2.1	13.2 ± 1.8
46	12.5 ± 2.8	14.4 ± 2.7	11.1 ± 1.8	12.3 ± 2.1	12.0 ± 1.5
47	13.7 ± 3.3	15.9 ± 2.4	12.3 ± 1.8	14.1 ± 1.5	12.6 ± 1.2
48	14.2 ± 3.3	16.5 ± 2.1	12.9 ± 0.9	14.1 ± 2.1	13.2 ± 1.5
51	15.9 ± 3.3	17.7 ± 2.1	13.8 ± 1.2	16.5 ± 1.8	15.6 ± 2.4
52	17.3 ± 3.9	18.6 ± 0.9	15.0 ± 0.6	19.2 ± 2.1	16.5 ± 2.7
53	15.4 ± 3.8	18.0 ± 2.1	13.5 ± 1.2	15.3 ± 1.8	14.7 ± 2.4
54	13.5 ± 3.0	15.0 ± 0.9	11.7 ± 0.9	14.4 ± 0.6	12.9 ± 1.8
55	19.1 ± 4.1	21.6 ± 1.5	17.7 ± 0.9	19.8 ± 0.9	17.1 ± 3.6
56	17.3 ± 2.7	18.6 ± 1.2	15.9 ± 1.2	18.3 ± 2.7	16.5 ± 1.2
57	14.6 ± 3.2	16.2 ± 1.5	12.9 ± 2.1	15.6 ± 1.5	13.5 ± 1.2
58	15.0 ± 4.0	17.4 ± 6.3	13.2 ± 1.5	15.9 ± 2.7	13.5 ± 1.5
59	14.8 ± 2.9	15.9 ± 1.5	12.9 ± 1.2	15.9 ± 3.0	14.4 ± 2.4
61	13.9 ± 3.5	15.9 ± 1.2	11.7 ± 0.6	14.4 ± 1.8	13.5 ± 1.5
62	14.2 ± 2.3	15.6 ± 1.8	12.9 ± 1.2	14.4 ± 1.5	13.8 ± 2.1
63	14.2 ± 3.6	15.9 ± 1.5	12.3 ± 1.5	14.4 ± 2.4	(1)
64	14.1 ± 3.8	16.2 ± 2.4	11.7 ± 1.2	14.7 ± 1.8	13.8 ± 2.1
65	14.0 ± 3.7	16.2 ± 0.3	11.7 ± 1.2	14.4 ± 1.5	13.5 ± 1.2
66	13.2 ± 2.5	14.7 ± 1.5	11.7 ± 1.8	13.5 ± 1.5	12.9 ± 1.8
68	12.5 ± 3.2	13.8 ± 1.2	(1)	13.8 ± 1.8	12.0 ± 1.5
71	14.6 ± 3.3	16.5 ± 2.1	12.6 ± 1.2	15.3 ± 1.8	14.1 ± 1.5
72	14.1 ± 4.2	16.8 ± 1.2	12.0 ± 1.5	14.7 ± 2.4	12.9 ± 1.2
73	12.5 ± 3.4	14.7 ± 2.4	10.5 ± 0.6	12.6 ± 2.4	12.3 ± 1.2
74	12.8 ± 3.9	15.0 ± 0.6	10.5 ± 0.9	13.5 ± 1.8	12.0 ± 1.5
75	13.3 ± 2.0	14.4 ± 1.2	12.3 ± 1.5	13.8 ± 1.2	12.6 ± 1.8
78	14.0 ± 4.0	16.2 ± 1.5	11.4 ± 1.5	14.4 ± 1.8	13.8 ± 3.6
79	14.3 ± 3.1	16.2 ± 1.8	12.9 ± 2.4	15.0 ± 2.7	13.2 ± 1.8
81	13.4 ± 3.3	15.0 ± 1.5	11.1 ± 0.6	14.1 ± 2.4	13.5 ± 1.8
82	13.7 ± 5.0	17.1 ± 3.0	11.1 ± 0.9	13.5 ± 1.5	13.2 ± 1.5
84	13.5 ± 3.9	15.9 ± 1.5	11.1 ± 2.1	13.8 ± 3.0	13.2 ± 2.4
85	12.5 ± 3.2	14.4 ± 1.5	10.5 ± 1.2	12.6 ± 0.9	12.3 ± 0.9
86	14.0 ± 3.9	16.2 ± 1.8	11.7 ± 0.9	14.7 ± 1.8	13.2 ± 1.8
88	12.2 ± 4.3	15.0 ± 1.5	9.9 ± 0.6	12.3 ± 2.1	11.4 ± 1.2
89	12.2 ± 0.8	12.6 ± 1.5	12.3 ± 1.5	12.3 ± 2.1	11.7 ± 1.5
90	12.2 ± 3.4	14.1 ± 1.5	10.2 ± 1.2	12.9 ± 1.8	11.4 ± 1.2
92	14.3 ± 3.3	16.8 ± 1.5	13.5 ± 2.4	13.8 ± 1.2	13.2 ± 1.8
98	13.7 ± 5.5	15.6 ± 1.5	11.7 ± 0.6	(1)	(1)
99	13.1 ± 3.4	15.6 ± 2.4	(1)	12.6 ± 1.5	12.0 ± 1.5
T1	14.9 ± 3.9	17.4 ± 1.5	12.9 ± 0.9	15.3 ± 1.5	13.8 ± 1.2

(1) SEE PROGRAM EXCEPTIOS SECTION FOR EXPLANATION

TABLE C-IX.1 QUARTERLY TLD RESULTS FOR OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF MILLI-ROENTGEN/STD. QUARTER ± STANDARD DEVIATIONS

STATION CODE	MEAN ± 2 S.D.	JAN - MAR	APR - JUN	JUL - SEP	OCT - DEC
100	13.3 ± 3.3	15.3 ± 2.7	11.4 ± 1.5	13.8 ± 1.5	12.6 ± 1.2
101	13.4 ± 3.3	15.6 ± 3.9	12.0 ± 1.2	13.8 ± 0.9	12.3 ± 1.5
102	14.5 ± 3.6	16.8 ± 1.2	12.9 ± 2.4	15.0 ± 1.2	13.2 ± 0.9
103	13.6 ± 2.7	14.7 ± 2.4	12.0 ± 2.1	14.7 ± 1.8	12.9 ± 1.5
104	14.0 ± 3.8	16.8 ± 1.2	12.6 ± 1.2	13.5 ± 2.4	13.2 ± 1.8
105	12.4 ± 3.9	14.7 ± 0.9	10.5 ± 1.8	13.2 ± 1.5	11.1 ± 0.9
106	13.2 ± 2.9	15.0 ± 2.1 (1)	12.0 ± 0.6	13.8 ± 2.7	12.0 ± 0.9
107	13.3 ± 4.5	16.5 ± 2.7 (1)	11.4 ± 0.9	12.9 ± 1.2	12.3 ± 1.5
108	16.2 ± 0.0	16.2 ± 3.0 (1)	(1)	(1)	(1)
109	14.3 ± 3.3	16.8 ± 1.2	13.2 ± 0.9	13.5 ± 1.8	13.8 ± 1.2
110	13.9 ± 3.1	15.9 ± 1.8	12.3 ± 1.2	14.1 ± 1.2	13.2 ± 2.4
112	16.7 ± 3.0	18.9 ± 3.6	15.6 ± 2.7	16.2 ± 0.6	15.9 ± 3.3
113	14.3 ± 4.4	17.4 ± 1.5	12.6 ± 0.9	14.1 ± 1.2	12.9 ± 0.6

(1) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE C-IX.2 MEAN QUARTERLY TLD RESULTS FOR THE SITE BOUNDARY, INTERMEDIATE, SPECIAL INTEREST AND CONTROL LOCATIONS FOR OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF MILLI-ROENTGEN PER STD. QUARTER \pm 2 STANDARD DEVIATIONS OF THE STATION DATA

COLLECTION PERIOD	SITE BOUNDARY \pm 2 S.D.	INTERMEDIATE	SPECIAL INTEREST	CONTROL
JAN-MAR	17.1 \pm 3.3	15.7 \pm 2.3	15.4 \pm 2.8	16.8 \pm 2.7
APR-JUN	13.3 \pm 3.3	11.9 \pm 2.2	11.6 \pm 2.3	13.8 \pm 1.7
JUL-SEP	15.6 \pm 3.5	13.8 \pm 2.2	13.5 \pm 2.1	15.0 \pm 2.7
OCT-DEC	14.4 \pm 2.7	12.9 \pm 2.0	12.8 \pm 2.1	14.1 \pm 1.7

TABLE C-IX.3 SUMMARY OF THE AMBIENT DOSIMETRY PROGRAM FOR OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF MILLI-ROENTGEN/STD. QUARTER

LOCATION	SAMPLES ANALYZED	PERIOD MINIMUM	PERIOD MAXIMUM	PERIOD MEAN \pm 2 S.D.
SITE BOUNDARY	75	11.7	21.6	15.1 \pm 4.3
INTERMEDIATE	123	10.5	20.1	13.6 \pm 3.6
SPECIAL INTEREST	36	9.9	16.8	13.3 \pm 3.6
CONTROL	8	13.2	17.7	14.9 \pm 3.0

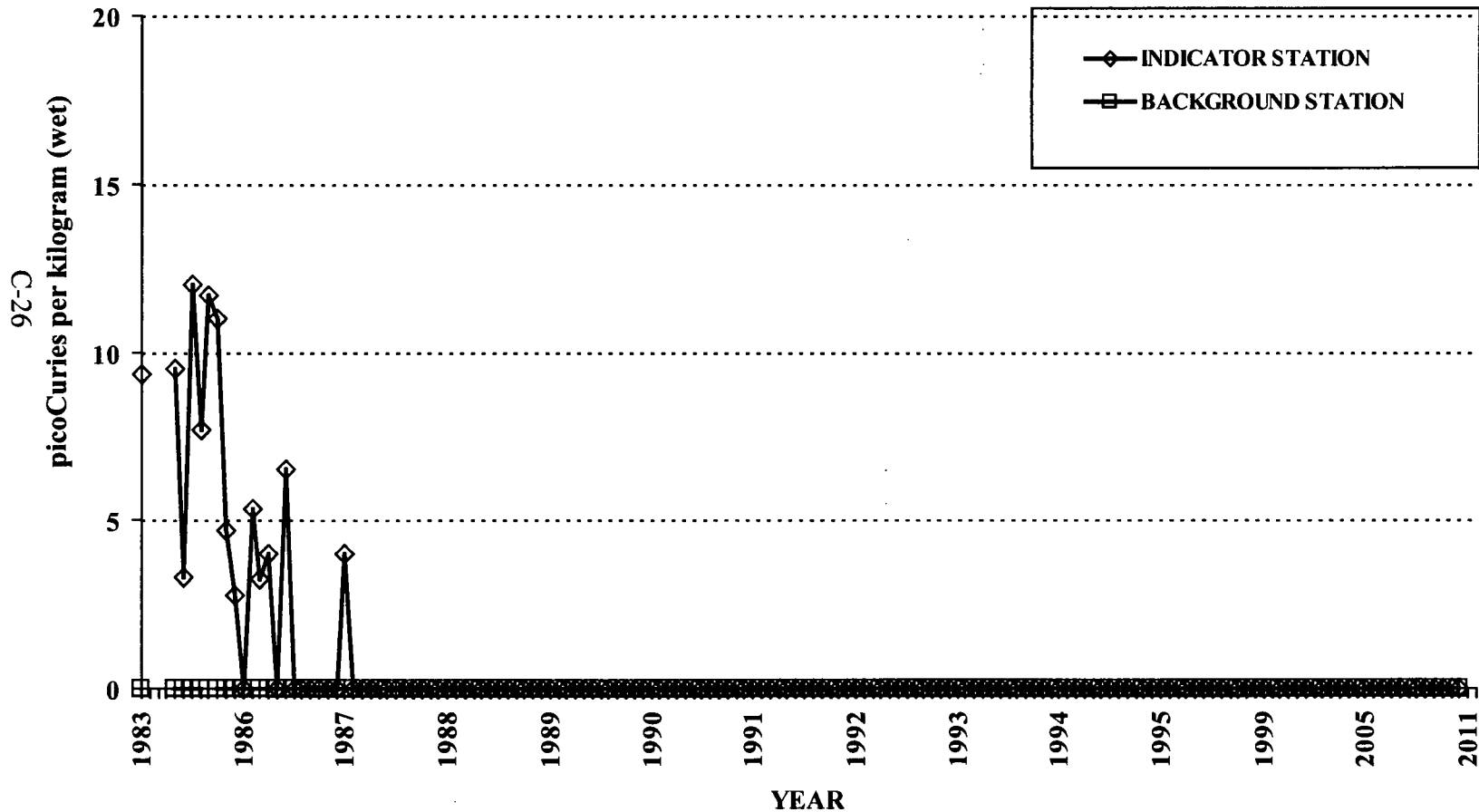
SITE BOUNDARY STATIONS - 1, 112, 113, 51, 52, 53, 54, 55, 56, 57, 58, 59, 61, 62, 63, 64, 65, 66, T1

INTERMEDIATE STATIONS - 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 22, 4, 46, 47, 48, 5, 6, 68, 73, 74, 75, 78, 79, 8, 82, 84, 85, 86, 9, 98, 99

SPECIAL INTEREST STATIONS - 11, 3, 71, 72, 81, 88, 89, 90, 92

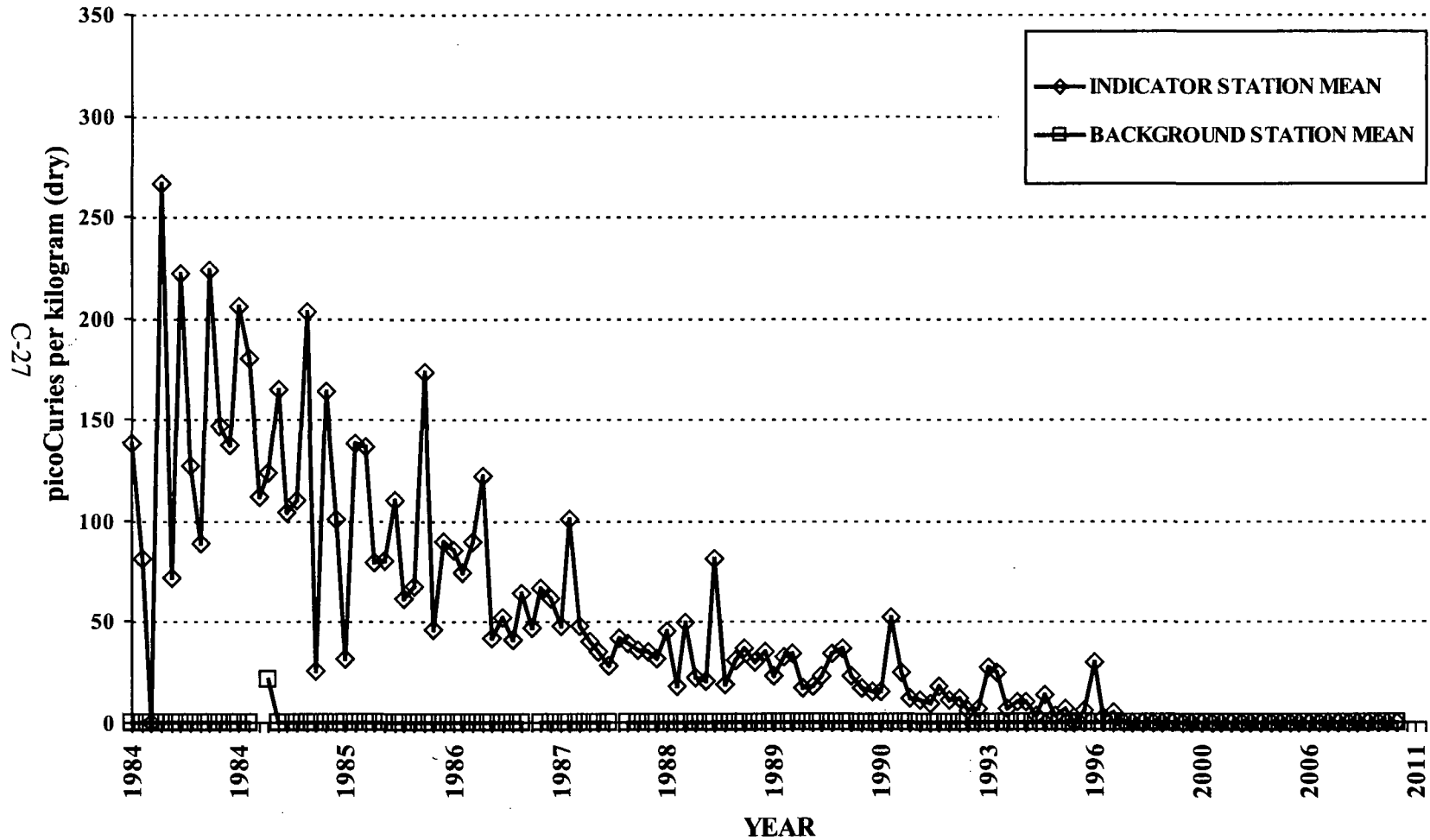
CONTROL STATIONS - 14, C

FIGURE C-1
MEAN COBALT-60 CONCENTRATION IN CLAMS
OYSTER CREEK GENERATING STATION, 1983 - 2010



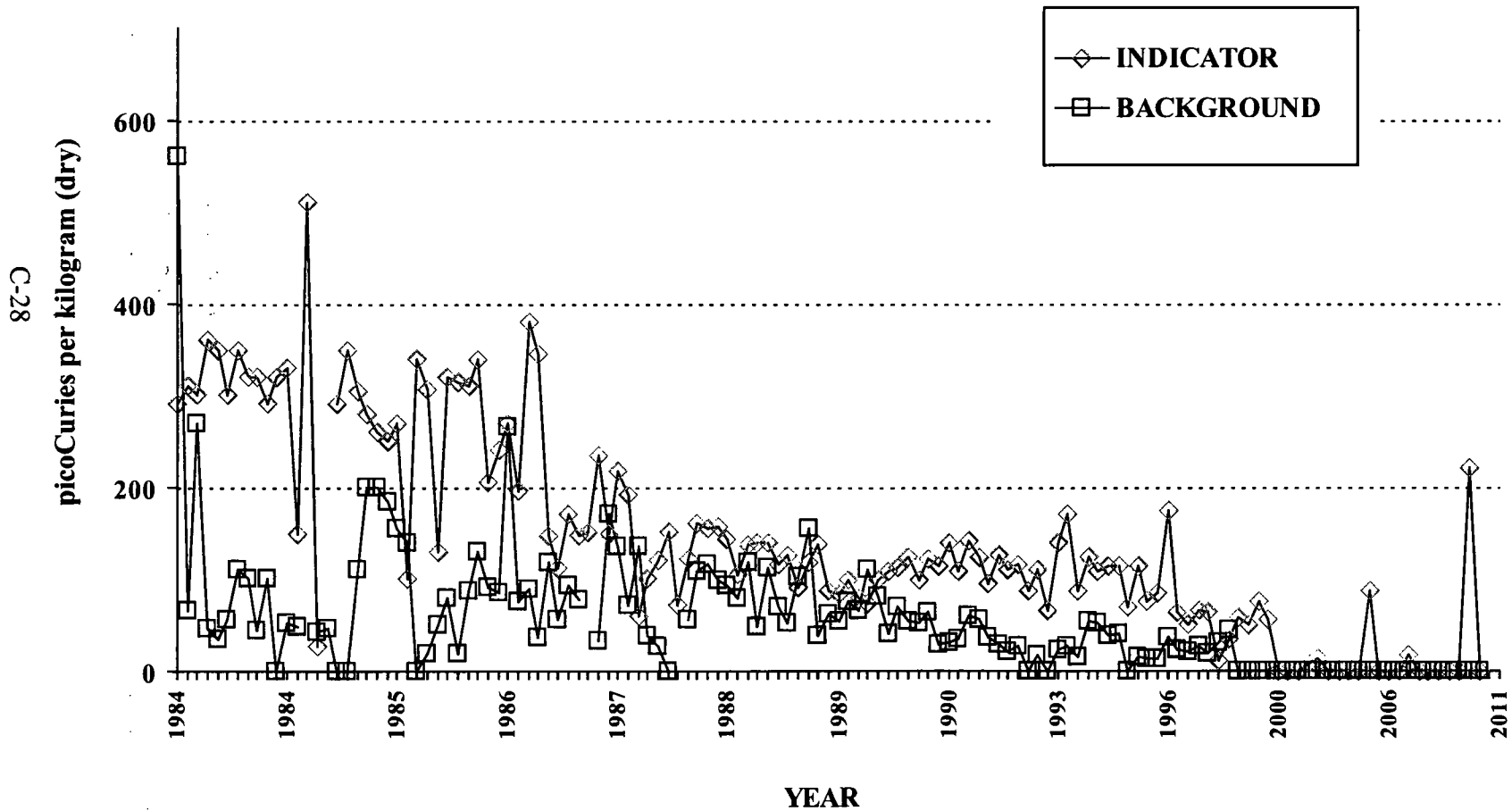
* The year designations on the x-axis reflect multiple sampling periods in a given year, as well as historical changes in the number of sampling periods per year.

FIGURE C-2
MEAN COBALT-60 CONCENTRATION IN AQUATIC SEDIMENT
OYSTER CREEK GENERATING STATION, 1984 - 2010



* The year designations on the x-axis reflect multiple sampling periods in a given year, as well as historical changes in the number of sampling periods per year.

FIGURE C-3
MEAN CESIUM-137 CONCENTRATION IN AQUATIC SEDIMENT
OYSTER CREEK GENERATING STATION, 1984 - 2010



* The year designations on the x-axis reflect multiple sampling periods in a given year, as well as historical changes in the number of sampling periods per year.

FIGURE C-4
MEAN WEEKLY GROSS BETA CONCENTRATIONS
IN AIR PARTICULATES
OYSTER CREEK GENERATING STATION, 2010

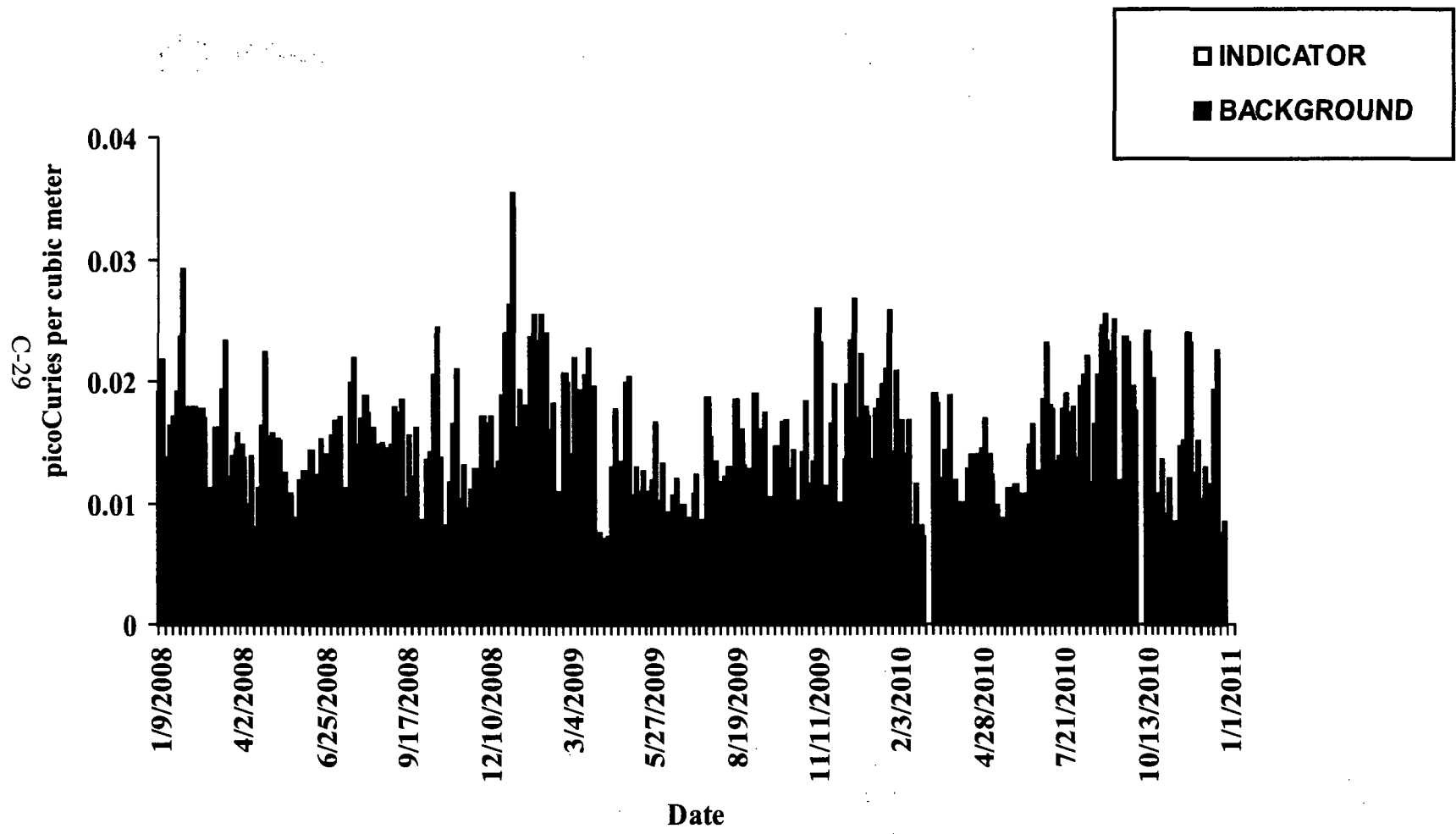
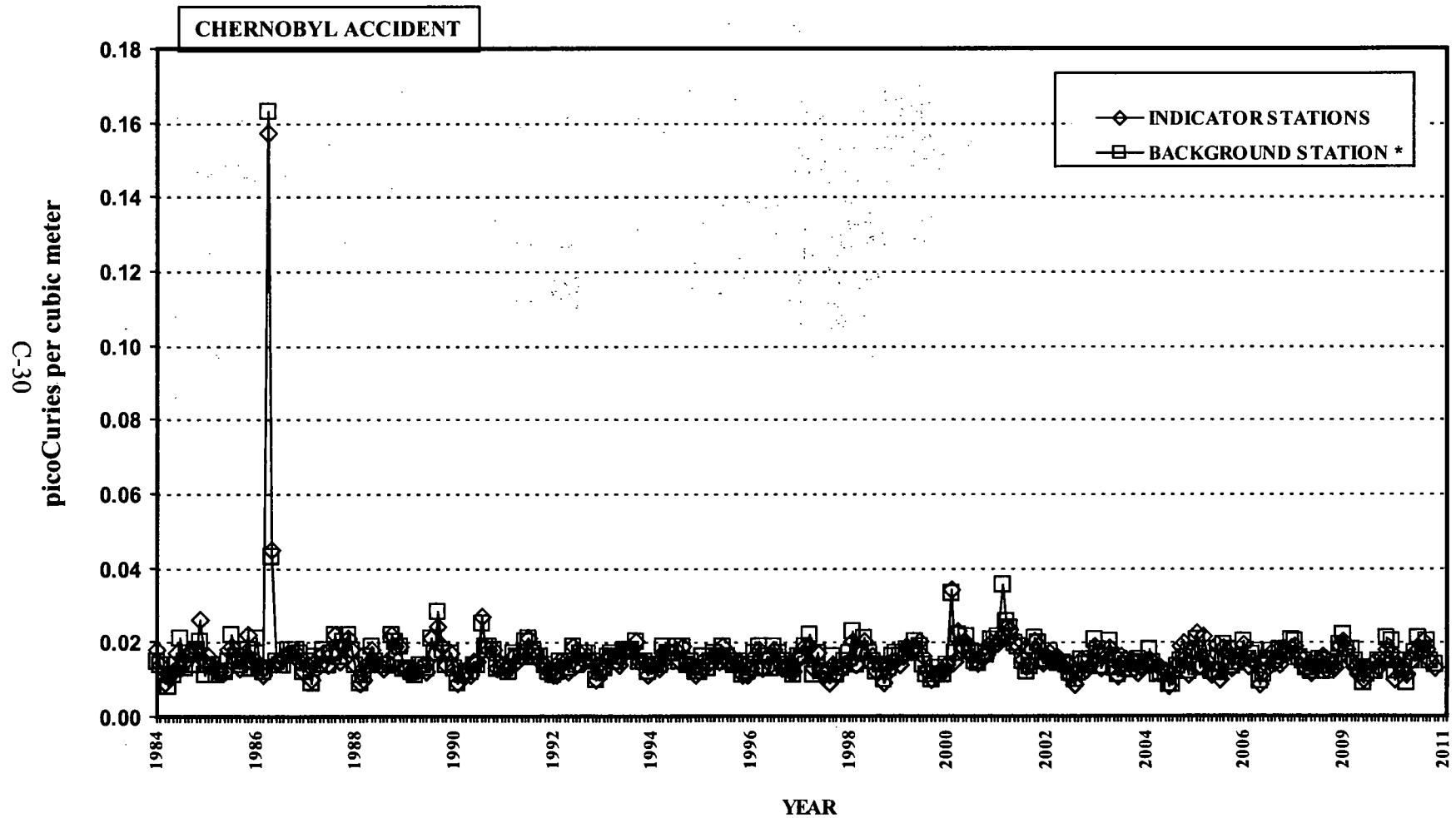


FIGURE C-5
MEAN MONTHLY GROSS BETA CONCENTRATIONS
IN AIR PARTICULATES
OYSTER CREEK GENERATING STATION, 1984 - 2010



* Data from Cookstown station ONLY after December 1996

FIGURE C-6
MEAN QUARTERLY TLD GAMMA DOSE
OYSTER CREEK GENERATING STATION, 2010

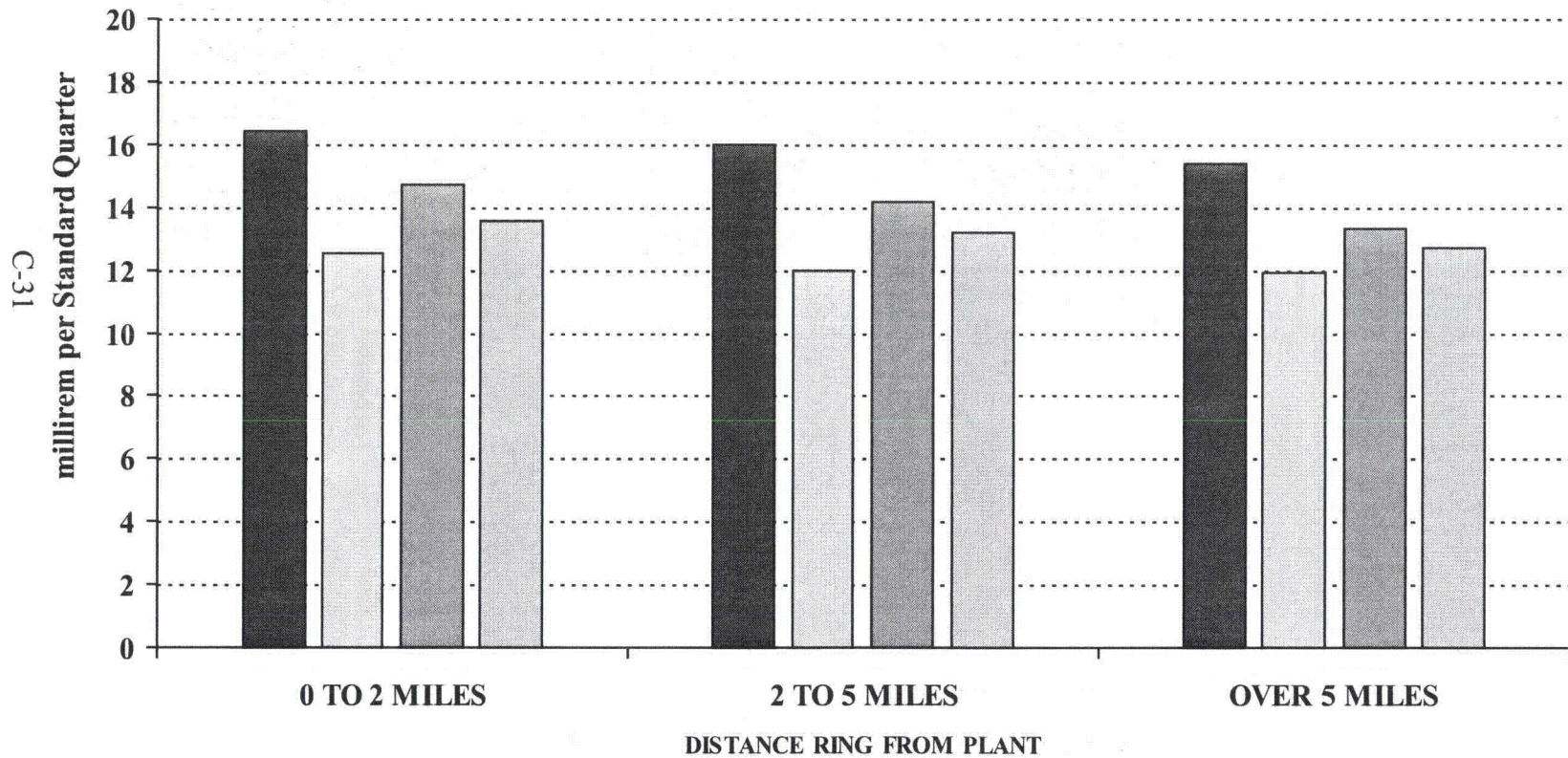
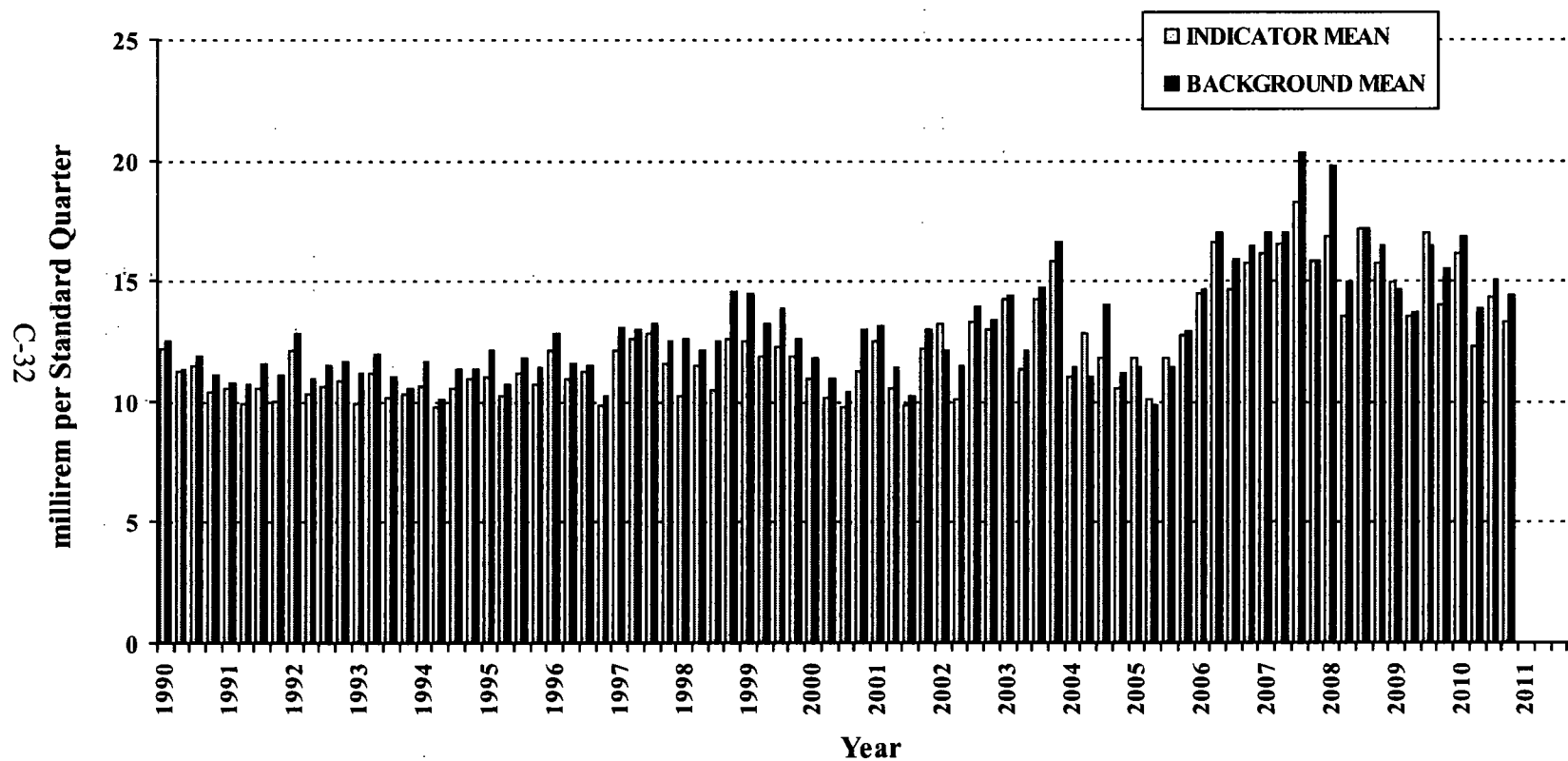


FIGURE C-7
MEAN QUARTERLY TLD GAMMA DOSE
OYSTER CREEK GENERATING STATION, 1990 – 2010*



* Harshaw Model 110 TLDs were used during the first quarter of 2001. Panasonic Model 814 TLDs were used in the second, third, and fourth quarters of 2001.

APPENDIX D

DATA TABLES AND FIGURES COMPARISON LABORATORY

The following section presents the results of data analysis performed by the QC laboratory, Environmental Inc. Duplicate samples were obtained from several locations and media and split between the primary laboratory, Teledyne Brown Engineering (TBE) and the QC laboratory. Comparisons of the results for all media were within expected ranges.

**TABLE D-I.1 CONCENTRATIONS OF TRITIUM IN SURFACE WATER SAMPLES
COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	24	QCA	QCB
04/13/10	< 157	< 157	< 145
10/11/10	< 152	< 149	< 159

TABLE D-I.2 CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	Cs-134	Cs-137	Ba-140	La-140
24	04/13/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 1	< 1	< 19	< 6
	10/11/10	< 4	< 4	< 11	< 5	< 9	< 5	< 8	< 4	< 4	< 25	< 9
QCA	04/13/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 1	< 2	< 21	< 6
	10/11/10	< 5	< 5	< 11	< 6	< 11	< 6	< 10	< 5	< 6	< 30	< 10
QCB	04/13/10	< 3	< 3	< 2	< 2	< 6	< 3	< 3	< 2	< 3	< 17	< 2
	10/11/10	< 1	< 1	< 5	< 2	< 3	< 2	< 2	< 1	< 1	< 13	< 3

**TABLE D-II.1 CONCENTRATIONS OF TRITIUM IN DRINKING WATER SAMPLES
COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

COLLECTION PERIOD	1	1N	1S	QCA	QCB 1N	QCB 1S
01/07/10 - 01/27/10	< 163			< 166	<	<
02/04/10 - 02/23/10	< 170			< 164	<	<
03/09/10 - 03/30/10	< 179			< 178	<	<
04/08/10 - 04/29/10	< 171			< 168	<	<
05/06/10 - 05/27/10	< 159 (1)			< 160	<	<
06/04/10 - 07/01/10		< 172 (1)	< 166 (1)	<	< 108	< 167
07/08/10 - 08/02/10		< 174	(2)	<	< 151	-
08/16/10 - 08/23/10		< 169	< 167	<	< 155	< 154
09/02/10 - 09/29/10		< 188	< 184	<	< 160	< 160
10/06/10 - 10/28/10		< 185	< 162	<	< 164	< 164
11/03/10 - 11/23/10		< 153	< 161	<	< 149	< 149
12/02/10 - 12/29/10		< 171	< 166	<	< 146	< 146

(1) SEE PROGRAM CHANGES SECTION FOR EXPLANATION

(2) SEE PROGRAM EXCEPTIONS SECTION FOR EXPLANATION

TABLE D-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN DRINKING WATER SAMPLES
COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	Cs-134	Cs-137	Ba-140	La-140
1	01/05/10 - 01/26/10	< 6	< 4	< 11	< 5	< 11	< 6	< 7	< 5	< 6	< 28	< 6
	02/02/10 - 03/02/10	< 6	< 6	< 12	< 6	< 13	< 5	< 11	< 5	< 5	< 38	< 11
	03/09/10 - 03/30/10	< 6	< 6	< 12	< 6	< 12	< 6	< 11	< 6	< 6	< 35	< 11
	04/06/10 - 04/27/10	< 4	< 4	< 8	< 4	< 8	< 4	< 6	< 4	< 5	< 29	< 8
	05/04/10 - 05/24/10	(1) < 1	< 1	< 3	< 1	< 2	< 1	< 2	< 1	< 1	< 15	< 5
	MEAN	-	-	-	-	-	-	-	-	-	-	-
1N	06/01/10 - 06/28/10	(1) < 2	< 2	< 5	< 2	< 4	< 2	< 4	< 2	< 2	< 16	< 6
	07/06/10 - 08/02/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 1	< 2	< 14	< 4
	08/02/10 - 08/16/10	< 1	< 1	< 3	< 1	< 2	< 2	< 3	< 1	< 1	< 19	< 6
	08/30/10 - 09/28/10	< 4	< 4	< 8	< 4	< 8	< 3	< 7	< 3	< 4	< 26	< 7
	10/05/10 - 10/25/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 1	< 2	< 19	< 6
	11/02/10 - 11/23/10	< 6	< 6	< 11	< 7	< 9	< 7	< 9	< 5	< 5	< 32	< 8
	11/30/10 - 12/29/10	< 3	< 3	< 9	< 4	< 7	< 4	< 7	< 3	< 3	< 30	< 9
MEAN												
1S	06/01/10 - 06/30/10	(1) < 1	< 2	< 4	< 1	< 3	< 2	< 3	< 1	< 2	< 11	< 3
	07/06/10 - 08/02/10	(2) -	-	-	-	-	-	-	-	-	-	-
	08/18/10 - 08/23/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 2	< 2	< 23	< 7
	08/30/10 - 09/28/10	< 4	< 4	< 8	< 3	< 7	< 5	< 6	< 3	< 4	< 28	< 9
	10/05/10 - 10/25/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 2	< 2	< 23	< 7
	11/02/10 - 11/23/10	< 5	< 7	< 12	< 6	< 12	< 6	< 11	< 6	< 6	< 35	< 12
	11/30/10 - 12/29/10	< 4	< 5	< 8	< 4	< 8	< 4	< 6	< 4	< 5	< 27	< 7
MEAN												

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TABLE D-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN DRINKING WATER SAMPLES
COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	Cs-134	Cs-137	Ba-140	La-140
QCA	01/05/10 - 01/26/10	< 5	< 6	< 10	< 6	< 10	< 6	< 10	< 6	< 6	< 36	< 12
	02/02/10 - 03/02/10	< 4	< 5	< 12	< 4	< 11	< 5	< 9	< 4	< 6	< 31	< 8
	03/09/10 - 03/30/10	< 4	< 4	< 10	< 4	< 8	< 5	< 7	< 3	< 4	< 27	< 8
	04/06/10 - 04/27/10	< 3	< 3	< 7	< 3	< 6	< 4	< 6	< 3	< 3	< 24	< 7
	05/04/10 - 05/24/10	< 1	< 1	< 3	< 1	< 3	< 1	< 2	< 1	< 1	< 16	< 5
	MEAN	-	-	-	-	-	-	-	-	-	-	-
QCB 1N	06/04/10 - 07/01/10	< 2	< 2	< 5	< 1	< 4	< 3	< 5	< 3	< 2	< 16	< 6
	07/08/10 - 08/02/10	< 2	< 2	< 5	< 3	< 4	< 3	< 4	< 4	< 2	< 25	< 5
	08/16/10 - 08/23/10	< 2	< 2	< 5	< 3	< 5	< 4	< 4	< 2	< 3	< 19	< 2
	09/02/10 - 09/29/10	< 2	< 3	< 4	< 3	< 5	< 2	< 4	< 3	< 2	< 108	< 241
	10/06/10 - 10/28/10	< 2	< 2	< 9	< 2	< 3	< 3	< 4	< 3	< 3	< 15	< 3
	11/03/10 - 11/23/10	< 2	< 3	< 8	< 4	< 6	< 4	< 5	< 3	< 3	< 18	< 3
	12/02/10 - 12/29/10	< 3	< 3	< 7	< 3	< 5	< 3	< 3	< 4	< 3	< 17	< 4
	MEAN	-	-	-	-	-	-	-	-	-	-	-
QCB 1S	06/04/10 - 07/01/10	< 2	< 2	< 3	< 2	< 2	< 3	< 4	< 1	< 2	< 19	< 4
	07/08/10 - 08/02/10	-	-	-	-	-	-	-	-	-	-	-
	08/16/10 - 08/23/10	< 3	< 2	< 6	< 3	< 4	< 4	< 4	< 4	< 3	< 115	< 506
	09/02/10 - 09/29/10	< 2	< 1	< 7	< 2	< 5	< 3	< 3	< 2	< 3	< 10	< 3
	10/06/10 - 10/28/10	< 2	< 4	< 4	< 3	< 6	< 3	< 6	< 4	< 3	< 22	< 3
	11/03/10 - 11/23/10	< 3	< 3	< 5	< 3	< 7	< 4	< 7	< 4	< 3	< 23	< 3
	12/02/10 - 12/29/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 2	< 3	< 10	< 2

TABLE D-III.1 CONCENTRATIONS OF TRITIUM IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

COLLECTION PERIOD	W-3C	QCB
03/02/10	< 171	< 151
04/27/10	< 169	< 151
09/08/10	< 169	< 153
11/04/10	< 158	< 163

TABLE D-III.2 CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

STC	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
W-3C	03/02/10	< 5	< 5	< 9	< 5	< 9	< 5	< 9	< 14	< 5	< 6	< 28	< 11
	04/27/10	< 3	< 4	< 9	< 5	< 9	< 5	< 8	< 15	< 4	< 4	< 29	< 8
	09/08/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 10	< 2	< 2	< 17	< 6
	11/04/10	< 4	< 5	< 12	< 5	< 11	< 6	< 9	< 14	< 5	< 5	< 31	< 11
	MEAN	-	-	-	-	-	-	-	-	-	-	-	-
QCB	03/02/10	< 3	< 2	< 2	2 ± 2	< 6	< 3	< 4	< 6	< 4	< 3	< 16	< 3
	04/27/10	< 2	< 3	< 7	< 3	< 4	< 2	< 5	< 5	< 3	< 4	< 20	< 2
	09/08/10	< 3	< 3	< 8	< 3	< 5	< 4	< 5	< 12	< 4	< 3	< 24	< 4
	11/03/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 14	< 3	< 1	< 26	< 3
	MEAN	-	-	-	-	-	-	-	-	-	-	-	-

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES

**TABLE D-IV.1 CONCENTRATIONS OF GAMMA EMITTERS IN CLAM SAMPLES
COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/KG WET ± 2 SIGMA

STC	COLLECTION PERIOD	K-40	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Cs-134	Cs-137
24	04/13/10	1100 ± 524	< 35	< 37	< 81	< 40	< 69	< 36	< 31
QCA	04/13/10	1180 ± 478	< 40	< 46	< 103	< 37	< 101	< 52	< 45
QCB	04/13/10	1140 ± 258	< 14	< 7	< 12	< 11	< 25	< 10	< 10
	MEAN*	1140 ± 80	-	-	-	-	-	-	-

**TABLE D-V.1 CONCENTRATIONS OF GAMMA EMITTERS IN SEDIMENT SAMPLES
COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010**

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

STC	COLLECTION PERIOD	Be-7	K-40	Mn-54	Co-58	Co-60	Cs-134	Cs-137	Ra-226	Th-228
24	04/13/10	< 340	567 \pm 303	< 26	< 32	< 16	< 24	< 25	< 523	157 \pm 39
	10/11/10	< 942	6100 \pm 1110	< 90	< 102	< 102	< 120	< 99	< 1720	321 \pm 120
	MEAN*	-	3334 \pm 7825	-	-	-	-	-	-	239 \pm 232
QCA	04/13/10	< 629	754 \pm 452	< 43	< 43	< 43	< 38	< 51	< 1220	215 \pm 87
	10/11/10	< 571	4880 \pm 831	< 47	< 61	< 53	< 54	< 53	1160 \pm 1140	308 \pm 97
	MEAN*	-	2817 \pm 536	-	-	-	-	-	1160 \pm 85	262 \pm 132
QCB	04/13/10	86 \pm 61	677 \pm 211	< 12	< 6	< 7	< 11	< 7	499 \pm 239	< 1004
	10/11/10	457 \pm 198	3823 \pm 411	< 14	< 14	< 12	32 \pm 19	< 15	772 \pm 370	< 1311
	MEAN*	272 \pm 525	2250 \pm 4449	-	-	-	-	-	636 \pm 386	-

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES

TABLE D-VI.1 CONCENTRATIONS OF STRONTIUM AND GAMMA EMITTERS IN VEGETATION SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2010

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

STC		COLLECTION PERIOD	Sr-89	Sr-90	K-40	I-131	Cs-134	Cs-137	Ba-140	La-140
36	CABBAGE	07/27/10	< 17	6 \pm 2	3030 \pm 319	< 57	< 23	< 23	< 141	< 36
	COLLARDS	07/27/10	< 20	3 \pm 2	5380 \pm 512	< 59	< 20	< 21	< 133	< 42
	KALE	07/27/10	< 17	6 \pm 2	6320 \pm 352	< 58	< 21	< 20	< 125	< 31
		MEAN*	-	5 \pm 3	4910 \pm 3389	-	-	-	-	-
QCA	CABBAGE	07/27/10	< 18	4 \pm 2	2510 \pm 307	< 41	< 14	< 17	< 101	< 24
	COLLARDS	07/27/10	< 20	4 \pm 2	5570 \pm 517	< 57	< 16	< 22	< 403	< 21
	KALE	07/27/10	< 18	6 \pm 3	6370 \pm 560	< 56	< 20	< 19	< 143	< 41
		MEAN*	-	5 \pm 2	4817 \pm 4075	-	-	-	-	-
QCB	CABBAGE	07/27/10	< 3	< 2	2506 \pm 318	< 20	< 9	< 13	< 80	< 9
	COLLARDS	07/27/10	< 5	4 \pm 2	4789 \pm 431	< 25	< 17	< 15	< 54	< 16
	KALE	07/27/10	< 7	6 \pm 3	5765 \pm 453	< 25	< 15	< 14	< 81	< 20
		MEAN*	-	5 \pm 4	4353 \pm 3345	-	-	-	-	-

* THE MEAN AND 2 STANDARD DEVIATION VALUES ARE CALCULATED USING THE POSITIVE VALUES

APPENDIX E

INTER-LABORATORY COMPARISON PROGRAM

TABLE E-1

ANALYTICS ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM
TELEDYNE BROWN ENGINEERING, 2010

(PAGE 1 OF 3)

Month/Year	Identification Number	Matrix	Nuclide	Units	Reported Value (a)	Known Value (b)	Ratio (c) TBE/Analytics	Evaluation (d)			
March 2010	E6978-396	Milk	Sr-89	pCi/L	89.3	92.8	0.96	A			
			Sr-90	pCi/L	13.8	12.7	1.09	A			
March 2010	E6979-396	Milk	I-131	pCi/L	65.2	74.0	0.88	A			
			Ce-141	pCi/L	241	261	0.92	A			
			Cr-51	pCi/L	388	361	1.07	A			
			Cs-134	pCi/L	157	178	0.88	A			
			Cs-137	pCi/L	150	158	0.95	A			
			Co-58	pCi/L	143	143	1.00	A			
			Mn-54	pCi/L	202	207	0.98	A			
			Fe-59	pCi/L	146	137	1.07	A			
			Zn-65	pCi/L	247	254	0.97	A			
			Co-60	pCi/L	177	183	0.97	A			
			March 2010	E6981-396	AP	Ce-141	pCi	211	185	1.14	A
						Cr-51	pCi	304	255	1.19	A
						Cs-134	pCi	142	125	1.14	A
						Cs-137	pCi	131	111	1.18	A
Co-58	pCi	119				101	1.18	A			
Mn-54	pCi	162				146	1.11	A			
Fe-59	pCi	110				97	1.14	A			
Zn-65	pCi	217				179	1.21	W			
Co-60	pCi	145	129	1.12	A						
March 2010	E6980-396	Charcoal	I-131	pCi	80.2	85.6	0.94	A			
June 2010	E7132-396	Milk	Sr-89	pCi/L	82.0	93.4	0.88	A			
			Sr-90	pCi/L	15.8	16.7	0.95	A			
June 2010	E7133-396	Milk	I-131	pCi/L	83.5	96.9	0.86	A			
			Ce-141	pCi/L	107	110	0.97	A			
			Cr-51	pCi/L	325	339	0.96	A			
			Cs-134	pCi/L	114	126	0.90	A			
			Cs-137	pCi/L	144	150	0.96	A			
			Co-58	pCi/L	92.3	101	0.91	A			
			Mn-54	pCi/L	165	169	0.98	A			
			Fe-59	pCi/L	121	119	1.02	A			
			Zn-65	pCi/L	197	206	0.96	A			
			Co-60	pCi/L	190	197	0.96	A			
			June 2010	E7135-396	AP	Ce-141	pCi	88.4	91.6	0.97	A
						Cr-51	pCi	292	282	1.04	A
						Cs-134	pCi	101	105	0.96	A
						Cs-137	pCi	132	125	1.06	A
Co-58	pCi	87.3				84.0	1.04	A			
Mn-54	pCi	150				140	1.07	A			
Fe-59	pCi	105				98.6	1.06	A			
Zn-65	pCi	168				171	0.98	A			
Co-60	pCi	170	163	1.04	A						
June 2010	E7134-396	Charcoal	I-131	pCi	76.4	79.9	0.96	A			

**TABLE E-1 ANALYTICS ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM
TELEDYNE BROWN ENGINEERING, 2010
(PAGE 2 OF 3)**

Month/Year	Identification Number	Matrix	Nuclide	Units	Reported Value (a)	Known Value (b)	Ratio (c) TBE/Analytics	Evaluation (d)			
September 2010	E7229-396	Milk	Sr-89	pCi/L	85.0	92.8	0.92	A			
			Sr-90	pCi/L	12.6	14.7	0.86	A			
September 2010	E7230-396	Milk	I-131	pCi/L	80.2	94.1	0.85	A			
			Ce-141	pCi/L	130	130	1.00	A			
			Cr-51	pCi/L	235	234	1.00	A			
			Cs-134	pCi/L	83.2	93.0	0.89	A			
			Cs-137	pCi/L	95.1	94.5	1.01	A			
			Co-58	pCi/L	77.3	73.7	1.05	A			
			Mn-54	pCi/L	121	119	1.02	A			
			Fe-59	pCi/L	96.4	91.1	1.06	A			
			Zn-65	pCi/L	216	204	1.06	A			
			Co-60	pCi/L	172	171	1.01	A			
			September 2010	E7232-396	AP	Ce-141	pCi	122	119	1.03	A
						Cr-51	pCi	228	214	1.07	A
						Cs-134	pCi	79.9	85.3	0.94	A
						Cs-137	pCi	93.8	86.7	1.08	A
Co-58	pCi	71.5				67.6	1.06	A			
Mn-54	pCi	113				110	1.03	A			
Fe-59	pCi	73.8				83.6	0.88	A			
Zn-65	pCi	186				187	0.99	A			
September 2010	E7231-396	Charcoal	I-131	pCi/L	62.3	59.9	1.04	A			
December 2010	E7375-396	Milk	Sr-89	pCi/L	92.7	98.0	0.95	A			
			Sr-90	pCi/L	13.5	13.5	1.00	A			
December 2010	E7376-396	Milk	I-131	pCi/L	87.9	96.9	0.91	A			
			Ce-141	pCi/L	not provided by Analytics for this study						
			Cr-51	pCi/L	389	456	0.85	A			
			Cs-134	pCi/L	137	157	0.87	A			
			Cs-137	pCi/L	172	186	0.92	A			
			Co-58	pCi/L	84.3	90.2	0.93	A			
			Mn-54	pCi/L	120	120	1.00	A			
			Fe-59	pCi/L	134	131	1.02	A			
			Zn-65	pCi/L	162	174	0.93	A			
			Co-60	pCi/L	284	301	0.94	A			
			December 2010	E7378-396	AP	Ce-141	pCi	not provided by Analytics for this study			
						Cr-51	pCi	387	365	1.06	A
Cs-134	pCi	135				126	1.07	A			
Cs-137	pCi	157				149	1.05	A			
Co-58	pCi	73.6				72.3	1.02	A			
Mn-54	pCi	88.7				96	0.92	A			
Fe-59	pCi	127				105	1.21	W			
Zn-65	pCi	151				139	1.09	A			
Co-60	pCi	249	241	1.03	A						

TABLE E-1 ANALYTICS ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM
TELEDYNE BROWN ENGINEERING, 2010
(PAGE 3 OF 3)

Month/Year	Identification Number	Matrix	Nuclide	Units	Reported Value (a)	Known Value (b)	Ratio (c) TBE/Analytics	Evaluation (d)
December 2010	E7377-396	Charcoal	I-131	pCi	79.6	84.2	0.95	A

(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 based on TBE internal QC limits: A= Acceptable. Reported result falls within ratio limits of 0.80-1.20. W-Acceptable with warning. Reported result falls within 0.70-0.80 or 1.20-1.30. N = Not Acceptable. Reported result falls outside the ratio limits of < 0.70 and > 1.30.

TABLE E-2

**ERA ENVIRONMENTAL RADIOACTIVITY CROSS CHECK PROGRAM
TELEDYNE BROWN ENGINEERING, 2010**

(PAGE 1 OF 1)

Month/Year	Identification Number	Media	Nuclide	Units	Reported Value (a)	Known Value (b)	Control Limits	Evaluation (c)
May 2010	RAD-81	Water	Sr-89	pCi/L	64.4	60.4	48.6 - 68.2	A
			Sr-90	pCi/L	37.8	41.3	30.4 - 47.4	A
			Ba-133	pCi/L	66.4	65.9	54.9 - 72.5	A
			Cs-134	pCi/L	66.43	71.6	58.4 - 78.8	A
			Cs-137	pCi/L	137.33	146	131 - 163	A
			Co-60	pCi/L	83.33	84.5	76.0 - 95.3	A
			Zn-65	pCi/L	177	186	167 - 219	A
			Gr-A	pCi/L	26.37	32.9	16.9 - 42.6	A
			Gr-B	pCi/L	28.77	37.5	24.7 - 45.0	A
			I-131	pCi/L	26.27	26.4	21.9 - 31.1	A
			H-3	pCi/L	12967	12400	10800 - 13600	A
November 2010	RAD-83	Water	Sr-89	pCi/L	77.8	68.5	55.8 - 76.7	N (1)
			Sr-90	pCi/L	39.3	43.0	31.7 - 49.3	A
			Ba-133	pCi/L	70.3	68.9	57.5 - 75.8	A
			Cs-134	pCi/L	39.9	43.2	34.5 - 47.5	A
			Cs-137	pCi/L	117	123	111 - 138	A
			Co-60	pCi/L	53.5	53.4	48.1 - 61.3	A
			Zn-65	pCi/L	11.0	102	91.8 - 122	N (2)
			Gr-A	pCi/L	35.1	42.3	21.9 - 53.7	A
			Gr-B	pCi/L	35.5	36.6	24.0 - 44.2	A
			I-131	pCi/L	27.9	27.5	22.9 - 32.3	A
			H-3	pCi/L	13233	12900	11200 - 14200	A

(1) Sr-89 TBE to known ratio of 1.14 fell within acceptable range of $\pm 20\%$. No action required. NCR 10-09

(2) Zn-65 result of 111 was incorrectly reported as 11.0. No action required. NCR 10-09

(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) 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-3

DOE'S MIXED ANALYTE PERFORMANCE EVALUATION PROGRAM (MAPEP)
TELEDYNE BROWN ENGINEERING, 2010

(PAGE 1 OF 2)

Month/Year	Identification Number	Media	Nuclide	Units	Reported Value (a)	Known Value (b)	Acceptance Range	Evaluation (c)
March 2010	10-MaW22	Water	Cs-134	Bq/L	-0.0942		(1)	A
			Cs-137	Bq/L	58.5	60.6	42.4 - 78.8	A
			Co-57	Bq/L	27.2	28.3	19.8 - 36.8	A
			Co-60	Bq/L	0.0226		(1)	A
			H-3	Bq/L	104	90.8	63.6 - 118.0	A
			Mn-54	Bq/L	26.6	26.9	18.8 - 35.0	A
			Sr-90	Bq/L	0.1029		(1)	A
			Zn-65	Bq/L	42.0	40.7	28.5 - 52.9	A
	10-GrW22	Water	Gr-A	Bq/L	0.5173	0.676	0.00 - 1.352	A
			Gr-B	Bq/L	3.98	3.09	1.55 - 4.64	A
	10-MaS22	Soil	Cs-134	Bq/kg	665	733	513 - 953	A
			Cs-137	Bq/kg	800	779	545 - 1013	A
			Co-57	Bq/kg	508	522	365 - 679	A
			Co-60	Bq/kg	648	622	435 - 809	A
			Mn-54	Bq/kg	893	849	594 - 1104	A
			K-40	Bq/kg	597	559	391 - 727	A
			Sr-90	Bq/kg	221	288	202 - 374	W
			Zn-65	Bq/kg	-4.97		(1)	A
	10-RdF22	AP	Cs-134	Bq/sample	1.81	2.13	1.49 - 2.77	A
			Cs-137	Bq/sample	1.70	1.53	1.07 - 1.99	A
			Co-57	Bq/sample	0.0056		(1)	A
			Co-60	Bq/sample	2.65	2.473	1.731 - 3.215	A
			Mn-54	Bq/sample	3.70	3.02	2.11 - 3.93	W
			Sr-90	Bq/sample	0.0523		(1)	A
			Zn-65	Bq/sample	-0.0627		(1)	A
	10-GrF22	AP	Gr-A	Bq/sample	0.1533	0.0427	0.00 - 0.854	A
			Gr-B	Bq/sample	1.240	1.29	0.65 - 1.94	A
	10-RdV22	Vegetation	Cs-134	Bq/sample	4.48	4.39	3.07 - 5.71	A
			Cs-137	Bq/sample	3.43	3.06	2.14 - 3.98	A
			Co-57	Bq/sample	-0.0117		(1)	A
			Co-60	Bq/sample	3.55	3.27	2.29 - 4.25	A
			Mn-54	Bq/sample	0.007		(1)	A
			Sr-90	Bq/sample	-0.0002		(1)	A
Zn-65			Bq/sample	8.12	7.10	4.97 - 9.23	A	
September 2010	10-MaW23	Water	Cs-134	Bq/L	27.1	31.4	22.0 - 40.8	A
			Cs-137	Bq/L	41.8	44.2	30.9 - 57.5	A
			Co-57	Bq/L	33.2	36.0	25.2 - 46.8	A
			Co-60	Bq/L	26.5	28.3	19.8 - 36.8	A
			H-3	Bq/L	500	453.4	317.4 - 589.4	A
			Mn-54	Bq/L	0.024		(1)	A
			Sr-90	Bq/L	8.10	8.3	5.8 - 10.8	A
			Zn-65	Bq/L	30.8	31.0	21.7 - 40.3	A
	10-GrW23	Water	Gr-A	Bq/L	2.36	1.92	0.58 - 3.26	A
			Gr-B	Bq/L	6.37	4.39	2.20 - 6.59	A

**TABLE E-3 DOE'S MIXED ANALYTE PERFORMANCE EVALUATION PROGRAM (MAPEP)
TELEDYNE BROWN ENGINEERING, 2010
(PAGE 2 OF 2)**

Month/Year	Identification Number	Media	Nuclide	Units	Reported Value (a)	Known Value (b)	Acceptance Range	Evaluation (c)
September 2010	10-MaS23	Soil	Cs-134	Bq/kg	837	940	658 - 1222	A
			Cs-137	Bq/kg	680	670	469 - 871	A
			Co-57	Bq/kg	2.78		(1)	A
			Co-60	Bq/kg	350	343	240 - 446	A
			Mn-54	Bq/kg	853	820	574 - 1066	A
			K-40	Bq/kg	721	699	489 - 909	A
			Sr-90	Bq/kg	2.24		(1)	A
			Zn-65	Bq/kg	287	265	186 - 345	A
	10-RdF23	AP	Cs-134	Bq/sample	2.31	2.98	2.09 - 3.87	W
			Cs-137	Bq/sample	-0.025		(1)	A
			Co-57	Bq/sample	3.64	4.08	2.86 - 5.380	A
			Co-60	Bq/sample	2.81	2.92	2.04 - 3.80	A
			Mn-54	Bq/sample	3.19	3.18	2.23- 4.13	A
			Sr-90	Bq/sample	1.01	1.01	0.71 - 1.31	A
			Zn-65	Bq/sample	0.0310		(1)	A
	10-GrF23	AP	Gr-A	Bq/sample	0.004		(1)	A
			Gr-B	Bq/sample	0.473	0.50	0.25 - 0.75	A
	10-RdV23	Vegetation	Cs-134	Bq/sample	4.90	4.79	3.35 - 6.23	A
			Cs-137	Bq/sample	6.78	5.88	4.12 - 7.64	A
			Co-57	Bq/sample	10.2	8.27	5.79 - 10.75	W
			Co-60	Bq/sample	0.00		(1)	A
			Mn-54	Bq/sample	7.36	6.287	4.401 - 8.173	A
			Sr-90	Bq/sample	2.53	2.63	1.84 - 3.42	A
			Zn-65	Bq/sample	6.40	5.3900	3.77 - 7.01	A

(1) False positive test.

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

TABLE E-4

**ERA (a) STATISTICAL SUMMARY PROFICIENCY TESTING PROGRAM^a
ENVIRONMENTAL, INC., 2010**

(Page 1 of 1)

Lab Code	Date	Analysis	Concentration (pCi/L)			Acceptance
			Laboratory Result ^b	ERA Result ^c	Control Limits	
STW-1205	04/05/10	Sr-89	63.0 ± 5.7	60.4	48.6 - 68.2	Pass
STW-1205	04/05/10	Sr-90	37.4 ± 2.4	41.3	30.4 - 47.4	Pass
STW-1206	04/05/10	Ba-133	63.6 ± 3.3	65.9	54.9 - 72.5	Pass
STW-1206	04/05/10	Co-60	83.3 ± 2.9	84.5	76.0 - 95.3	Pass
STW-1206	04/05/10	Cs-134	71.0 ± 3.4	71.6	58.4 - 78.8	Pass
STW-1206	04/05/10	Cs-137	145.5 ± 5.1	146.0	131.0 - 163.0	Pass
STW-1206	04/05/10	Zn-65	194.9 ± 7.8	186.0	167.0 - 219.0	Pass
STW-1207	04/05/10	Gr. Alpha	26.5 ± 1.7	32.9	16.9 - 42.6	Pass
STW-1207	04/05/10	Gr. Beta	34.5 ± 1.6	37.5	24.7 - 45.0	Pass
STW-1208	04/05/10	I-131	22.7 ± 0.8	26.4	21.9 - 31.1	Pass
STW-1210	04/05/10	H-3	12955 ± 332	12400.0	10800 - 13600	Pass
STW-1224	10/04/10	Sr-89	65.3 ± 5.7	68.5	55.8 - 76.7	Pass
STW-1224	10/04/10	Sr-90	39.9 ± 2.3	43.0	31.7 - 49.3	Pass
STW-1225	10/04/10	Ba-133	67.2 ± 4.3	68.9	57.5 - 75.8	Pass
STW-1225	10/04/10	Co-60	53.2 ± 3.3	53.4	48.1 - 61.3	Pass
STW-1225	10/04/10	Cs-134	47.3 ± 5.1	43.2	34.5 - 47.5	Pass
STW-1225	10/04/10	Cs-137	118.0 ± 5.9	123.0	111.0 - 138.0	Pass
STW-1225	10/04/10	Zn-65	107.0 ± 8.7	102.0	91.8 - 122.0	Pass
STW-1226	10/04/10	Gr. Alpha	30.7 ± 2.9	42.3	21.9 - 53.7	Pass
STW-1226	10/04/10	Gr. Beta	32.7 ± 0.8	36.6	24.0 - 44.2	Pass
STW-1227	10/04/10	I-131	28.6 ± 1.1	27.5	22.9 - 32.3	Pass
STW-1229	10/04/10	H-3	13682 ± 352	12900.0	11200 - 14200	Pass

^a Results obtained by Environmental, Inc., Midwest Laboratory as a participant in the crosscheck program for proficiency testing in drinking water conducted by Environmental Resources Associates (ERA).

^b Unless otherwise indicated, the laboratory result is given as the mean ± standard deviation for three determinations.

^c Results are presented as the known values, expected laboratory precision (1 sigma, 1 determination) and control limits as provided by ERA.

TABLE E-5

DOE'S MIXED ANALYTE PERFORMANCE EVALUATION PROGRAM (MAPEP)^a
ENVIRONMENTAL, INC., 2010

(Page 1 of 3)

Lab Code ^c	Date	Analysis	Laboratory result	Concentration ^b		Acceptance
				Known Activity	Control Limits ^d	
STVE-1199	03/01/10	Co-57	0.01 ± 0.03	0.00	-	Pass
STVE-1199	03/01/10	Co-60	3.39 ± 0.12	3.27	2.29 - 4.25	Pass
STVE-1199	03/01/10	Cs-134	4.74 ± 0.15	4.39	3.07 - 5.71	Pass
STVE-1199	03/01/10	Cs-137	3.32 ± 0.17	3.06	2.14 - 3.98	Pass
STVE-1199	03/01/10	Mn-54	0.01 ± 0.05	0.00	-	Pass
STVE-1199	03/01/10	Zn-65	8.03 ± 0.33	7.10	4.97 - 9.23	Pass
STW-1200	03/01/10	Gr. Alpha	0.40 ± 0.05	0.68	0.00 - 1.35	Pass
STW-1200	03/01/10	Gr. Beta	3.03 ± 0.07	3.09	1.55 - 4.64	Pass
STW-1201	03/01/10	Co-57	28.90 ± 0.40	28.30	19.80 - 36.80	Pass
STW-1201	03/01/10	Co-60	0.06 ± 0.05	0.00	-	Pass
STW-1201	03/01/10	Cs-134	-0.03 ± 0.09	0.00	-	Pass
STW-1201	03/01/10	Cs-137	60.60 ± 0.60	60.60	42.40 - 78.80	Pass
STW-1201	03/01/10	H-3	93.20 ± 18.30	90.80	63.60 - 118.00	Pass
STW-1201	03/01/10	Mn-54	27.80 ± 0.40	26.90	18.80 - 35.00	Pass
STW-1201	03/01/10	Sr-90	-0.10 ± 0.60	0.00	-	Pass
STW-1201	03/01/10	Zn-65	42.70 ± 0.80	40.70	28.50 - 52.90	Pass
STSO-1202	03/01/10	Co-57	520.00 ± 10.80	522.00	365.00 - 679.00	Pass
STSO-1202	03/01/10	Co-60	599.10 ± 2.80	622.00	435.00 - 809.00	Pass
STSO-1202	03/01/10	Cs-134	666.10 ± 4.70	733.00	513.00 - 953.00	Pass
STSO-1202	03/01/10	Cs-137	774.40 ± 4.50	779.00	545.00 - 1013.00	Pass
STSO-1202	03/01/10	K-40	562.00 ± 15.30	559.00	391.00 - 727.00	Pass
STSO-1202	03/01/10	Mn-54	866.20 ± 4.60	849.00	594.00 - 1104.00	Pass
STSO-1202	03/01/10	Sr-90	225.50 ± 11.80	288.00	202.00 - 374.00	Pass
STSO-1202	03/01/10	Zn-65	-1.23 ± 1.96	0.00	-	Pass
STAP-1203	03/01/10	Co-57	0.01 ± 0.02	0.00	-	Pass
STAP-1203	03/01/10	Co-60	2.63 ± 0.19	2.47	1.73 - 3.22	Pass
STAP-1203	03/01/10	Cs-134	2.21 ± 0.34	2.13	1.49 - 2.77	Pass
STAP-1203	03/01/10	Cs-137	1.66 ± 0.22	1.53	1.07 - 1.99	Pass
STAP-1203	03/01/10	Mn-54	3.42 ± 0.26	3.02	2.11 - 3.93	Pass
STAP-1203	03/01/10	Sr-90	0.02 ± 0.06	0.00	-	Pass
STAP-1203	03/01/10	Zn-65	-0.05 ± 0.11	0.00	-	Pass
STAP-1204	03/01/10	Gr. Alpha	0.13 ± 0.03	0.43	0.00 - 0.85	Pass
STAP-1204	03/01/10	Gr. Beta	1.46 ± 0.07	1.29	0.65 - 1.94	Pass

TABLE E-5

DOE'S MIXED ANALYTE PERFORMANCE EVALUATION PROGRAM (MAPEP)^a
ENVIRONMENTAL, INC., 2010

(Page 2 of 3)

Lab Code ^c	Date	Analysis	Laboratory result	Concentration ^b		Acceptance
				Known Activity	Control Limits ^d	
STW-1211	08/01/10	Co-57	36.40 ± 4.80	36.00	25.20 - 46.80	Pass
STW-1211	08/01/10	Co-60	28.30 ± 1.00	28.30	19.80 - 36.80	Pass
STW-1211	08/01/10	Cs-134	29.30 ± 2.10	31.40	22.00 - 40.80	Pass
STW-1211	08/01/10	Cs-137	44.60 ± 1.80	44.20	30.90 - 57.50	Pass
STW-1211	08/01/10	H-3	503.60 ± 12.80	453.40	317.40 - 589.40	Pass
STW-1211	08/01/10	K-40	38.50 ± 2.50	38.90	27.20 - 50.60	Pass
STW-1211	08/01/10	Mn-54	0.10 ± 0.30	0.00	-	Pass
STW-1211	08/01/10	Sr-90	9.20 ± 1.30	8.30	5.80 - 10.80	Pass
STW-1211	08/01/10	Zn-65	32.80 ± 3.00	31.00	21.70 - 40.30	Pass
STW-1212	08/01/10	Gr. Alpha	1.54 ± 0.09	1.92	0.58 - 3.26	Pass
STW-1212	08/01/10	Gr. Beta	4.13 ± 0.15	4.39	2.20 - 6.59	Pass
STVE-1213	08/01/10	Co-57	9.60 ± 0.54	8.27	5.79 - 10.75	Pass
STVE-1213	08/01/10	Co-60	0.05 ± 0.08	0.00	-	Pass
STVE-1213	08/01/10	Cs-134	4.83 ± 0.26	4.79	3.35 - 6.23	Pass
STVE-1213	08/01/10	Cs-137	6.45 ± 0.66	5.88	4.12 - 7.64	Pass
STVE-1213	08/01/10	Mn-54	7.12 ± 0.66	6.29	4.40 - 8.17	Pass
STVE-1213	08/01/10	Zn-65	6.05 ± 0.74	5.39	3.77 - 7.01	Pass
STSO-1214	08/01/10	Co-57	0.10 ± 1.60	0.00	-	Pass
STSO-1214	08/01/10	Co-60	370.00 ± 6.00	343.00	240.00 - 446.00	Pass
STSO-1214	08/01/10	Cs-134	1005.00 ± 21.00	940.00	658.00 - 1222.00	Pass
STSO-1214	08/01/10	Cs-137	755.00 ± 15.00	670.00	469.00 - 871.00	Pass
STSO-1214	08/01/10	K-40	783.00 ± 54.00	699.00	489.00 - 909.00	Pass
STSO-1214	08/01/10	Mn-54	942.00 ± 15.00	820.00	574.00 - 1066.00	Pass
STSO-1214	08/01/10	Sr-90	3.50 ± 8.00	0.00	-	Pass
STSO-1214	08/01/10	Zn-65	310.00 ± 18.00	265.00	186.00 - 345.00	Pass
STAP-1215	08/01/10	Co-57	4.47 ± 0.21	4.08	2.86 - 5.30	Pass
STAP-1215	08/01/10	Co-60	3.15 ± 0.30	2.92	2.04 - 3.80	Pass
STAP-1215	08/01/10	Cs-134	3.03 ± 0.17	2.98	2.09 - 3.87	Pass
STAP-1215	08/01/10	Cs-137	0.01 ± 0.05	0.00	-	Pass
STAP-1215	08/01/10	Mn-54	3.69 ± 0.39	3.18	2.23 - 4.13	Pass
STAP-1215	08/01/10	Sr-90	1.00 ± 0.12	1.01	0.71 - 1.31	Pass
STAP-1215	08/01/10	Zn-65	0.03 ± 0.15	0.00	-	Pass

TABLE E-5

DOE'S MIXED ANALYTE PERFORMANCE EVALUATION PROGRAM (MAPEP)^a
ENVIRONMENTAL, INC., 2010

(Page 3 of 3)

Lab Code ^c	Date	Analysis	Laboratory result	Concentration ^b		Acceptance
				Known Activity	Control Limits ^d	
STAP-1216	08/01/10	Gr. Alpha	0.01 ± 0.01	0.00	-	Pass
STAP-1216	08/01/10	Gr. Beta	0.54 ± 0.05	0.50	0.25 - 0.75	Pass

^a Results obtained by Environmental, Inc., Midwest Laboratory as a participant in the Department of Energy's Mixed Analyte Performance Evaluation Program, Idaho Operations office, Idaho Falls, Idaho

^b Results are reported in units of Bq/kg (soil), Bq/L (water) or Bq/total sample (filters, vegetation).

^c Laboratory codes as follows: STW (water), STAP (air filter), STSO (soil), STVE (vegetation).

^d MAPEP results are presented as the known values and expected laboratory precision (1 sigma, 1 determination) and control limits as defined by the MAPEP.

^e Included in the testing series as a "false positive".

OCGS REMP Sample Schedule / Effort Table

Year 2010

Note: Yellow fields are the only ones that can be changed.

Worksheet Password is REMP.

Sampling	Sample	Tentative	Scheduled	Actual	Shipping	Sampled in		
Period	Sample Type	Frequency	Schedule	Collection Date	Late Date	Collection Date	Date	Compliance
						26-Oct		
Growing Season	Vegetation	Monthly	23-Jun, (Wed)	13-Jul, (Tue)	20-Jul, (Tue)	29-Jun	29-Jun	YES
Growing Season	Vegetation	Monthly	21-Jul, (Wed)	6-Mar, (Sun)	13-Mar, (Sun)	27-Jul	28-Jul	YES
Growing Season	Vegetation	Monthly	18-Aug, (Wed)	27-Aug, (Fri)	3-Sep, (Fri)			*
Growing Season	Vegetation	Monthly	15-Sep, (Wed)	*	*			*
Growing Season	Vegetation	Monthly	13-Oct, (Wed)	*	*			*

**** Monthly vegetation is when available as per ODCM regs.**

APPENDIX F

ANNUAL RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM REPORT (ARGPPR)

Docket No: 50-219

OYSTER CREEK GENERATING STATION UNIT 1

Annual Radiological
Groundwater Protection Program Report

1 January Through 31 December 2010

Prepared By

Teledyne Brown Engineering
Environmental Services

ExelonSM

Nuclear

Oyster Creek Generating Station
Forked River, NJ 08731

April 2011

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Appendix A Location Designation

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Table A-1 Radiological Groundwater Protection Program – Sampling Locations, Oyster Creek Generating Station, 2010

Figures

Figure A-1 Sampling locations – Selected Cohansey and Cape May Formation Wells, Oyster Creek Generating Station, 2010

Security-Related Information: Detailed maps of the Oyster Creek Generating Station have been withheld from public disclosure under 10 CFR 2.390 and N.J.S.A. 47:1A-1.1

Appendix B Data Tables

Tables

Table B-I.1 Concentrations of Tritium, Strontium-90, Gross Alpha and Gross Beta in Groundwater Samples Collected as Part of the Radiological Groundwater Protection Program, Oyster Creek Generating Station, 2010.

Table B-I.2 Concentrations of Gamma Emitters in Groundwater Samples Collected as Part of the Radiological Groundwater Protection Program, Oyster Creek Generating Station, 2010.

Table B-I.3 Concentrations of “Hard-To-Detects” in Groundwater Samples Collected as Part of the Radiological Groundwater Protection Program, Oyster Creek Generating Station, 2010.

Table B-II.1 Concentrations of Tritium, Strontium-90, Gross Alpha and Gross Beta in Surface Water Samples Collected as Part of the Radiological Groundwater Protection Program, Oyster Creek Generating Station, 2010.

Table B-II.2 Concentrations of Gamma Emitters in Surface Water Samples Collected as Part of the Radiological Groundwater Protection Program, Oyster Creek Generating Station, 2010.

Table B-II.3 Concentrations of “Hard-To-Detects” in Surface Water Samples Collected as Part of the Radiological Groundwater Protection Program, Oyster Creek Generating Station, 2010.

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I. Summary and Conclusions

This report on the Radiological Groundwater Protection Program (RGPP) conducted for the Oyster Creek Generating Station (OCGS) by Exelon Generation Company LLC (Exelon) covers the period 01 January 2010 through 31 December 2010.

This report covers groundwater and surface water samples collected from the environment, both on and off station property in 2010. Three thousand two hundred and twenty analyses were performed on one thousand eight hundred and nine samples from 62 locations.

There were three inadvertent releases of contaminated water into the groundwater during 2009 that resulted in two plumes of tritiated groundwater. The largest plume is located west of the turbine building and is monitored via a series of monitoring wells. The small plume east of the reactor building is in a location where site commodities don't allow a well to be placed directly into the plume. New wells were installed near the vault to evaluate and monitor the plume.

Gamma-emitting radionuclides were only identified in one sample. A sample obtained from vault 1, located at the southeast corner of the reactor building inside the radiologically controlled area, identified Cs-137 and Co-60. This sample was scooped from a puddle in the bottom of the vault and a lot of sediment was obtained with the water sample. Gamma-emitting radionuclides were not detected in any of the groundwater well samples or surface water samples.

In the case of tritium, Exelon specified that its laboratories achieve a lower limit of detection 100 times lower than the drinking water limit specified by the United States Environmental Protection Agency (USEPA) (200 pCi/l versus 20,000 pCi/l).

As expected, tritium was detected in groundwater samples. 2010 Tritium concentrations varied from <200 to 1,280,000 pCi/l. The well with the highest concentration was MW-56I. The flow of groundwater is in the direction of the intake and discharge canals.

No detectable tritium (greater than the MDC) was found in surface water samples collected from onsite and offsite monitoring locations during 2010.

Strontium-89/90 was not detected in any groundwater or surface water sample during 2010.

Gross Alpha and Gross Beta analyses in the dissolved and suspended fractions were performed on groundwater and surface water samples during the second sampling in 2010. Since this is the first year these analyses were performed as part of the RGPP for Oyster Creek, these results will be utilized to establish baseline levels.

There were four samples taken from three surface water locations. Gross Alpha (dissolved and suspended) and Gross Beta (suspended) was not detected in any of the samples. Gross Beta (dissolved) was detected in all four samples and ranged from 419 to 507 pCi/L.

There were 49 samples taken from 44 groundwater well locations. Gross Alpha (dissolved) was detected in 9 samples and ranged from 3.2 to 10.1 pCi/L. Gross Alpha (suspended) was detected in 20 samples and ranged from 1.1 to 146 pCi/L. Gross Beta (dissolved) was detected in 44 samples and ranged from 2.1 to 33 pCi/L. Gross Beta (suspended) was detected in 18 samples and ranged from 1.9 to 26.6 pCi/L with one sample at 302 pCi/L.

There was one sample taken from the W-73 batch tank. Gross Alpha (dissolved) and Gross Beta (dissolved) was not detected. Gross Alpha (suspended) was detected at 32.7 pCi/L and Gross Beta (suspended) was detected at 91.5 pCi/L.

“Hard-To-Detect” analyses were performed on a select group of groundwater and surface water locations to establish baseline levels. The analyses for groundwater included Fe-55, Ni-63, Am-241, Cm-242, Cm-243/244, Pu-238, Pu-239/240, U-234, U-235, and U-238. The analyses for surface water included Fe-55, Ni-63, Am-241, Cm-242, Cm-243/244, Pu-238, Pu-239/240, U-234, U-235 and U-238. The isotopes of U-234 and U-238 were detected in four of six groundwater monitoring locations. The U-234 concentrations ranged from 0.2 to 0.8 pCi/L and the U-238 concentrations ranged from 0.3 to 0.6 pCi/L. The levels detected are considered background.

II. Introduction

The Oyster Creek Nuclear Generating Station consists of a single boiling water reactor (BWR) and turbine generator capable of producing 650 megawatts of electricity. The Station operates under Nuclear Regulatory Commission (NRC) renewed facility operating license number DPR-16. Brackish water from Barnegat Bay is supplied to the circulating water system. The circulating water system is designed to supply a continuous flow of water from Barnegat Bay through the plant to remove the waste heat released by the power cycle in the Main Condenser. The circulating water system comprised of the intake canal from Barnegat Bay to the plant, the Main Condenser Circulating Water System, the dilution plant, and the discharge canal to Barnegat Bay. The dilution plant portion of the system minimizes the adverse effects of hot discharge water on aquatic life in the discharge canal and Barnegat Bay to meet the conditions of the Oyster Creek New Jersey Pollutant Discharge Elimination system (NJPDES) Permit No. NJ0005550. Approximately 1 million gallons per minute of water are withdrawn from the intake canal for dilution and station use and returned to the discharge canal.

The Station is located in the Atlantic Coastal Plain physiographic province. Topography in the region of the Station is a slightly undulating coastal plain having low relief. The land surface gradually rises from sea level at Barnegat Bay, which is located east of the Station, to approximately 50 feet above mean sea level (AMSL) 2 miles inland. This region of the coastal plain has numerous tidal marshes and is incised by easterly flowing streams and creeks. Elevations at the Station property west of Route 9 range from approximately 0 to 15 feet AMSL immediately adjacent to the intake and discharge canals to slightly more than 30 feet AMSL in the northwest portion of the Station property. The 132-acre developed portion of the Site located within the "horseshoe" formed by the intake and discharge canals west of Route 9 has an approximate average elevation of 20 feet AMSL. In the immediate vicinity of the intake and discharge canals, the Station property slopes steeply down to the canal. The average elevation of the surface water level in the intake and discharge canals is approximately 1-foot AMSL. The remaining 637-acre portion of the Station located east of Route 9 is primarily vegetated and undeveloped. The ground surface is relatively level except for the steep slopes at areas adjacent to the intake and discharge canals.

The three shallowest stratigraphic units in the vicinity of the Oyster Creek area in descending order are the Cape May Formation, the Cohansey Formation, and the Kirkwood Formation. Some of the Station structures are constructed to depths of approximately 50 feet below ground surface (bgs). Excavations were completed from grade, through the fill, Cape May Formation, Upper Clay, and into the Cohansey Formation during construction. Consequently, the bottoms of

some Station structures are completed within the Cohansey Formation and some structures breach the Upper Clay.

The Cape May Formation regionally has an average thickness of 40 feet and at OCGS, the Cape May is described as a light gray to tan, medium- to fine-grained sand, with trace to some silt and occasional coarse sand. It is generally poorly compacted. The Cape May Formation varies from 0 to 21 feet in thickness based on historical boring logs. The variation principally is due to the varying amount of material excavated and replaced by fill during Station construction. When present, the thickness of the Cape May generally ranges from 15 to 20 feet thick. The base of the Cape May generally is defined by the presence of a dark clay unit referred to as the Upper Clay unit. The Upper Clay is a stiff to hard, gray, plastic organic clay containing inclusions (also described as lenses or partings) of dense fine sand with trace to some organic silt. The deposits of fine sand within the Upper Clay layer have high relative densities and occur as lenses or inclusions.

The Cohansey Formation is primarily composed of a light-colored, fine- to very coarse-grained quartzose sand with lenses of silt and clay. Although most borings at the Station do not penetrate the entire Cohansey Formation, this formation appears to be approximately 60 to 80 feet thick at OCGS. A clay sequence, referred to at the Station as the "Lower Clay", marks the base of the Cohansey, which generally is present to approximately 90 to 100 feet bgs. The lower clay is a dense gray medium- to fine-grained sand containing trace to some organic silt and layers or inclusions of very stiff to hard gray organic clay. The thickness of the lower clay is estimated to be approximately 10 to 20 feet in the vicinity of OCGS.

The Cohansey Formation is underlain by the Kirkwood Formation which consists of several stratigraphic units. The Kirkwood Formation is described as a medium- to fine-grained sand with trace silt. The thickness of this formation beneath the Station is unknown. The south domestic supply well terminates in the Kirkwood at a depth of 310 feet bgs. The Kirkwood thickness in Ocean County ranges from approximately 300 to 400 feet.

This report covers those analyses performed by Teledyne Brown Engineering (TBE) and Environmental Inc. (Midwest Labs) on samples collected in 2010.

A. Objectives of the RGPP

The long-term objectives of the RGPP are as follows:

- Ensure that the site characterization of geology and hydrology provides an understanding of predominant ground water gradients based upon current site conditions.

- Identify site risk based on plant design and work practices
- Evaluate all SSCs that contain or could contain licensed material and for which there is a credible mechanism for the licensed material to reach groundwater.
 - Evaluate work practices that involve licensed material and for which there is a credible mechanism for the licensed material to reach groundwater.
- Perform on-site monitoring to ensure timely detection of inadvertent radiological releases to ground water.
 - Understand background concentrations of radioactive analytes outside of the REMP, as required.
 - Evaluate return/re-use of previously discharged radioactive effluents in gaseous or liquid effluents that are returned from the environment to the operating nuclear power facility.
 - Ensure controls are established for the selection, installation and retirement of monitoring wells.
 - Perform remediation protocols to prevent migration of licensed material off-site and to minimize decommissioning impacts.
 - Ensure that records of leaks, spills, remediation efforts are retained and retrievable to meet the requirements of 10 CFR 50.75(g).
 - Ensure periodic communications are held on the RGPP with the designated State/Local officials.
 - Ensure timely verbal and written reporting occurs if there is an inadvertent release of licensed materials to the soil, groundwater or surface water.
- Document and report all applicable RGPP data.
- Identify and resolve deficiencies via the Corrective Action Process as delineated in LS-AA-120 "Issue Identification and Screening Process".
- Perform program oversight to ensure effective implementation of the voluntary RGPP.

B. Implementation of the Objectives

The objectives identified have been implemented at the Oyster Creek Generating Station through compliance with approved procedures EN-AA-408-4000, Radiological Groundwater Protection Program Implementation and site specific procedure EN-OC-408-4160, RGPP Reference Material for Oyster Creek Generating Station.

C. Program Description

Samples for the OCGS site were collected for Exelon by on-site personnel and Normandeau Associates, Inc. This section describes the general collection methods used to obtain environmental samples for the OCGS RGPP in 2010. Sample locations can be found in Table A-1, Appendix A.

1. Sample Collection

Samples of water are collected, managed, transported and analyzed in accordance with approved procedures. Both groundwater and surface water are collected. Sample locations, sample collection frequencies and analytical frequencies are controlled in accordance with approved station procedures. Contractor and/or station personnel are trained in the collection, preservation management, and shipment of samples, as well as in documentation of sampling events.

2. Sample Analysis

Samples are analyzed in accordance with approved procedures that are based on industry standards.

3. Quality Control

Analytical laboratories are subject to internal quality assurance programs, industry cross-check programs, nuclear industry audits, as well as being certified by the State of New Jersey.

4. Data Interpretation

Station personnel review and evaluate all analytical data deliverables as data is received. Analytical data results are reviewed by both station personnel and independent consultants, including a hydrogeologist, for adverse trends or changes to hydrogeologic conditions.

D. Characteristics of Tritium (H-3)

Tritium (chemical symbol H-3) is a radioactive isotope of hydrogen. The most common form of tritium is tritium oxide, which is also called "tritiated water." The chemical properties of tritium are essentially those of ordinary hydrogen.

Tritiated water behaves the same as ordinary water in both the environment and the body. Tritium can be taken into the body by drinking water, breathing air, eating food, or absorption through the skin. Once tritium enters the body, it disperses quickly and is uniformly distributed throughout the body. Tritium is excreted primarily through urine with a clearance rate characterized by an effective biological half-life of about 10 days.

Tritium is produced naturally in the upper atmosphere when cosmic rays strike air molecules. Tritium is also produced during nuclear weapons explosions, as a by-product in reactors producing electricity, and in special production reactors. Also, tritium was released into the atmosphere from Chernobyl in 1986. Like normal water, tritiated water is colorless and odorless. Tritiated water behaves chemically and physically like non-tritiated water in the subsurface, and therefore tritiated water will travel at the same velocity as the average groundwater velocity.

Tritium has a half-life of approximately 12.3 years. It decays spontaneously to helium-3 (He-3). This radioactive decay releases a beta particle (18.6 keV low-energy electron). The radioactive decay of tritium is the source of the health risk from exposure to tritium. Tritium is one of the least dangerous radionuclides because it emits very weak radiation and leaves the body relatively quickly. Since tritium is almost always found as water, it goes directly into soft tissues and organs. The associated dose to these tissues is generally uniform and is dependent on the water content of the specific tissue.

III. Program Description

A. Sample Analysis

This section describes the general analytical methodologies used by TBE to analyze the environmental samples for radioactivity for the Oyster Creek Generating Station RGPP in 2010. The sampling frequencies are increased if activity is detected.

In order to achieve the stated objectives, the current program includes the following analyses for groundwater and surface water:

1. Gamma emitters
2. Gross strontium, Strontium-89 and Strontium-90
3. Tritium
4. Gross Alpha, Dissolved and Suspended and Gross Beta, Dissolved and Suspended
5. Selected transuranics
6. Fe-55
7. Ni-63

B. Data Interpretation

The radiological data collected prior to Oyster Creek Generating Station becoming operational, as well as background data from publicly available databases, were used as a baseline with which these operational data were compared. For the purpose of this report, Oyster Creek Generating Station was considered operational at initial criticality. Several factors were important in the interpretation of the data:

1. Lower Limit of Detection and Minimum Detectable Concentration

The lower limit of detection (LLD) is 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 is intended as a before the fact estimate of a system (including instrumentation, procedure and sample type) and not as an after the fact criterion for the presence of activity. All analyses were designed to achieve the required OCGS detection capabilities for environmental sample analysis.

The minimum detectable concentration (MDC) is 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 as an after the fact estimate

of the presence of activity.

2. Laboratory Measurements Uncertainty

The estimated uncertainty in measurement of tritium in environmental samples is frequently on the order of 50% of the measurement value.

Statistically, the exact value of a measurement is expressed as a range with a stated level of confidence. The convention is to report results with a 95% level of confidence. The uncertainty comes from calibration standards, sample volume or weight measurements, sampling uncertainty and other factors. Exelon reports the uncertainty of a measurement created by statistical process (counting error) as well as all sources of error (Total Propagated Uncertainty or TPU). Each result has two values calculated. Exelon reports the TPU by following the result with plus or minus (\pm) the estimated sample standard deviation, as TPU, that is obtained by propagating all sources of analytical uncertainty in measurements.

Analytical uncertainties are reported at the 95% confidence level.

C. Background Analysis

1. Background Concentrations of Tritium

The purpose of the following discussion is to summarize background measurements of tritium in various media performed by others. Additional detail may be found by consulting references.

a. Tritium Production

Tritium is created in the environment from naturally occurring processes both cosmic and subterranean, as well as from anthropogenic (i.e., man-made) sources. In the upper atmosphere, "cosmogenic" tritium is produced from the bombardment of stable nuclides and combines with oxygen to form tritiated water, which will then enter the hydrologic cycle. Below ground, "lithogenic" tritium is produced by the bombardment of natural lithium present in crystalline rocks by neutrons produced by the radioactive decay of naturally abundant uranium and thorium. Lithogenic production of tritium is usually negligible compared to other sources due to the limited abundance of lithium in rock. The lithogenic

tritium is introduced directly to groundwater.

A major anthropogenic source of tritium and strontium-90 comes from the former atmospheric testing of thermonuclear weapons. Levels of tritium in precipitation increased significantly during the 1950s and peaked in 1963 with the signing of the limited test ban treaty. The Canadian heavy water nuclear power reactors, other commercial power reactors, nuclear research and weapons production continue to influence tritium concentrations in the environment. Also, tritium was released into the atmosphere from Chernobyl in 1986.

b. Precipitation Data

Precipitation samples are routinely collected at stations around the world for the analysis of tritium and other radionuclides. One publicly available database that provides tritium concentrations in precipitation is the USEPA's RadNet database. RadNet provides tritium precipitation concentration data for samples collected at stations throughout the U.S. from 1978 up to and including 1996. Tritium concentrations in precipitation in New Jersey from 1978 through 1996 have ranged from 600 pCi/l in 1979 to 0 pCi/l in 1996, with an average of 185 pCi/l. Tritium concentrations in wells may still be above the 200 pCi/l detection limit from the external causes described above. Water from previous years and decades is naturally captured in groundwater, so some well water sources today are affected by the surface water from the 1960s that was elevated in tritium.

c. Surface Water Data

Tritium concentrations are routinely measured in surface water bodies, including Oyster Creek and the Delaware River. New Jersey surface water data between 1978 and 1998 averaged 185 pCi/l.

The USEPA RadNet surface water data typically has a reported 'Combined Standard Uncertainty' of 2 standard deviations. This corresponds to a ± 36 to ± 100 pCi/l confidence bound on each given reported measurement so that the typical surface water background data provided by

RadNet may be subject to measurement uncertainty of up to 100 pCi/l.

The radio-analytical laboratory counts tritium results to an Exelon specified LLD of 200 pCi/l with a typical uncertainty of ± 100 pCi/l. Therefore, sample results reported by TBE near this LLD can not be distinguished from natural background concentrations in surface water.

IV. Results and Discussion

A. Program Exceptions

1. Sample Anomalies

There are no samples anomalies in 2010.

2. Missed Samples

Exelon maintains a Radiological Groundwater Protection Program (RGPP) as part of the nuclear industry's voluntary groundwater protection initiative as described in NEI 07-07. As part of this program, samples are obtained routinely from monitoring wells and surface waters at Oyster Creek based on the frequencies outlined in station procedures. The following samples were not obtained as required by procedure:

SW-3 Fire Pond tritium for 4Q10
W-1A gamma for 2010
W-2B gamma for 2010
W-4A gamma for 2010
W-4B gamma for 2010
Domestic Water South gamma for 2010
Domestic Water North gamma for 2010
MW-51 Gross Alpha, Gross Beta, Strontium-89/90 for 2010
MW-61I Gross Alpha, Gross Beta, Strontium-89/90 for 2010
MW-15K-1A Select Transuranics for 2010
MW-51 Select Transuranics for 2010
MW-54 Select Transuranics for 2010
MW-61I Select Transuranics for 2010
MW-64 Select Transuranics for 2010

Immediate actions taken:

Validated that the samples were missed taking into account various procedure revision implementation dates. Confirmed with the Exelon RGPP vendor laboratory (Teledyne) that samples were not received. Confirmed that the annual samples were last obtained in 2009. Samples were obtained and analyzed upon discovery of the missed samples.

3. LLDs Not Met

Required LLDs for Surface and Groundwater

Isotope	pCi/liter
H-3	200
Mn-54	15
Co-58	15
Fe-59	30
Co-60	15
Zn-65	30
Nb-95	15
Zr-95	30
I-131	15
Cs-134	15
Cs-137	18
Ba-140	60
La-140	15

Indicated LLDs for shorter lived radionuclides were not met due to a time lag between taking the samples and analyzing the samples as indicated on table B-I.2 and B-II.2.

B. Groundwater Results

Samples were collected from on-site locations in accordance with the station radiological groundwater protection program. As reported in CRA's 2006 Hydrogeologic Investigation Report, groundwater flow in the vicinity of the Torus Water Storage Tank and the Condensate Storage Tank is towards the intake and discharge canals.

Tritium

Samples from 32 locations were analyzed for tritium activity (Table

B-I.1, Appendix B). Tritium was detected in 409 of 745 samples. The values ranged from < 200 to 1,280,000 pCi/l. The well with the highest concentration was MW-56I (Table B-I.1, Appendix B).

Strontium

Strontium-90 was not detected in any location sampled in 2010. (Table B-I.1, Appendix B)

Gross Alpha and Gross Beta (dissolved and suspended)

Gross Alpha and Gross Beta analyses in the dissolved and suspended fractions were performed on groundwater samples during the second sampling in 2010.

There were 49 samples taken from 44 groundwater well locations. Gross Alpha (dissolved) was detected in 9 samples and ranged from 3.2 to 10.1 pCi/L. Gross Alpha (suspended) was detected in 20 samples and ranged from 1.1 to 146 pCi/L. Gross Beta (dissolved) was detected in 44 samples and ranged from 2.1 to 33 pCi/L. Gross Beta (suspended) was detected in 18 samples and ranged from 1.9 to 26.6 pCi/L with one sample at 302 pCi/L.

There was one sample taken from the W-73 batch tank. Gross Alpha (dissolved) and Gross Beta (dissolved) was not detected. Gross Alpha (suspended) was detected at 32.7 pCi/L and Gross Beta (suspended) was detected at 91.5 pCi/L (Table B-I.1, Appendix B).

Gamma Emitters

Gamma-emitting radionuclides were only identified in one sample. A sample obtained from vault 1, located at the southeast corner of the reactor building inside the radiologically controlled area, identified Cs-137 and Co-60. This sample was scooped from a puddle in the bottom of the vault and a lot of sediment was obtained with the water sample.

No other gamma emitting nuclides, other than naturally occurring potassium-40, were detected in any of the samples analyzed during 2010 (Table B-I.2, Appendix B).

"Hard-To-Detect"

"Hard-To-Detect" analyses were performed on a select group of groundwater locations to establish background levels. The analyses included Fe-55, Ni-63, Am-241, Cm-242, Cm-243/244, Pu-238, and Pu-239/240. "Hard-to-detects" were not identified in any of the groundwater samples.

"Hard-To-Detect" analyses were performed on one sample of W-73 batch tank. The analyses included Fe-55, Ni-63, Am-241, Cm-242, Cm-243/244, Pu-238, Pu-239/240, U-234, U-235, and U-238. The isotopes of U-234 and U-238 were detected at concentrations of 0.2 pCi/L and 0.3 pCi/L respectively. The concentrations detected are considered background due to naturally occurring U-234 and U-238 (Table B-I.3, Appendix B).

C. Surface Water Results

Samples were collected from on-site locations in accordance with the station radiological groundwater protection program. Analytical results and anomalies are discussed below.

Tritium

Samples from four locations were analyzed for tritium activity (Table B-II.1, Appendix B). No detectable tritium (greater than the LLD) was found in any surface water samples collected from onsite and offsite monitoring locations.

Strontium

Strontium-90 was not detected in any location sampled in 2010. (Table B-II.1, Appendix B)

Gross Alpha and Gross Beta (dissolved and suspended)

Gross Alpha and Gross Beta analyses in the dissolved and suspended fractions were performed on select surface water samples in 2010. Gross Alpha (dissolved) was not detected in any of the surface water locations. Gross Alpha (suspended) was not detected in any of the surface water locations. Gross Beta (dissolved) was detected in all 3 surface water locations. The concentrations ranged from 419 to 507 pCi/L. Gross Beta (suspended) was not detected in any of the surface water locations (Table B-I.1, Appendix B).

Gamma Emitters

No gamma emitting nuclides, other than naturally occurring potassium-40, were detected in any of the samples analyzed. (Table B-II.2, Appendix B)

"Hard-To-Detect"

"Hard-To-Detect" analyses were performed on a select group of surface water locations to establish background levels. The analyses included Fe-55, Ni-63, Am-241, Cm-242, Cm-243/244, Pu-238, Pu-239/240, U-234, U-235, and U-238. The isotopes of U-234 and U-238 were detected in one surface water monitoring location. The U-234 concentration was 0.8 pCi/L and the U-238 concentration was 0.6 pCi/L. The concentrations detected are considered background due to naturally occurring U-234 and U-238 (Table B-I.3, Appendix B).

All other "hard-to-detect" nuclides were not detected at concentrations greater than their respective MDCs.

D. Summary of Results – Inter-Laboratory Comparison Program

Inter-Laboratory Comparison Program results for TBE and Environmental Inc. (Midwest Labs) are presented in the 2010 Oyster Creek AREOR. This report is part of the AREOR

E. Leaks, Spills, and Releases

There were no abnormal releases during 2010.

F. Trends

Active remediation of tritium in groundwater due to the spills that occurred in 2009 was initiated in October 2010. Trending of the data due to active remediation is on-going. Overall the station has seen a decreasing trend in tritium values although there was fluctuation in individual wells when W-73 remediation pumping was initiated.

G. Investigations

Conestoga Rovers and Associates performed an independent assessment of the tritium plume. The results of their assessment can be found in References 2 and 3.

H. Actions Taken

1. Compensatory Actions

The compensatory actions taken during 2010 were to add 15 additional monitoring wells to better characterize and monitor the tritium plume. Active remediation of tritium in groundwater due to the spills that occurred in 2009 was initiated in October, 2010.

2. Installation of Monitoring Wells

The following wells were installed in 2010 to better characterize and monitor the tritium plume and site hydrology.

Well Number	Formation	Well Installation Date
W-58 I	Cohansey	July
W-59 I	Cohansey	March
W-60 I	Cohansey	July
W-61 I	Cohansey	July
W-62	Cape May	March
W-63 I	Cohansey	July
W-64	Cape May	March
W-65	Cape May	March
W-66 I	Cohansey	July
W-67	Cape May	March
W-68 I	Cohansey	July
W-69 I	Cohansey	July
W-70 I	Cohansey	July
W-71	Cape May	August
W-72	Cape May	August
W-73 Pumping well	Cohansey	October

3. Actions to Recover/Reverse Plumes

Oyster Creek Generating Station is currently addressing the tritium in groundwater through pumping of groundwater out of W-73 into the intake structure.

V. References

1. Conestoga Rovers and Associates, Hydrogeologic Investigation Report, Fleetwide Assessment, Oyster Creek Generating Station, Forked River, New Jersey, Ref. No. 045136(18), September 2006
2. Conestoga Rovers and Associates, Site Investigation Report, Oyster Creek Generating Station, Forked River, New Jersey, Ref. No. 055875 (4), August 2009
3. Conestoga Rovers and Associates, Remedial Investigation Workplan, Oyster Creek Generating Station, Forked River, New Jersey, Ref. No. 055875 (5), October 2009

APPENDIX A

LOCATION DESIGNATION

TABLE A-1: Radiological Groundwater Protection Program - Sampling Locations, Oyster Creek Generating Station, 2010

Oyster Creek Generating Station RGPP Sample Point List
Page 1 of 8

Sample Identification Number	Location	Well GPS Coordinates (Northing/Easting)	Depth (ft)	RGPP Sample Point Designation	Internal Reporting Values for Tritium	Aquifer or Water Body Monitored
DWN	North Domestic Well	358373.33 574672.98	300.0	B	APV	Kirkwood
DWS	South Domestic Well	356955.90 574616.69	145.0	B	APV	Kirkwood
LW-1	E of ISFSI - (microwave zone)	357632.49 575569.96	21.0	I	APV	Cape May
LW-2	E of ISFSI - (microwave zone)	357645.30 575581.92	21.0	I	APV	Cape May
LW-3	E of ISFSI - (microwave zone)	357630.20 575575.52	21.0	D	APV	Cape May
LW-4	East of ISFSI - (microwave zone)	357652.78 575573.75	49.0	D	APV	Cohansey
MW-1A-2A	SW of MFOT Moat	357380.76 575043.44	24.0	D	APV	Cape May
MW-1G-1A	East of fueling station	358551.94 575308.91	20.0	I	APV	Cape May
MW-1G-1B	East of fueling station	358550.57 575316.19	45.0	I	APV	Cohansey
MW-1I-1A	Roadway - NW of TWST	357598.17 574412.70	19.0	D	APV	Cape May
MW-1I-2A	Roadway - SE of TWST	357574.80 574493.50	17.5	D	APV	Cape May
MW-15K-1A	Roadway - Intake	357297.90 574469.50	19.0	E/Monthly H-3*	100,000	Cape May
MW-16D	Yard - W of MAC Building	357573.30 574746.50	25.0	D	APV	Cape May

TABLE A-1: Radiological Groundwater Protection Program - Sampling Locations, Oyster Creek Generating Station, 2010

Oyster Creek Generating Station RGPP Sample Point List
Page 2 of 8

Sample Identification Number	Location	Well GPS Coordinates (Northing/Easting)	Depth (ft)	RGPP Sample Point Designation	Internal Reporting Values for Tritium	Aquifer or Water Body Monitored
MW-24-2A	Finninger Farm - near DSB	356838.52 579470.94	18.0	I	APV	Cape May
MW-24-3A	Finninger Farm - near DSB	356828.49 578969.05	17.0	I	Level Only	Cape May
MW-50	Between CST and Intake Structure	357368.21 574436.80	20.0	E/Monthly H-3*	APV	Cape May
MW-51	Near CST	357378.30 574480.80	20.0	E/Monthly H-3*	APV	Cape May
MW-52	Near Intake Structure	357400.90 574353.00	20.0	D/Monthly H-3*	APV	Cape May
MW-53	Near end of CW discharge piping	357272.80 574447.60	20.0	D/Monthly H-3*	APV	Cape May
MW-54	Near Intake Structure	357276.20 574311.70	20.0	E/Monthly H-3*	APV	Cape May
MW-55	Between CST and Intake Structure	357354.88 574440.07	30.0	E/Monthly H-3*	APV	Cape May
MW-56I	By NaOCl tanks	357305.30 574465.50	52.0	E/Monthly H-3*	APV	Cohansey
MW-57I	Near Intake Structure	357343.71 574373.89	50.0	E/Monthly H-3*	APV	Cohansey
MW-58I	Near Intake Structure	357346.70 574377.28	72.0	D	APV	Cohansey
MW-59I	Intake Roadway - NW of CST	357422.14 574406.38	44.0	D	APV	Cohansey
MW-60I	Near Intake Structure	357346.55 574373.88	92.0	D	APV	Cohansey

TABLE A-1: Radiological Groundwater Protection Program - Sampling Locations, Oyster Creek Generating Station, 2010

Oyster Creek Generating Station RGPP Sample Point List
Page 3 of 8

Sample Identification Number	Location	Well GPS Coordinates (Northing/Easting)	Depth (ft)	RGPP Sample Point Designation	Internal Reporting Values for Tritium	Aquifer or Water Body Monitored
MW-61I	Between CST and Intake Structure	357328.64 574444.45	72.0	E	APV	Cohansey
MW-62	NW Corner of Turbine Bldg	357467.93 574524.10	25.0	D/Monthly H-3	APV	Cape May
MW-63I	Between CST and Intake Structure	357329.40 574447.67	92.0	D	APV	Cohansey
MW-64	Near Intake Structure	357343.96 574377.88	25.0	E/Monthly H-3*	APV	Cape May
MW-65	Intake Roadway - NW of CST	357421.00 574402.55	25.0	D/Monthly H-3*	APV	Cape May
MW-66I	SE of Reactor Bldg	357320.44 574889.18	80.0	D	APV	Cohansey
MW-67	West side of Turbine Bldg	357401.99 574540.38	25.0	E/Monthly H-3*	APV	Cape May
MW-68I	SE of Reactor Bldg	357323.83 574897.64	100.0	D	APV	Cohansey
MW-69I	Yard - NW of DWPC Building	357664.03 574760.93	78.0	D	APV	Cohansey
MW-70I	Yard - NW of DWPC Building	357670.57 574759.18	98.0	D	APV	Cohansey
NW-71	S of Reactor Bldg	357365.52 574841.89	25.0	D	APV	Cape May
MW-72	N of Reactor Bldg	357549.87 574788.52	25.0	D	APV	Cape May
MCD	Main Condenser Discharge	N/A	N/A	Weekly* H-3	APV	Surface Water

TABLE A-1: Radiological Groundwater Protection Program - Sampling Locations, Oyster Creek Generating Station, 2010

Oyster Creek Generating Station RGPP Sample Point List
Page 4 of 8

Sample Identification Number	Location	Well GPS Coordinates (Northing/Easting)	Depth (ft)	RGPP Sample Point Designation	Internal Reporting Values for Tritium	Aquifer or Water Body Monitored
SW-1	Intake Canal	N/A	N/A	SW/Weekly* H-3	APV	Surface Water
SW-2	RT 9 South Bridge	N/A	N/A	SW/Daily* H-3	APV	Surface Water
SW-3	Fire Pond	N/A	N/A	SW	APV	Surface Water
W-1	Dilution Pump Area - West Bank	357029.86 574140.61	50.0	I	Level Only	Cohansey
W-1A	North Yard Area	358311.70 574679.00	50.0	B	APV	Cohansey
W-1B	North Yard Area	358312.80 574685.40	20.0	I	Level Only	Cape May
W-1C	West end of backsite	357149.22 572741.00	60.0	I	APV	Cohansey
W-1K	West end of backsite	357151.55 572728.77	150.0	I	APV	Kirkwood
W-2	S of EDG Bldg	356965.65 574555.73	57.0	I	APV	Cohansey
W-2A	Field - W of North Yard Bldg	358105.00 574348.60	50.0	I	APV	Cohansey
W-2B	Field - W of North Yard Building	358110.30 574348.50	20.0	B	Level Only	Cape May
W-2C	Forked River CT Site	357923.67 573809.92	60.0	I	APV	Cohansey
W-2K	Forked River CT Site	358030.88 573762.54	150.0	I	APV	Kirkwood

TABLE A-1: Radiological Groundwater Protection Program - Sampling Locations, Oyster Creek Generating Station, 2010

Oyster Creek Generating Station RGPP Sample Point List
Page 5 of 8

Sample Identification Number	Location	Well GPS Coordinates (Northing/Easting)	Depth (ft)	RGPP Sample Point Designation	Internal Reporting Values for Tritium	Aquifer or Water Body Monitored
W-3	Intake - Access Road	357173.00 574499.10	24.0	D/Monthly H-3*	APV	Cape May
W-3A	Plant Access Road	358067.92 575664.22	50.0	I	Level Only	Cohansey
W-3B	Plant Access Road	358070.58 575656.25	20.0	I	Level Only	Cape May
W-3C	Finninger Farm - N of Discharge	356595.30 576663.33	60.0	I	APV	Cohansey
W-3K	Finninger Farm - N of Discharge	356602.17 576675.04	100.0	I	Level Only	Kirkwood
W-4	Intake - Access Road	357176.40 574497.70	55.0	D	APV	Cohansey
W-4A	SE of OCAB Building	356913.30 575387.10	50.0	B	APV	Cohansey
W-4B	SE of OCAB Building	356916.40 575388.90	20.0	B	APV	Cape May
W-4C	Finninger Farm - S of Intake	359305.61 575867.58	60.0	I	APV	Cohansey
W-4K	Finninger Farm - S of Intake	359321.83 575874.07	100.0	I	Level Only	Kirkwood
W-5	NW Yard area, near Fire Water Tank	357510.95 574374.05	20.5	D	APV	Cape May
W-5C	Finninger Farm - E of dredge spoils	356758.59 580642.26	60.0	B	APV	Cohansey
W-5K	Finninger Farm - E of dredge spoils	356743.81 580646.48	150.0	B	APV	Kirkwood

TABLE A-1: Radiological Groundwater Protection Program - Sampling Locations, Oyster Creek Generating Station, 2010

Oyster Creek Generating Station RGPP Sample Point List
Page 6 of 8

Sample Identification Number	Location	Well GPS Coordinates (Northing/Easting)	Depth (ft)	RGPP Sample Point Designation	Internal Reporting Values for Tritium	Aquifer or Water Body Monitored
W-6	NW Yard - near Fire Water Tank	357514.02 574373.77	52.0	D	APV	Cohansey
W-7	NE - Building 4	357074.46 574713.08	20.0	D	APV	Cape May
W-9	Roadway - NE of SAS Building	357289.29 574892.74	20.0	D	APV	Cape May
W-10	NW of SAS Building	357286.29 574890.61	60.0	D	APV	Cohansey
W-12	Yard - NW of DWPC Building	357669.10 574755.60	20.0	D	APV	Cape May
W-13	Yard - NW of DWPC Building	357666.00 574755.90	50.0	D	APV	Cohansey
W-14	Yard - SW of Warehouse	357702.41 575018.75	53.0	D	APV	Cohansey
W-15	Yard - SW of Warehouse	357705.83 575017.70	20.0	D	APV	Cape May
W-16	Yard - E of LLRW	357967.26 574933.03	20.0	D	APV	Cape May
W-17	Road/ Exit Near W-3A	358078.05 575667.14	150.0	I	APV	Kirkwood
W-18	Near EDG Building	357005.78 574621.6	20.0	I	APV	Cape May
W-19	Near EDG Building	357077.91 574633.23	20.0	I	APV	Cape May
W-20	SW of EDG Building	356927.46 574542.59	20.0	I	APV	Cape May

TABLE A-1: Radiological Groundwater Protection Program - Sampling Locations, Oyster Creek Generating Station, 2010

Oyster Creek Generating Station RGPP Sample Point List
Page 7 of 8

Sample Identification Number	Location	Well GPS Coordinates (Northing/Easting)	Depth (ft)	RGPP Sample Point Designation	Internal Reporting Values for Tritium	Aquifer or Water Body Monitored
W-21	Near EDG Building	357009.15 574518.22	20.0	I	APV	Cape May
W-22	Near EDG Building	357024.50 574590.19	39.0	I	APV	Cape May
W-23	Near EDG Building	357054.89 574564.88	20.0	I	APV	Cape May
W-24	South of TB W of old Machine Shop	357128.94 574650.77	19.0	D	APV	Cape May
W-25	Near EDG Building	356962.59 574677.59	20.0	I	APV	Cape May
W-26	Near EDG Building	357006.60 574644.03	20.0	I	APV	Cape May
W-27	Near EDG Building	357042.43 574636.35	20.0	I	APV	Cape May
W-28	Near EDG Building	356991.29 574573.64	19.5	I	APV	Cape May
W-29	Near EDG Building	357012.62 574568.69	19.5	I	APV	Cape May
W-30	Near EDG Building	357058.00 574516.71	19.5	I	APV	Cape May
W-31	Near EDG Building	357051.78 574495.62	19.5	I	APV	Cape May
W-32	Near EDG Building	356978.58 574528.44	19.5	I	APV	Cape May
W-33	Near EDG Building	357026.93 574499.17	19.5	I	APV	Cape May

TABLE A-1: Radiological Groundwater Protection Program - Sampling Locations, Oyster Creek Generating Station, 2010

Oyster Creek Generating Station RGPP Sample Point List
Page 8 of 8

Sample Identification Number	Location	Well GPS Coordinates (Northing/Easting)	Depth (ft)	RGPP Sample Point Designation	Internal Reporting Values for Tritium	Aquifer or Water Body Monitored
W-34	South of TB W of old Machine Shop	357196.14 574649.43	40.0	D	APV	Cohansey

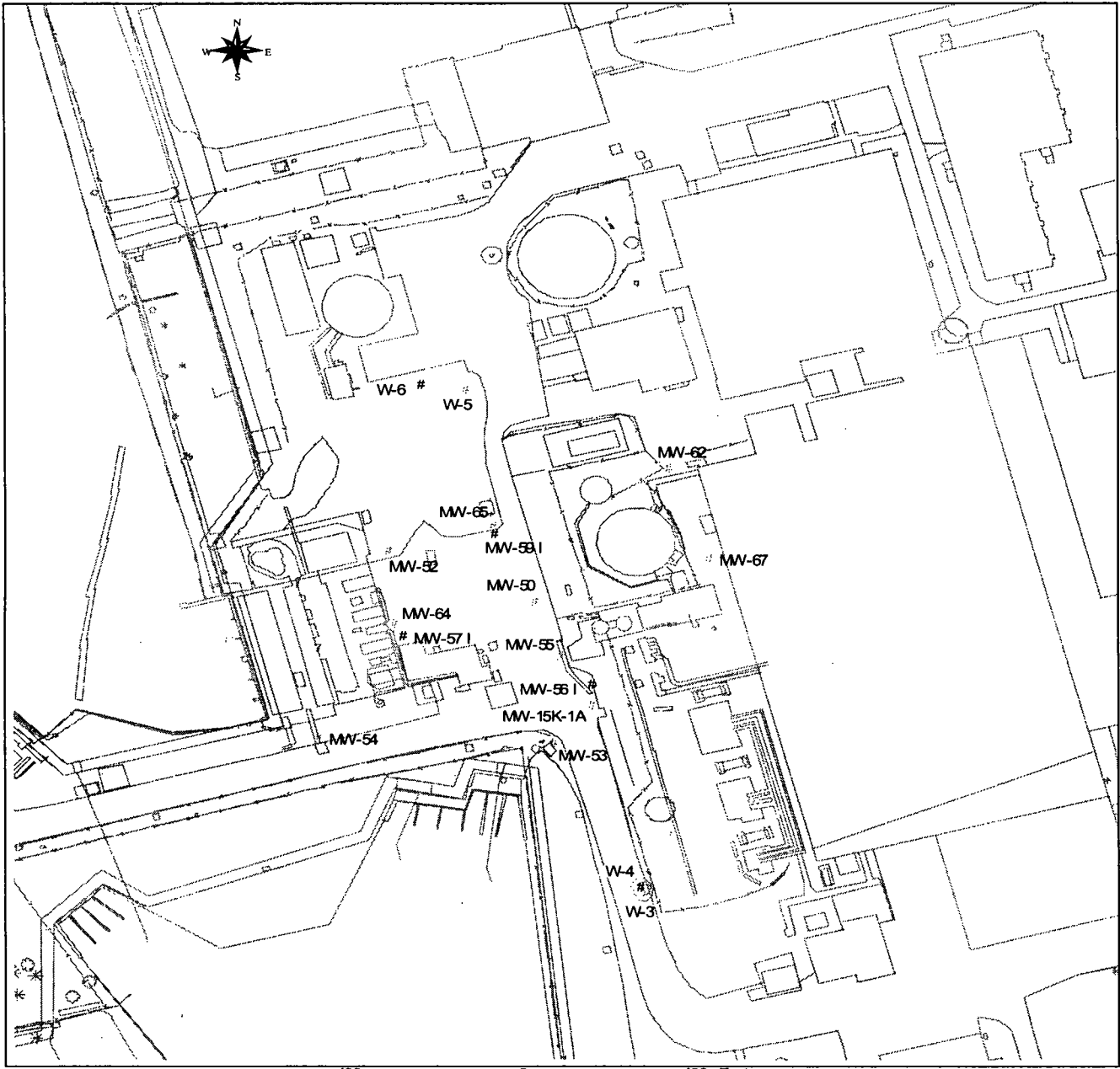
* Tritium sampling frequency based upon agreement made with the NJDEP on 1/19/11.

D = Daily
W = Weekly
M = Monthly
S = Semi-annual
B = Biennial

Note that only sample points that are part of the program are listed in this table.

The following list is samples that were obtained in 2010 but are not a part of the RGPP. The results for these samples are listed in Appendix B.

As listed in Appendix B	Description
BC WHSE	Back site warehouse bathroom tap
CTG BR	Back site CTG office building bathroom tap
CTG MFOST	Back site from well beside CTG main fuel oil storage tank
Vault 1	Vault at southeast corner of the reactor building
W-73 Batch Tank	Remediation well W-73 Batch Tank prior to discharge



100 0 100 Feet

CST Investigation Routine Groundwater Monitoring Locations
 □ Cape May Formation Wells
 ○ Cohansey Formation Wells

CST Investigation
 Routine Monitoring Locations
 Exelon Corporation
 Oyster Creek Generating Station

Figure A-1
 Sampling Locations – Selected Cohansey and Cape May
 Formation Wells, Oyster Creek Generating Station, 2010

APPENDIX B

DATA TABLES

TABLE B-1.1

CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
BC WHSE	06/18/10	< 157					
CTG BR	06/18/10	< 160					
CTG MFOST	06/18/10	< 158					
DWN	04/29/10 TBE	< 170					
DWN	04/29/10 TBE	< 171					
DWN	04/29/10 EIML	< 151					
DWS	04/29/10	< 152					
VAULT 1	05/21/10	4860 ± 540					
LW-3	04/28/10	< 169					
LW-3	10/14/10	< 172	< 0.7	< 0.7	< 0.5	< 1.8	< 1.6
LW-4	04/28/10	< 168					
LW-4	04/28/10 TBE	< 151					
LW-4	04/28/10 EIML	< 151					
LW-4	10/14/10	< 178	< 0.8	< 0.6	< 0.5	2.1 ± 1.1	< 1.5
MW-15K-1A	01/05/10	28500 ± 2880					
MW-15K-1A	01/12/10	21600 ± 4400					
MW-15K-1A	01/19/10	28500 ± 2880					
MW-15K-1A	01/26/10	30400 ± 3080					
MW-15K-1A	02/02/10	20100 ± 3860					
MW-15K-1A	02/09/10	20900 ± 2130					
MW-15K-1A	02/16/10	2640 ± 307					
MW-15K-1A	02/24/10	2120 ± 263					
MW-15K-1A	03/02/10	1940 ± 246					
MW-15K-1A	03/09/10	2660 ± 323					
MW-15K-1A	03/16/10	2420 ± 302					
MW-15K-1A	03/23/10	4970 ± 546					
MW-15K-1A	03/31/10	4190 ± 473					
MW-15K-1A	04/06/10	6010 ± 649					
MW-15K-1A	04/14/10	4010 ± 450					
MW-15K-1A	04/20/10	6140 ± 661					
MW-15K-1A	04/27/10	8370 ± 884					
MW-15K-1A	05/04/10	11800 ± 1230					
MW-15K-1A	05/11/10	7390 ± 792					
MW-15K-1A	05/19/10	9360 ± 984					
MW-15K-1A	05/25/10	8020 ± 1080					
MW-15K-1A	06/02/10	4270 ± 483					
MW-15K-1A	06/08/10	6210 ± 669					
MW-15K-1A	06/15/10	4770 ± 528					
MW-15K-1A	06/22/10	4800 ± 528					
MW-15K-1A	06/30/10	4920 ± 540					
MW-15K-1A	07/07/10	6340 ± 674					
MW-15K-1A	07/13/10	8250 ± 878					
MW-15K-1A	07/21/10	9370 ± 984					
MW-15K-1A	07/27/10	8650 ± 910					
MW-15K-1A	08/04/10	10700 ± 1120					
MW-15K-1A	08/11/10	11100 ± 922					
MW-15K-1A	08/18/10	9950 ± 1040					
MW-15K-1A	08/24/10	11600 ± 1220					
MW-15K-1A	09/08/10	10000 ± 1050					
MW-15K-1A	09/22/10	14600 ± 1500					
MW-15K-1A	09/28/10	11000 ± 1150					

TABLE B-1.1

CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION						
	DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MW-15K-1A	10/13/10	871 ± 157	< 0.5	< 1.2	14.7 ± 6.0	2.9 ± 1.3	26.6 ± 3.4
MW-15K-1A	10/27/10	1400 ± 199					
MW-15K-1A	11/10/10	2320 ± 299					
MW-15K-1A	11/23/10	3780 ± 634					
MW-15K-1A	12/14/10	8940 ± 938					
MW-16D	04/28/10	< 167					
MW-16D	10/13/10	< 177	< 0.8	10.1 ± 5.9	< 0.6	20.8 ± 3.7	< 1.6
MW-1A-2A	04/27/10	< 166					
MW-1A-2A	10/13/10	< 185	< 0.7	< 0.9	1.4 ± 0.8	< 1.9	< 1.6
MW-1I-1A	01/27/10	< 149					
MW-1I-1A	02/24/10	< 186					
MW-1I-1A	03/22/10	< 168					
MW-1I-1A	04/28/10	< 148					
MW-1I-1A	04/28/10	< 160					
MW-1I-1A	05/27/10	< 178					
MW-1I-1A	06/29/10	< 171					
MW-1I-1A	07/28/10	< 163					
MW-1I-1A	08/25/10	< 161					
MW-1I-1A	10/12/10	< 183	< 0.7	< 0.9	< 0.5	< 1.9	< 1.5
MW-1I-2A	01/27/10	< 154					
MW-1I-2A	02/24/10	< 188					
MW-1I-2A	03/22/10	< 172					
MW-1I-2A	04/28/10	< 153					
MW-1I-2A	04/28/10	< 157					
MW-1I-2A	05/27/10	< 180					
MW-1I-2A	06/29/10	< 171					
MW-1I-2A	07/28/10	< 167					
MW-1I-2A	08/25/10	< 163					
MW-1I-2A	10/12/10	< 182	< 0.8	< 1.7	2.1 ± 1.0	6.2 ± 1.8	3.6 ± 1.3
MW-50	01/05/10	251000 ± 11000					
MW-50	01/12/10	246000 ± 10900					
MW-50	01/19/10	231000 ± 10500					
MW-50	01/26/10	245000 ± 24400					
MW-50	02/02/10	344000 ± 12200					
MW-50	02/09/10	293000 ± 11300					
MW-50	02/16/10	337000 ± 12100					
MW-50	02/24/10	237000 ± 23800					
MW-50	03/02/10	177000 ± 17800					
MW-50	03/09/10	168000 ± 16900					
MW-50	03/16/10	137000 ± 13900					
MW-50	03/23/10	161000 ± 16500					
MW-50	03/31/10	173000 ± 17700					
MW-50	04/07/10	149000 ± 15100					
MW-50	04/14/10	196000 ± 19900					
MW-50	04/21/10	74500 ± 7700					
MW-50	04/28/10	193000 ± 12500					
MW-50	05/04/10	125000 ± 12500					
MW-50	05/11/10	116000 ± 11600					
MW-50	05/12/10	120000 ± 12000	< 0.6				
MW-50	05/26/10	209000 ± 4280					

TABLE B-I.1

**CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN
GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL
GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION		H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
	DATE							
MW-50	06/02/10		214000 \pm 20200					
MW-50	06/08/10		187000 \pm 18600					
MW-50	06/15/10		148000 \pm 12500					
MW-50	06/22/10		126000 \pm 12600					
MW-50	06/30/10		224000 \pm 22200					
MW-50	07/07/10		76200 \pm 5840					
MW-50	07/14/10		256000 \pm 25100					
MW-50	07/21/10		240000 \pm 23800					
MW-50	07/27/10		175000 \pm 11900					
MW-50	08/04/10		121000 \pm 12100					
MW-50	08/11/10		118000 \pm 11800					
MW-50	08/18/10		139000 \pm 13100					
MW-50	08/24/10		177000 \pm 17700					
MW-50	08/31/10		112000 \pm 11200					
MW-50	09/08/10		82100 \pm 8260					
MW-50	09/15/10		115000 \pm 11200					
MW-50	09/22/10		251000 \pm 24800					
MW-50	09/29/10		208000 \pm 20700					
MW-50	10/06/10		212000 \pm 21100					
MW-50	10/13/10		151000 \pm 15000	< 0.7	< 1.8	1.9 \pm 1.2	3.0 \pm 1.5	2.7 \pm 1.3
MW-50	10/20/10		154000 \pm 3810					
MW-50	10/27/10		145000 \pm 14500					
MW-50	11/03/10		125000 \pm 12600					
MW-50	11/10/10		149000 \pm 14800					
MW-50	11/17/10		142000 \pm 13800					
MW-50	11/23/10		128000 \pm 12400					
MW-50	12/15/10		147000 \pm 14700					
MW-51	01/19/10		81700 \pm 6740					
MW-51	01/26/10		85600 \pm 6400					
MW-51	02/02/10		45600 \pm 5020					
MW-51	02/09/10		73500 \pm 6050					
MW-51	02/16/10		7880 \pm 826					
MW-51	02/23/10		21400 \pm 2200					
MW-51	03/02/10		12700 \pm 1310					
MW-51	03/09/10		22100 \pm 2260					
MW-51	03/16/10		20200 \pm 2240					
MW-51	03/23/10		12500 \pm 1790					
MW-51	03/30/10		7600 \pm 1330					
MW-51	04/06/10		13800 \pm 1900					
MW-51	04/13/10		34000 \pm 3680					
MW-51	04/20/10		34800 \pm 3760					
MW-51	04/27/10		44400 \pm 4710					
MW-51	05/04/10		48600 \pm 4450					
MW-51	05/25/10		37800 \pm 1840					
MW-51	06/02/10		38200 \pm 3860					
MW-51	11/16/10		16300 \pm 1670					
MW-52	01/05/10		< 162					

TABLE B-I.1

CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION		H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
	DATE							
MW-52	01/12/10	<	164					
MW-52	01/19/10	<	161					
MW-52	01/26/10	<	148					
MW-52	02/02/10	<	146					
MW-52	02/09/10	<	148					
MW-52	02/16/10	<	188					
MW-52	02/23/10	<	193					
MW-52	03/02/10	<	187					
MW-52	03/09/10	<	191					
MW-52	03/16/10	<	164					
MW-52	03/23/10	<	172					
MW-52	03/30/10	<	169					
MW-52	04/06/10	<	170					
MW-52	04/13/10	<	163					
MW-52	04/20/10	<	159					
MW-52	04/28/10	<	160					
MW-52	05/04/10	<	179					
MW-52	05/11/10	<	177					
MW-52	05/18/10	<	153					
MW-52	05/25/10	<	178					
MW-52	06/03/10	<	155					
MW-52	06/09/10	<	168					
MW-52	06/16/10	<	152					
MW-52	06/22/10	<	160					
MW-52	06/29/10	<	191					
MW-52	07/07/10	<	162					
MW-52	07/13/10	<	169					
MW-52	07/21/10	<	169					
MW-52	07/28/10	<	166					
MW-52	08/03/10	<	185					
MW-52	08/10/10	<	193					
MW-52	08/17/10	<	188					
MW-52	08/25/10	<	193					
MW-52	09/28/10	<	185					
MW-52	10/13/10	<	170	< 0.7	< 2.0	1.7 ± 1.0	13.8 ± 2.5	2.8 ± 1.2
MW-52	11/16/10	<	155					
MW-52	12/14/10	<	162					
MW-53	01/05/10	<	161					
MW-53	01/12/10	<	164					
MW-53	01/19/10	<	166					
MW-53	01/26/10	<	149					
MW-53	02/02/10	<	149					
MW-53	02/09/10		154 ± 98					
MW-53	02/16/10	<	190					
MW-53	02/23/10	<	195					
MW-53	03/02/10	<	189					
MW-53	03/09/10	<	193					

TABLE B-I.1

CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MW-53	03/16/10	< 166					
MW-53	03/23/10	< 169					
MW-53	03/30/10	< 168					
MW-53	04/06/10	< 171					
MW-53	04/13/10	< 158					
MW-53	04/20/10	< 160					
MW-53	04/27/10	< 160					
MW-53	05/04/10	< 175					
MW-53	05/11/10	< 178					
MW-53	05/18/10	< 168					
MW-53	05/25/10	< 178					
MW-53	06/02/10	< 179					
MW-53	06/08/10	< 168					
MW-53	06/15/10	215 ± 103					
MW-53	06/22/10	< 169					
MW-53	06/30/10	< 190					
MW-53	07/08/10	< 161					
MW-53	07/13/10	< 164					
MW-53	07/21/10	< 168					
MW-53	07/27/10	174 ± 108					
MW-53	08/04/10	< 180					
MW-53	08/11/10	< 190					
MW-53	08/17/10	< 184					
MW-53	08/25/10	< 196					
MW-53	09/28/10	< 189					
MW-53	10/12/10	< 173	< 0.7	< 2.8	< 1.2	< 2.3	< 1.7
MW-53	11/16/10	< 156					
MW-53	12/14/10	< 163					
MW-54	01/05/10	241 ± 113					
MW-54	01/12/10	1260 ± 183					
MW-54	01/19/10	1760 ± 227					
MW-54	01/26/10	4350 ± 480					
MW-54	02/02/10	9390 ± 3210					
MW-54	02/09/10	3920 ± 433					
MW-54	02/16/10	8780 ± 1090					
MW-54	02/23/10	2110 ± 456					
MW-54	03/02/10	205 ± 112					
MW-54	03/02/10	223 ± 113					
MW-54	03/09/10	1990 ± 479					
MW-54	03/16/10	298 ± 117					
MW-54	03/23/10	1770 ± 232					
MW-54	03/30/10	< 170					
MW-54	04/06/10	700 ± 138					
MW-54	04/13/10	1160 ± 170					
MW-54	04/20/10	5530 ± 601					
MW-54	04/27/10	2050 ± 255					
MW-54	05/04/10	550 ± 134					

TABLE B-I.1

**CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN
GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL
GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION		H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
	DATE							
MW-54	05/11/10		368 \pm 125					
MW-54	05/18/10		< 149					
MW-54	05/25/10		< 179					
MW-54	06/02/10		< 180					
MW-54	06/09/10		182 \pm 115					
MW-54	06/15/10		244 \pm 106					
MW-54	06/22/10		< 161					
MW-54	06/30/10		< 194					
MW-54	07/08/10		184 \pm 108					
MW-54	07/14/10		343 \pm 127					
MW-54	07/21/10		< 166					
MW-54	07/27/10		< 161					
MW-54	08/04/10		< 184					
MW-54	08/11/10		< 189					
MW-54	08/17/10		< 186					
MW-54	08/25/10		431 \pm 121					
MW-54	09/08/10		389 \pm 123					
MW-54	09/22/10		377 \pm 125					
MW-54	09/28/10		483 \pm 140					
MW-54	10/13/10		426 \pm 125	< 0.5	< 11.5	146 \pm 40.4	24.8 \pm 13.5	302 \pm 26.9
MW-54	10/27/10		865 \pm 150					
MW-54	11/10/10		237 \pm 125					
MW-54	11/23/10		25800 \pm 2610					
MW-54	11/23/10		24800 \pm 2520					
MW-54	12/14/10		735 \pm 139					
MW-55	01/05/10		30600 \pm 4790					
MW-55	01/12/10		48700 \pm 5540					
MW-55	01/19/10		125000 \pm 8010					
MW-55	01/26/10		67100 \pm 5800					
MW-55	02/02/10		40600 \pm 4800					
MW-55	02/09/10		52200 \pm 5310					
MW-55	02/16/10		30200 \pm 3070					
MW-55	02/24/10		14400 \pm 1640					
MW-55	03/02/10		16100 \pm 1800					
MW-55	03/09/10		21500 \pm 2370					
MW-55	03/16/10		12200 \pm 1450					
MW-55	03/23/10		20900 \pm 2580					
MW-55	03/31/10		8650 \pm 1430					
MW-55	04/07/10		20000 \pm 2290					
MW-55	04/14/10		24900 \pm 2750					
MW-55	04/21/10		63100 \pm 6580					
MW-55	04/27/10		80700 \pm 8340					
MW-55	05/04/10		68000 \pm 6840					
MW-55	05/11/10		95000 \pm 8760					
MW-55	05/12/10		59000 \pm 4900	< 0.6				
MW-55	05/19/10		91800 \pm 9210					
MW-55	05/26/10		50800 \pm 2090					

TABLE B-I.1

CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN
GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL
GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MW-55	06/02/10	56600 ± 5690					
MW-55	06/08/10	53800 ± 5420					
MW-55	06/15/10	58800 ± 4890					
MW-55	06/22/10	75900 ± 7620					
MW-55	06/30/10	77800 ± 7820					
MW-55	07/08/10	112000 ± 8210					
MW-55	07/14/10	92800 ± 7140					
MW-55	07/21/10	77600 ± 7800					
MW-55	07/27/10	68100 ± 6850					
MW-55	08/04/10	57800 ± 5820					
MW-55	08/11/10	63200 ± 5460					
MW-55	08/18/10	68900 ± 6930					
MW-55	08/24/10	79000 ± 7920					
MW-55	08/31/10	57700 ± 5690					
MW-55	09/08/10	79300 ± 7950					
MW-55	09/15/10	87300 ± 5950					
MW-55	09/22/10	57100 ± 5740					
MW-55	09/29/10	43500 ± 4390					
MW-55	10/06/10	7980 ± 913					
MW-55	10/13/10	13700 ± 1420	< 0.7	< 2.1	2.1 ± 1.1	4.4 ± 1.7	2.4 ± 1.2
MW-55	10/20/10	20000 ± 1420					
MW-55	10/27/10	19300 ± 1970					
MW-55	11/03/10	17800 ± 1820					
MW-55	11/10/10	10900 ± 1150					
MW-55	11/17/10	15700 ± 1610					
MW-55	11/23/10	26500 ± 2690					
MW-55	12/15/10	32200 ± 3250					
MW-56I	01/05/10	839000 ± 19600					
MW-56I	01/12/10	847000 ± 19700					
MW-56I	01/19/10	742000 ± 18500					
MW-56I	01/26/10	929000 ± 19600					
MW-56I	02/02/10	918000 ± 19500					
MW-56I	02/09/10	963000 ± 19900					
MW-56I	02/16/10	686000 ± 17100					
MW-56I	02/23/10	1280000 ± 125000					
MW-56I	03/02/10	1160000 ± 114000					
MW-56I	03/09/10	1090000 ± 107000					
MW-56I	03/16/10	981000 ± 96400					
MW-56I	03/23/10	761000 ± 75400					
MW-56I	03/31/10	898000 ± 88800					
MW-56I	04/06/10	855000 ± 85500					
MW-56I	04/14/10	818000 ± 80200					
MW-56I	04/20/10	803000 ± 79100					
MW-56I	04/27/10	1000000 ± 88100					
MW-56I	05/04/10	1030000 ± 101000					
MW-56I	05/11/10	1070000 ± 104000					
MW-56I	05/12/10	979000 ± 93600					

TABLE B-1.1

CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
	DATE						
MW-56I	05/18/10	985000 ± 94700					
MW-56I	05/25/10	868000 ± 17400					
MW-56I	06/02/10	1010000 ± 94900					
MW-56I	06/08/10	1080000 ± 105000					
MW-56I	06/15/10	1020000 ± 96200					
MW-56I	06/22/10	935000 ± 91600					
MW-56I	06/30/10	887000 ± 84800					
MW-56I	07/07/10	944000 ± 92200					
MW-56I	07/13/10	856000 ± 83700					
MW-56I	07/21/10	814000 ± 80600					
MW-56I	07/27/10	711000 ± 69600					
MW-56I	08/04/10	791000 ± 77500					
MW-56I	08/11/10	702000 ± 67900					
MW-56I	08/18/10	691000 ± 67700					
MW-56I	08/24/10	709000 ± 68500					
MW-56I	08/31/10	721000 ± 70600					
MW-56I	09/08/10	663000 ± 64600					
MW-56I	09/15/10	599000 ± 50800					
MW-56I	09/22/10	294000 ± 28900					
MW-56I	09/29/10	381000 ± 24700					
MW-56I	10/06/10	507000 ± 46900					
MW-56I	10/14/10	356000 ± 35300	< 0.8	6.5 ± 2.2	2.8 ± 1.6	10.0 ± 2.3	5.0 ± 1.6
MW-56I	10/14/10	252000 ± 24400	< 0.8	5.9 ± 1.9	3.1 ± 1.7	10.1 ± 2.2	6.3 ± 1.7
MW-56I	10/20/10	367000 ± 5840					
MW-56I	10/27/10	341000 ± 28900					
MW-56I	11/03/10	410000 ± 40300					
MW-56I	11/10/10	341000 ± 33600					
MW-56I	11/17/10	298000 ± 29400					
MW-56I	11/23/10	45100 ± 4520					
MW-56I	11/23/10	45800 ± 4610					
MW-56I	12/15/10	4630 ± 507					
MW-57I	01/05/10	249000 ± 11000					
MW-57I	01/12/10	225000 ± 10500					
MW-57I	01/19/10	500000 ± 15200					
MW-57I	01/26/10	210000 ± 9570					
MW-57I	02/02/10	230000 ± 10100					
MW-57I	02/09/10	175000 ± 8920					
MW-57I	02/16/10	193000 ± 9370					
MW-57I	02/24/10	302000 ± 30300					
MW-57I	03/02/10	259000 ± 26000					
MW-57I	03/09/10	189000 ± 19100					
MW-57I	03/16/10	191000 ± 19300					
MW-57I	03/23/10	173000 ± 17700					
MW-57I	03/31/10	105000 ± 11000					
MW-57I	04/07/10	178000 ± 18000					
MW-57I	04/14/10	165000 ± 16700					
MW-57I	04/20/10	156000 ± 15900					

TABLE B-1.1

**CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN
GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL
GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MW-57I	04/27/10	155000 \pm 15800					
MW-57I	05/05/10	83800 \pm 8410					
MW-57I	05/12/10	60100 \pm 6060					
MW-57I	05/12/10	60800 \pm 6120	< 0.7				
MW-57I	05/19/10	83800 \pm 8420					
MW-57I	05/25/10	59800 \pm 2250					
MW-57I	06/02/10	53600 \pm 5370					
MW-57I	06/08/10	51900 \pm 5220					
MW-57I	06/15/10	51300 \pm 5170					
MW-57I	06/22/10	91900 \pm 7380					
MW-57I	06/29/10	123000 \pm 12400					
MW-57I	07/07/10	111000 \pm 11000					
MW-57I	07/14/10	26400 \pm 2690					
MW-57I	07/21/10	66900 \pm 6030					
MW-57I	07/27/10	66600 \pm 5980					
MW-57I	08/03/10	49400 \pm 4740					
MW-57I	08/11/10	72000 \pm 7220					
MW-57I	08/18/10	52200 \pm 4920					
MW-57I	08/24/10	154000 \pm 15300					
MW-57I	08/24/10	173000 \pm 17200					
MW-57I	08/31/10	58100 \pm 5850					
MW-57I	09/08/10	72200 \pm 7250					
MW-57I	09/15/10	63300 \pm 6360					
MW-57I	09/22/10	81400 \pm 6190					
MW-57I	09/29/10	68300 \pm 5680					
MW-57I	10/06/10	63100 \pm 6340					
MW-57I	10/13/10	78900 \pm 7860	< 0.8	< 2.1	< 0.8	20.9 \pm 3.6	< 1.6
MW-57I	10/20/10	45000 \pm 2090					
MW-57I	10/27/10	7680 \pm 812					
MW-57I	11/03/10	63200 \pm 5800					
MW-57I	11/10/10	43200 \pm 4170					
MW-57I	11/16/10	53900 \pm 4620					
MW-57I	11/23/10	50100 \pm 5050					
MW-57I	12/15/10	81000 \pm 5840					
MW-58I	07/21/10	< 170					
MW-58I	07/27/10	< 162					
MW-58I	08/03/10	< 182					
MW-58I	08/11/10	< 183					
MW-58I	08/18/10	< 166					
MW-58I	08/24/10	< 192					
MW-58I	10/14/10	< 175	< 0.6	< 1.7	< 0.6	7.1 \pm 1.9	< 1.6
MW-59I	03/24/10	1280 \pm 186					
MW-59I	03/30/10	3050 \pm 359					
MW-59I	04/06/10	1540 \pm 211					
MW-59I	04/13/10	2230 \pm 278					
MW-59I	04/21/10	1830 \pm 239					
MW-59I	04/28/10	2130 \pm 261					

TABLE B-1.1

CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
	DATE						
MW-59I	05/05/10	2580 ± 318					
MW-59I	05/11/10	2260 ± 286					
MW-59I	05/18/10	1580 ± 215					
MW-59I	05/26/10	1170 ± 467					
MW-59I	06/02/10	776 ± 152					
MW-59I	06/08/10	755 ± 142					
MW-59I	06/16/10	563 ± 122					
MW-59I	06/22/10	307 ± 118					
MW-59I	06/29/10	248 ± 118					
MW-59I	07/07/10	200 ± 115					
MW-59I	07/13/10	< 180					
MW-59I	07/21/10	< 168					
MW-59I	07/28/10	< 178					
MW-59I	08/03/10	< 178					
MW-59I	08/10/10	< 184					
MW-59I	08/17/10	< 200					
MW-59I	08/24/10	< 197					
MW-59I	09/08/10	< 168					
MW-59I	09/22/10	< 200					
MW-59I	09/28/10	< 190					
MW-59I	10/13/10	< 166	< 0.6	< 0.9	< 0.8	2.2 ± 1.2	< 1.5
MW-59I	10/27/10	< 165					
MW-59I	11/10/10	< 188					
MW-59I	11/23/10	< 168					
MW-59I	12/14/10	< 164					
MW-60I	05/18/10	175000 ± 17300					
MW-60I	07/21/10	< 169					
MW-60I	07/27/10	< 161					
MW-60I	08/03/10	< 178					
MW-60I	08/11/10	< 181					
MW-60I	08/18/10	< 189					
MW-60I	08/24/10	< 196					
MW-60I	10/14/10	< 183	< 1.0	< 0.6	< 0.6	3.1 ± 1.2	< 1.6
MW-60I	10/14/10	< 175	< 0.5	< 1.0	1.1 ± 0.7	5.9 ± 1.7	< 1.6
MW-61I	07/21/10	5900 ± 640					
MW-61I	07/27/10	11000 ± 1140					
MW-61I	08/03/10	12100 ± 1260					
MW-61I	08/11/10	13400 ± 1390					
MW-61I	08/18/10	13500 ± 1400					
MW-61I	08/24/10	11100 ± 1170					
MW-62	03/10/10	< 166					
MW-62	03/17/10	< 165					
MW-62	03/24/10	< 171					
MW-62	03/30/10	< 170					
MW-62	04/06/10	< 170					
MW-62	04/13/10	< 157					
MW-62	04/20/10	< 165					

TABLE B-I.1

CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MW-62	04/28/10	< 161					
MW-62	05/04/10	< 180					
MW-62	05/12/10	< 176					
MW-62	05/18/10	< 168					
MW-62	05/27/10	< 178					
MW-62	06/03/10	< 170					
MW-62	06/09/10	< 169					
MW-62	06/16/10	< 150					
MW-62	06/23/10	< 162					
MW-62	06/29/10	< 189					
MW-62	07/07/10	< 159					
MW-62	07/13/10	< 178					
MW-62	07/21/10	< 170					
MW-62	07/28/10	< 176					
MW-62	08/04/10	< 180					
MW-62	08/10/10	3150 ± 372					
MW-62	08/17/10	< 185					
MW-62	08/25/10	< 192					
MW-62	09/28/10	< 185					
MW-62	10/13/10	< 163	< 0.6	< 2.2	< 0.8	28.0 ± 4.0	< 1.6
MW-62	11/16/10	< 168					
MW-62	12/14/10	< 161					
MW-63I	07/21/10	< 169					
MW-63I	07/27/10	< 163					
MW-63I	08/03/10	< 187					
MW-63I	08/11/10	< 188					
MW-63I	08/18/10	< 186					
MW-63I	08/24/10	< 195					
MW-63I	10/14/10	< 174	< 0.4	< 1.8	< 0.5	7.3 ± 1.9	< 1.6
MW-64	03/10/10	12100 ± 1260					
MW-64	03/17/10	6210 ± 1210					
MW-64	03/24/10	2400 ± 894					
MW-64	03/31/10	2860 ± 925					
MW-64	04/07/10	2040 ± 257					
MW-64	04/14/10	2660 ± 309					
MW-64	04/20/10	2820 ± 334					
MW-64	04/27/10	16800 ± 1730					
MW-64	05/05/10	2070 ± 268					
MW-64	05/12/10	7040 ± 753					
MW-64	05/19/10	16200 ± 1660	< 0.9				
MW-64	05/25/10	5130 ± 966					
MW-64	06/02/10	4820 ± 540					
MW-64	06/08/10	6520 ± 701					
MW-64	06/15/10	13200 ± 1370					
MW-64	06/22/10	10200 ± 1060					
MW-64	06/29/10	7500 ± 791					
MW-64	07/07/10	8910 ± 934					

TABLE B-I.1

CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION						
	DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MW-64	07/14/10	16700 ± 1720					
MW-64	07/21/10	14400 ± 1480					
MW-64	07/27/10	8410 ± 885					
MW-64	08/03/10	11700 ± 1220					
MW-64	08/11/10	12400 ± 1290					
MW-64	08/18/10	13400 ± 1380					
MW-64	08/24/10	39900 ± 4030					
MW-64	08/24/10	46400 ± 4680					
MW-64	09/08/10	28100 ± 2850					
MW-64	09/22/10	24400 ± 2480					
MW-64	09/29/10	31200 ± 3160					
MW-64	10/13/10	15300 ± 1580	< 0.6	3.2 ± 1.4	< 0.8	14.5 ± 2.4	< 1.5
MW-64	10/27/10	15100 ± 1550					
MW-64	11/10/10	6780 ± 736					
MW-64	11/23/10	6470 ± 798					
MW-64	12/15/10	6810 ± 724					
MW-65	03/10/10	< 162					
MW-65	03/17/10	< 164					
MW-65	03/24/10	< 172					
MW-65	03/30/10	< 170					
MW-65	04/06/10	< 168					
MW-65	04/13/10	< 164					
MW-65	04/21/10	< 156					
MW-65	04/28/10	< 157					
MW-65	05/05/10	< 174					
MW-65	05/11/10	< 174					
MW-65	05/18/10	< 152					
MW-65	05/26/10	< 178					
MW-65	06/02/10	< 181					
MW-65	06/08/10	< 170					
MW-65	06/16/10	< 149					
MW-65	06/22/10	< 163					
MW-65	06/29/10	< 191					
MW-65	07/07/10	< 161					
MW-65	07/13/10	< 180					
MW-65	07/21/10	< 167					
MW-65	07/28/10	< 174					
MW-65	08/03/10	< 183					
MW-65	08/10/10	< 188					
MW-65	08/17/10	< 185					
MW-65	08/24/10	< 192					
MW-65	09/28/10	< 182					
MW-65	10/12/10	< 171	< 0.6	< 1.8	< 1.5	15.4 ± 3.3	< 1.8
MW-65	11/16/10	< 156					
MW-65	12/14/10	< 181					
MW-66I	07/21/10	< 166					
MW-66I	07/29/10	< 178					
MW-66I	08/05/10	< 183					
MW-66I	08/10/10	< 185					
MW-66I	08/17/10	321 ± 135					
MW-66I	08/25/10	< 193					
MW-66I	10/12/10	< 183	< 0.8	< 0.7	< 0.6	6.5 ± 1.5	< 1.5
MW-67	03/10/10	600000 ± 59600					

TABLE B-I.1

CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MW-67	03/17/10	723000 ± 72400					
MW-67	03/24/10	799000 ± 79800					
MW-67	03/30/10	797000 ± 80100					
MW-67	04/06/10	842000 ± 83900					
MW-67	04/13/10	950000 ± 92700					
MW-67	04/20/10	643000 ± 62800					
MW-67	04/28/10	848000 ± 82600					
MW-67	05/04/10	702000 ± 68700					
MW-67	05/12/10	893000 ± 85000					
MW-67	05/12/10	885000 ± 84400	< 0.6				
MW-67	05/18/10	823000 ± 81400					
MW-67	05/27/10	899000 ± 88200					
MW-67	06/03/10	925000 ± 90700					
MW-67	06/09/10	915000 ± 86200					
MW-67	06/15/10	941000 ± 91400					
MW-67	06/23/10	781000 ± 75300					
MW-67	06/29/10	693000 ± 68600					
MW-67	07/07/10	790000 ± 76500					
MW-67	07/13/10	844000 ± 79400					
MW-67	07/21/10	647000 ± 63100					
MW-67	07/28/10	696000 ± 69100					
MW-67	08/04/10	739000 ± 71600					
MW-67	08/10/10	677000 ± 64900					
MW-67	08/17/10	660000 ± 65300					
MW-67	08/25/10	626000 ± 62300					
MW-67	08/31/10	655000 ± 64600					
MW-67	09/08/10	569000 ± 55900					
MW-67	09/15/10	457000 ± 45300					
MW-67	09/22/10	500000 ± 49700					
MW-67	09/29/10	591000 ± 58200					
MW-67	10/06/10	755000 ± 74200					
MW-67	10/14/10	294000 ± 27200	< 0.7	< 1.3	4.1 ± 2.4	7.8 ± 1.7	9.8 ± 2.0
MW-67	10/14/10	298000 ± 29700	< 0.9	< 1.4	6.2 ± 2.7	10.8 ± 1.9	9.0 ± 2.0
MW-67	10/20/10	305000 ± 5340					
MW-67	10/27/10	258000 ± 25600					
MW-67	11/03/10	1200000 ± 118000					
MW-67	11/10/10	736000 ± 73100					
MW-67	11/17/10	633000 ± 61800					
MW-67	11/23/10	617000 ± 60800					
MW-67	12/15/10	808000 ± 79800					
MW-68I	07/21/10	< 168					
MW-68I	07/29/10	< 179					
MW-68I	08/05/10	< 177					
MW-68I	08/10/10	< 184					
MW-68I	08/17/10	< 182					
MW-68I	08/25/10	< 162					
MW-68I	10/12/10	< 184	< 0.7	< 0.8	< 0.6	2.9 ± 1.4	< 1.6
MW-69I	07/21/10	< 167					
MW-69I	07/28/10	< 176					
MW-69I	08/04/10	< 181					
MW-69I	08/10/10	< 151					
MW-69I	08/17/10	< 181					
MW-69I	08/25/10	< 165					

TABLE B-I.1

CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION		H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
	DATE							
MW-69I	10/12/10	< 181		< 0.6	< 0.6	< 0.6	2.3 ± 1.2	< 1.5
MW-70I	07/21/10	< 166						
MW-70I	07/28/10	< 176						
MW-70I	08/04/10	< 183						
MW-70I	08/10/10	< 149						
MW-70I	08/17/10	< 194						
MW-70I	08/25/10	< 196						
MW-70I	10/12/10	< 181		< 0.7	< 0.7	1.1 ± 0.7	4.0 ± 1.3	< 1.6
MW-71	08/10/10		1010 ± 163					
MW-71	08/11/10		962 ± 157					
MW-71	08/18/10		931 ± 153					
MW-71	10/13/10		457 ± 126	< 0.7	< 2.3	< 0.8	33.0 ± 3.8	< 1.6
MW-71	10/13/10		448 ± 128	< 0.7	< 2.0	< 2.3	28.0 ± 3.4	1.9 ± 1.1
MW-72	08/10/10	< 150						
MW-72	08/18/10	< 172						
MW-72	10/13/10	< 176		< 0.8	5.9 ± 3.8	2.2 ± 1.0	27.6 ± 3.7	6.0 ± 1.5
MW-72	10/13/10	< 178		< 0.8	8.6 ± 4.4	< 0.6	32.3 ± 4.0	5.7 ± 1.4
VAULT 1	05/21/10		2370 ± 295					
GORILLA PIT	05/14/10		18400 ± 1890					
W-1	04/27/10	< 152						
W-10	04/27/10	< 167						
W-10	10/12/10	< 174		< 0.6	< 1.0	1.6 ± 0.8	5.0 ± 1.6	< 1.6
W-12	04/28/10	< 166						
W-12	10/12/10	< 182		< 0.7	< 1.2	4.3 ± 1.6	5.3 ± 1.6	5.5 ± 1.5
W-13	04/28/10	< 163						
W-13	10/12/10	< 176		< 0.9	< 0.7	4.1 ± 1.7	3.1 ± 1.3	6.2 ± 1.6
W-14	04/27/10	TBE < 169						
W-14	04/27/10	TBE < 168						
W-14	04/27/10	EIML < 151						
W-14	10/13/10	< 181		< 0.9	< 0.6	< 0.6	3.2 ± 1.3	< 1.6
W-15	04/27/10	< 166						
W-15	10/13/10	< 174		< 0.9	< 0.9	< 0.5	5.1 ± 1.5	< 1.5
W-16	04/28/10	< 153						
W-16	10/13/10	< 182		< 0.6	< 0.9	< 0.6	4.9 ± 1.5	< 1.6
W-17	06/18/10	< 155						
W-1A	04/28/10	< 154						
W-24	04/27/10	< 175						
W-24	10/12/10	< 185		< 0.9	< 1.1	2.9 ± 1.2	2.7 ± 1.4	7.9 ± 1.6
W-2A	04/28/10	< 150						
W-2B	04/28/10	< 170						
W-2C	04/27/10	< 151						
W-2C	06/18/10	< 159						
W-2K	04/27/10	< 157						
W-3	01/27/10	< 150						
W-3	02/23/10	< 193						
W-3	03/22/10	< 168						
W-3	04/27/10	TBE < 158						
W-3	04/27/10	TBE < 166						
W-3	04/27/10	TBE < 159						
W-3	04/27/10	EIML < 151						
W-3	05/25/10	< 178						
W-3	06/30/10	< 171						
W-3	07/27/10	< 163						

TABLE B-1.1

CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
W-3	08/24/10	1310 ± 208					
W-3	08/24/10	1450 ± 212					
W-3	09/28/10	< 187					
W-3	10/12/10	< 169	< 0.6	< 2.2	< 1.5	3.1 ± 1.5	3.4 ± 1.4
W-3	11/16/10	< 154					
W-3	12/14/10	< 164					
W-34	10/12/10	< 180	< 0.9	< 0.6	< 0.5	< 1.6	< 1.5
W-3C	06/15/10	< 161					
W-3K	06/15/10	< 160					
W-4	01/27/10	< 151					
W-4	02/24/10	< 190					
W-4	03/22/10	< 173					
W-4	04/27/10	< 153					
W-4	04/27/10	< 160					
W-4	05/25/10	< 176					
W-4	06/30/10	< 171					
W-4	07/27/10	< 163					
W-4	08/24/10	< 194					
W-4	09/28/10	< 185					
W-4	10/12/10	< 171	< 0.6	< 1.7	< 1.2	12.3 ± 2.4	< 1.7
W-4	11/16/10	383 ± 115					
W-4	11/16/10	293 ± 119					
W-4	11/16/10	377 ± 118					
W-4	12/14/10	< 163					
W-4A	04/27/10	< 153					
W-4B	04/27/10	< 155					
W-4C	06/15/10	< 159					
W-4K	01/06/10	< 161					
W-4K	01/26/10	< 150					
W-4K	02/24/10	< 197					
W-4K	03/22/10	< 170					
W-4K	04/27/10	TBE < 170					
W-4K	04/27/10	TBE < 169					
W-4K	04/27/10	TBE < 159					
W-4K	04/27/10	EIML < 151					
W-4K	05/26/10	< 175					
W-4K	06/15/10	< 158					
W-4K	06/30/10	< 174					
W-4K	07/28/10	< 174					
W-5	01/27/10	< 154					
W-5	02/24/10	< 193					
W-5	03/22/10	< 168					
W-5	04/28/10	TBE < 155					
W-5	04/28/10	TBE < 169					
W-5	04/28/10	EIML < 151					
W-5	04/28/10	< 160					
W-5	05/27/10	< 175					
W-5	06/29/10	< 166					
W-5	07/28/10	< 161					
W-5	08/24/10	< 192					
W-5	09/28/10	< 185					
W-5	10/12/10	< 167	< 0.8	3.8 ± 1.3	< 0.7	14.7 ± 1.9	< 1.5
W-5	11/16/10	< 158					

TABLE B-I.1

**CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN
GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL
GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION		H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
	DATE							
W-5	12/14/10	< 162						
W-5C	09/15/10	< 164						
W-5C	10/14/10	< 175		< 0.8	3.3 \pm 1.2	< 0.5	5.5 \pm 1.4	< 1.5
W-5K	09/15/10	< 165						
W-5K	10/14/10	< 176		< 0.6	< 1.2	< 0.5	6.2 \pm 1.7	< 1.6
W-6	01/27/10	< 151						
W-6	02/23/10	< 194						
W-6	03/22/10	< 171						
W-6	04/28/10	< 153						
W-6	04/28/10	< 157						
W-6	05/27/10	< 178						
W-6	06/29/10	< 172						
W-6	07/28/10	< 163						
W-6	08/24/10	< 194						
W-6	09/28/10	< 186						
W-6	10/12/10	< 173		< 0.4	< 1.3	30.5 \pm 9.2	9.0 \pm 2.0	18.9 \pm 3.3
W-6	11/16/10	< 155						
W-6	12/14/10	< 168						
W-7	04/27/10	< 155						
W-7	10/12/10	< 183		< 0.8	7.4 \pm 2.9	< 0.5	16.6 \pm 2.4	< 1.5
W-73 BATCH TANK	10/20/10	3420 \pm 393		< 0.7	< 13.9	32.7 \pm 13.7	< 22.6	91.5 \pm 17.4
W-9	04/27/10	< 166						
W-9	10/13/10	< 176		< 0.6	< 2.0	1.5 \pm 0.8	14.0 \pm 3.0	< 1.6

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATIO

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
LW-3	10/14/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 13	< 2	< 3	< 24	< 7
LW-4	10/14/10	< 3	< 4	< 8	< 4	< 7	< 4	< 7	< 12	< 3	< 3	< 26	< 9
MW-15K-1A	01/05/10	< 1	< 1	< 4	< 1	< 2	< 2	< 3	< 60	< 1	< 1	< 44	< 14
MW-15K-1A	01/12/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 39	< 1	< 1	< 40	< 12
MW-15K-1A	01/19/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 24	< 1	< 2	< 29	< 9
MW-15K-1A	01/26/10	< 1	< 2	< 4	< 1	< 3	< 2	< 4	< 137	< 1	< 1	< 79	< 25
MW-15K-1A	02/02/10	< 1	< 1	< 4	< 1	< 3	< 2	< 3	< 88	< 1	< 1	< 60	< 21
MW-15K-1A	02/09/10	< 1	< 2	< 5	< 2	< 3	< 2	< 3	< 51	< 1	< 1	< 43	< 14
MW-15K-1A	02/16/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 32	< 1	< 1	< 34	< 11
MW-15K-1A	02/24/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 21	< 5
MW-15K-1A	03/02/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 9	< 1	< 1	< 14	< 4
MW-15K-1A	03/09/10	< 1	< 1	< 4	< 1	< 2	< 2	< 3	< 25	< 1	< 1	< 30	< 10
MW-15K-1A	03/16/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 13	< 1	< 1	< 17	< 4
MW-15K-1A	03/23/10	< 1	< 1	< 4	< 1	< 2	< 2	< 3	< 98	< 1	< 1	< 63	< 16
MW-15K-1A	03/31/10	< 1	< 1	< 4	< 1	< 2	< 2	< 3	< 47	< 1	< 1	< 39	< 11
MW-15K-1A	04/06/10	< 1	< 1	< 4	< 1	< 3	< 2	< 3	< 45	< 1	< 1	< 39	< 13
MW-15K-1A	04/14/10	< 1	< 1	< 4	< 1	< 2	< 1	< 3	< 24	< 1	< 1	< 27	< 9
MW-15K-1A	04/20/10	< 1	< 1	< 3	< 1	< 2	< 2	< 3	< 17	< 1	< 1	< 20	< 7
MW-15K-1A	04/27/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 9	< 1	< 1	< 13	< 4
MW-15K-1A	05/04/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 12	< 2	< 2	< 21	< 5
MW-15K-1A	05/11/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 14	< 3	< 3	< 27	< 8
MW-15K-1A	05/19/10	< 4	< 4	< 9	< 4	< 8	< 5	< 8	< 12	< 4	< 4	< 27	< 9
MW-15K-1A	05/25/10	< 3	< 3	< 7	< 4	< 6	< 3	< 6	< 13	< 3	< 3	< 25	< 9
MW-15K-1A	06/02/10	< 3	< 4	< 8	< 3	< 7	< 4	< 7	< 10	< 4	< 4	< 24	< 6
MW-15K-1A	06/08/10	< 2	< 2	< 4	< 2	< 3	< 2	< 4	< 10	< 2	< 2	< 19	< 4
MW-15K-1A	06/15/10	< 5	< 5	< 10	< 5	< 9	< 5	< 9	< 14	< 4	< 5	< 32	< 11
MW-15K-1A	06/22/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 6	< 2	< 2	< 13	< 3
MW-15K-1A	06/30/10	< 1	< 2	< 3	< 1	< 3	< 2	< 4	< 14	< 1	< 2	< 18	< 6
MW-15K-1A	07/07/10	< 2	< 2	< 4	< 1	< 3	< 2	< 3	< 9	< 2	< 2	< 17	< 5
MW-15K-1A	07/13/10	< 3	< 3	< 7	< 3	< 5	< 3	< 5	< 15	< 2	< 3	< 28	< 9
MW-15K-1A	07/21/10	< 8	< 8	< 12	< 9	< 19	< 8	< 12	< 12	< 8	< 8	< 34	< 13
MW-15K-1A	07/27/10	< 4	< 4	< 8	< 4	< 7	< 4	< 7	< 8	< 4	< 4	< 21	< 6
MW-15K-1A	08/04/10	< 6	< 6	< 13	< 7	< 12	< 6	< 10	< 11	< 5	< 6	< 31	< 10
MW-15K-1A	08/11/10	< 4	< 4	< 10	< 4	< 9	< 5	< 8	< 14	< 4	< 4	< 30	< 9

BOLDED VALUES INDICATE THE LLD WAS NOT MET

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TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATIO

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-15K-1A	08/18/10	< 5	< 5	< 11	< 5	< 10	< 5	< 8	< 14	< 5	< 6	< 31	< 10
MW-15K-1A	08/24/10	< 4	< 5	< 9	< 4	< 8	< 5	< 8	< 15	< 4	< 4	< 31	< 10
MW-15K-1A	10/13/10	< 4	< 4	< 8	< 4	< 7	< 4	< 7	< 11	< 4	< 4	< 24	< 7
MW-16D	10/13/10	< 4	< 5	< 9	< 5	< 9	< 5	< 8	< 15	< 4	< 5	< 33	< 11
MW-1A-2A	10/13/10	< 4	< 5	< 9	< 5	< 9	< 5	< 9	< 15	< 4	< 5	< 32	< 10
MW-1I-1A	01/27/10	< 1	< 2	< 5	< 1	< 3	< 2	< 4	< 141	< 1	< 1	< 84	< 25
MW-1I-1A	02/24/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 31	< 1	< 1	< 33	< 8
MW-1I-1A	03/22/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 19	< 1	< 1	< 20	< 7
MW-1I-1A	10/12/10	< 2	< 2	< 4	< 2	< 3	< 2	< 4	< 6	< 2	< 2	< 14	< 3
MW-1I-2A	01/27/10	< 1	< 2	< 6	< 2	< 3	< 2	< 4	< 133	< 1	< 1	< 83	< 23
MW-1I-2A	02/24/10	< 1	< 1	< 4	< 1	< 2	< 2	< 3	< 34	< 1	< 1	< 30	< 11
MW-1I-2A	03/22/10	< 1	< 1	< 3	< 1	< 2	< 2	< 2	< 18	< 1	< 1	< 24	< 5
MW-1I-2A	10/12/10	< 4	< 5	< 9	< 5	< 9	< 5	< 8	< 13	< 4	< 4	< 30	< 10
MW-50	01/05/10	< 1	< 1	< 4	< 1	< 3	< 2	< 3	< 61	< 1	< 1	< 46	< 16
MW-50	01/12/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 31	< 1	< 1	< 26	< 9
MW-50	01/19/10	< 1	< 2	< 3	< 1	< 3	< 2	< 3	< 23	< 1	< 1	< 30	< 8
MW-50	01/26/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 143	< 1	< 2	< 82	< 26
MW-50	02/02/10	< 1	< 2	< 5	< 1	< 3	< 2	< 4	< 101	< 1	< 1	< 65	< 16
MW-50	02/09/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 54	< 1	< 2	< 46	< 15
MW-50	02/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 25	< 1	< 1	< 26	< 8
MW-50	02/24/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 16	< 1	< 1	< 21	< 7
MW-50	03/02/10	< 1	< 1	< 3	< 1	< 3	< 1	< 2	< 11	< 1	< 1	< 16	< 4
MW-50	03/09/10	< 1	< 2	< 3	< 1	< 3	< 1	< 3	< 27	< 1	< 1	< 31	< 8
MW-50	03/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 17	< 5
MW-50	03/23/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 88	< 1	< 1	< 57	< 17
MW-50	03/31/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 42	< 1	< 1	< 35	< 10
MW-50	04/07/10	< 2	< 2	< 5	< 1	< 3	< 2	< 4	< 53	< 1	< 1	< 46	< 11
MW-50	04/14/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 23	< 1	< 1	< 25	< 9
MW-50	04/21/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 14	< 1	< 1	< 20	< 6
MW-50	04/28/10	< 2	< 2	< 6	< 2	< 5	< 3	< 5	< 20	< 2	< 2	< 28	< 10
MW-50	05/04/10	< 4	< 4	< 11	< 6	< 9	< 5	< 8	< 26	< 4	< 5	< 44	< 11
MW-50	05/11/10	< 5	< 5	< 11	< 5	< 12	< 7	< 10	< 18	< 6	< 7	< 42	< 12

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-I.2

**CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART
OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATIO**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-50	05/12/10	< 2	< 2	< 5	< 2	< 4	< 3	< 4	< 11	< 2	< 2	< 23	< 6
MW-50	05/26/10	< 6	< 6	< 12	< 5	< 11	< 7	< 11	< 23	< 5	< 7	< 47	< 15
MW-50	06/02/10	< 4	< 4	< 7	< 3	< 9	< 5	< 8	< 12	< 4	< 4	< 25	< 6
MW-50	06/08/10	< 4	< 4	< 9	< 6	< 8	< 4	< 8	< 18	< 4	< 5	< 38	< 13
MW-50	06/15/10	< 5	< 5	< 10	< 5	< 8	< 5	< 9	< 16	< 4	< 5	< 36	< 11
MW-50	06/22/10	< 5	< 5	< 11	< 5	< 13	< 6	< 10	< 17	< 5	< 6	< 42	< 11
MW-50	10/13/10	< 6	< 5	< 12	< 5	< 10	< 6	< 10	< 14	< 5	< 6	< 35	< 11
MW-51	01/19/10	< 5	< 5	< 12	< 5	< 8	< 7	< 11	< 80	< 5	< 5	< 107	< 33
MW-51	01/26/10	< 1	< 3	< 6	< 1	< 3	< 2	< 4	< 144	< 1	< 1	< 100	< 32
MW-51	02/02/10	< 5	< 7	< 16	< 4	< 10	< 8	< 12	< 292	< 4	< 5	< 219	< 66
MW-51	02/09/10	< 6	< 8	< 14	< 5	< 12	< 8	< 15	< 244	< 6	< 5	< 205	< 47
MW-51	02/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 23	< 1	< 1	< 25	< 7
MW-51	02/23/10	< 3	< 3	< 7	< 2	< 5	< 3	< 5	< 36	< 2	< 3	< 43	< 12
MW-51	03/02/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 8	< 1	< 1	< 12	< 3
MW-51	03/09/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 18	< 1	< 1	< 19	< 6
MW-51	03/16/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 26	< 1	< 2	< 28	< 6
MW-51	03/23/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 90	< 1	< 1	< 61	< 20
MW-51	03/30/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 49	< 1	< 1	< 42	< 11
MW-51	04/06/10	< 1	< 2	< 4	< 2	< 2	< 2	< 3	< 41	< 1	< 1	< 40	< 12
MW-51	04/13/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 24	< 1	< 1	< 26	< 8
MW-51	04/20/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 18	< 4
MW-51	04/27/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 9	< 1	< 1	< 15	< 4
MW-51	05/04/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 10	< 2	< 2	< 21	< 5
MW-51	05/25/10	< 8	< 8	< 17	< 7	< 14	< 7	< 12	< 32	< 7	< 9	< 60	< 20
MW-51	06/02/10	< 5	< 6	< 12	< 6	< 11	< 6	< 12	< 18	< 6	< 7	< 45	< 10
MW-52	01/05/10	< 1	< 2	< 6	< 1	< 3	< 2	< 4	< 332	< 1	< 1	< 142	< 40
MW-52	01/12/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 152	< 1	< 1	< 90	< 27
MW-52	01/19/10	< 2	< 2	< 5	< 2	< 3	< 2	< 4	< 118	< 1	< 2	< 83	< 22
MW-52	01/26/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 102	< 1	< 1	< 63	< 18
MW-52	02/02/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 76	< 1	< 2	< 50	< 16

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-1.2

**CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART
OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-52	02/09/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 39	< 1	< 1	< 40	< 12
MW-52	02/16/10	< 1	< 1	< 4	< 1	< 2	< 1	< 2	< 41	< 1	< 1	< 32	< 11
MW-52	02/23/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 32	< 1	< 1	< 32	< 8
MW-52	03/02/10	< 2	< 2	< 4	< 1	< 3	< 2	< 4	< 38	< 2	< 2	< 42	< 8
MW-52	03/09/10	< 1	< 2	< 3	< 1	< 3	< 2	< 3	< 12	< 1	< 1	< 23	< 5
MW-52	03/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 20	< 5
MW-52	03/23/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 17	< 5
MW-52	03/30/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 14	< 1	< 2	< 20	< 6
MW-52	04/06/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 9	< 2	< 2	< 18	< 6
MW-52	10/13/10	< 5	< 5	< 12	< 6	< 11	< 6	< 10	< 11	< 5	< 6	< 29	< 10
MW-53	01/05/10	< 2	< 2	< 5	< 1	< 3	< 3	< 4	< 327	< 2	< 2	< 157	< 55
MW-53	01/12/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 154	< 1	< 1	< 84	< 25
MW-53	01/19/10	< 1	< 1	< 4	< 1	< 2	< 2	< 2	< 72	< 1	< 1	< 47	< 17
MW-53	01/26/10	< 1	< 1	< 4	< 1	< 2	< 2	< 2	< 93	< 1	< 1	< 56	< 15
MW-53	02/02/10	< 1	< 2	< 4	< 1	< 2	< 2	< 4	< 76	< 1	< 1	< 56	< 18
MW-53	02/09/10	< 1	< 2	< 3	< 1	< 2	< 2	< 3	< 31	< 1	< 1	< 34	< 10
MW-53	02/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 48	< 1	< 1	< 36	< 12
MW-53	02/23/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 40	< 1	< 1	< 39	< 12
MW-53	03/02/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 22	< 1	< 1	< 28	< 8
MW-53	03/09/10	< 1	< 1	< 3	< 1	< 3	< 1	< 2	< 13	< 1	< 1	< 18	< 5
MW-53	03/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 17	< 1	< 1	< 20	< 7
MW-53	03/23/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 17	< 5
MW-53	03/30/10	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 18	< 2	< 2	< 27	< 9
MW-53	04/06/10	< 2	< 2	< 5	< 2	< 4	< 3	< 4	< 10	< 2	< 2	< 19	< 6
MW-53	05/18/10	< 5	< 5	< 10	< 5	< 10	< 5	< 10	< 14	< 5	< 5	< 32	< 9
MW-53	06/02/10	< 7	< 8	< 15	< 8	< 16	< 8	< 13	< 19	< 8	< 9	< 52	< 14
MW-53	10/12/10	< 4	< 5	< 9	< 5	< 9	< 5	< 8	< 11	< 4	< 4	< 27	< 9
MW-54	01/05/10	< 1	< 2	< 7	< 1	< 2	< 2	< 4	< 303	< 1	< 1	< 144	< 44
MW-54	01/12/10	< 1	< 2	< 5	< 1	< 3	< 2	< 4	< 177	< 1	< 1	< 107	< 30
MW-54	01/19/10	< 1	< 2	< 3	< 1	< 3	< 2	< 3	< 24	< 1	< 1	< 27	< 8

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-54	01/26/10	< 1	< 2	< 5	< 1	< 2	< 2	< 3	< 123	< 1	< 1	< 86	< 22
MW-54	02/02/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 65	< 1	< 1	< 50	< 15
MW-54	02/09/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 40	< 1	< 1	< 42	< 14
MW-54	02/16/10	< 1	< 2	< 4	< 1	< 2	< 1	< 2	< 27	< 1	< 1	< 28	< 8
MW-54	02/23/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 19	< 4
MW-54	03/02/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 16	< 4
MW-54	03/09/10	< 1	< 2	< 3	< 1	< 3	< 2	< 4	< 42	< 2	< 2	< 42	< 9
MW-54	03/16/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 19	< 5
MW-54	03/23/10	< 1	< 2	< 5	< 1	< 2	< 2	< 3	< 95	< 1	< 1	< 63	< 20
MW-54	03/30/10	< 2	< 2	< 6	< 2	< 5	< 3	< 5	< 17	< 2	< 2	< 28	< 9
MW-54	04/06/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 8	< 2	< 2	< 16	< 5
MW-54	04/20/10	< 1	< 2	< 3	< 1	< 3	< 2	< 3	< 20	< 1	< 1	< 25	< 6
MW-54	06/02/10	< 7	< 7	< 15	< 11	< 15	< 8	< 12	< 19	< 7	< 8	< 47	< 12
MW-54	10/13/10	< 2	< 2	< 5	< 3	< 5	< 2	< 5	< 8	< 2	< 3	< 17	< 5
MW-55	01/05/10	< 1	< 1	< 4	< 1	< 2	< 2	< 2	< 53	< 1	< 1	< 38	< 11
MW-55	01/12/10	< 1	< 2	< 5	< 1	< 2	< 2	< 3	< 45	< 1	< 2	< 39	< 10
MW-55	01/19/10	< 1	< 1	< 3	< 1	< 2	< 2	< 3	< 24	< 1	< 2	< 28	< 7
MW-55	01/26/10	< 1	< 2	< 5	< 2	< 3	< 2	< 4	< 155	< 1	< 1	< 90	< 23
MW-55	02/02/10	< 1	< 2	< 5	< 1	< 3	< 2	< 3	< 81	< 1	< 1	< 64	< 18
MW-55	02/09/10	< 1	< 2	< 4	< 1	< 3	< 2	< 4	< 63	< 1	< 2	< 52	< 15
MW-55	02/16/10	< 1	< 2	< 3	< 1	< 2	< 2	< 3	< 28	< 1	< 1	< 28	< 8
MW-55	02/24/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 13	< 1	< 1	< 19	< 5
MW-55	03/02/10	< 1	< 1	< 4	< 1	< 3	< 2	< 3	< 14	< 1	< 1	< 20	< 6
MW-55	03/09/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 28	< 1	< 1	< 30	< 8
MW-55	03/16/10	< 1	< 1	< 3	< 1	< 3	< 2	< 3	< 15	< 1	< 1	< 22	< 7
MW-55	03/23/10	< 1	< 1	< 5	< 1	< 2	< 2	< 3	< 98	< 1	< 1	< 67	< 17
MW-55	03/31/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 44	< 1	< 1	< 35	< 10
MW-55	04/07/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 38	< 1	< 1	< 40	< 9
MW-55	04/14/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 23	< 1	< 1	< 27	< 7
MW-55	04/21/10	< 2	< 2	< 5	< 2	< 3	< 2	< 4	< 20	< 2	< 2	< 29	< 9

BOLDED VALUES INDICATE THE LLD WAS NOT MET

B-21

TABLE B-1.2

**CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART
OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATIO**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-55	04/27/10	< 1	< 2	< 3	< 2	< 3	< 2	< 3	< 11	< 1	< 2	< 17	< 6
MW-55	05/04/10	< 7	< 6	< 13	< 6	< 14	< 7	< 12	< 36	< 6	< 7	< 67	< 17
MW-55	05/11/10	< 4	< 4	< 8	< 4	< 7	< 4	< 8	< 15	< 4	< 4	< 31	< 8
MW-55	05/12/10	< 3	< 3	< 7	< 3	< 6	< 4	< 6	< 15	< 3	< 3	< 26	< 9
MW-55	05/19/10	< 5	< 5	< 11	< 6	< 11	< 5	< 9	< 13	< 5	< 6	< 30	< 8
MW-55	05/26/10	< 5	< 5	< 10	< 4	< 9	< 5	< 9	< 21	< 5	< 5	< 38	< 13
MW-55	06/02/10	< 7	< 7	< 13	< 7	< 14	< 8	< 13	< 19	< 7	< 8	< 45	< 14
MW-55	06/08/10	< 4	< 4	< 8	< 4	< 7	< 4	< 7	< 18	< 4	< 3	< 36	< 10
MW-55	06/15/10	< 5	< 6	< 11	< 6	< 12	< 6	< 11	< 18	< 6	< 6	< 44	< 11
MW-55	06/22/10	< 6	< 6	< 13	< 6	< 12	< 7	< 11	< 22	< 7	< 7	< 47	< 13
MW-55	10/13/10	< 4	< 4	< 9	< 4	< 8	< 5	< 8	< 13	< 4	< 5	< 30	< 9
MW-56I	01/05/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 70	< 1	< 1	< 50	< 17
MW-56I	01/12/10	< 1	< 2	< 5	< 2	< 2	< 2	< 3	< 45	< 1	< 1	< 43	< 13
MW-56I	01/19/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 26	< 1	< 1	< 30	< 7
MW-56I	01/26/10	< 1	< 2	< 5	< 1	< 3	< 2	< 3	< 162	< 1	< 1	< 89	< 30
MW-56I	02/02/10	< 2	< 2	< 5	< 1	< 3	< 2	< 4	< 84	< 1	< 1	< 72	< 23
MW-56I	02/09/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 33	< 1	< 1	< 29	< 9
MW-56I	02/16/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 33	< 1	< 1	< 36	< 8
MW-56I	02/23/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 14	< 1	< 1	< 18	< 6
MW-56I	03/02/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 10	< 1	< 1	< 16	< 5
MW-56I	03/09/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 27	< 1	< 1	< 32	< 9
MW-56I	03/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 19	< 6
MW-56I	03/23/10	< 1	< 1	< 4	< 1	< 2	< 2	< 3	< 84	< 1	< 1	< 53	< 14
MW-56I	03/31/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 39	< 1	< 1	< 27	< 10
MW-56I	04/06/10	< 1	< 2	< 3	< 1	< 3	< 1	< 3	< 40	< 1	< 1	< 34	< 11
MW-56I	04/14/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 21	< 1	< 1	< 24	< 7
MW-56I	04/20/10	< 2	< 2	< 5	< 2	< 4	< 2	< 3	< 22	< 1	< 2	< 30	< 8
MW-56I	04/27/10	< 1	< 1	< 4	< 2	< 3	< 1	< 3	< 9	< 1	< 1	< 17	< 5
MW-56I	05/04/10	< 6	< 7	< 13	< 6	< 10	< 7	< 13	< 29	< 5	< 5	< 59	< 19
MW-56I	05/11/10	< 4	< 4	< 9	< 4	< 8	< 5	< 8	< 14	< 4	< 5	< 33	< 8

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATIO

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-56I	05/12/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 21	< 6
MW-56I	05/18/10	< 5	< 5	< 10	< 5	< 9	< 5	< 9	< 14	< 5	< 6	< 31	< 8
MW-56I	05/25/10	< 4	< 4	< 8	< 3	< 7	< 5	< 7	< 17	< 4	< 4	< 37	< 10
MW-56I	06/02/10	< 6	< 6	< 12	< 5	< 13	< 7	< 10	< 14	< 5	< 6	< 36	< 12
MW-56I	06/08/10	< 5	< 5	< 11	< 4	< 10	< 6	< 10	< 25	< 5	< 6	< 46	< 14
MW-56I	06/15/10	< 4	< 4	< 9	< 4	< 9	< 5	< 8	< 13	< 4	< 4	< 29	< 8
MW-56I	06/22/10	< 5	< 4	< 9	< 4	< 8	< 5	< 9	< 16	< 4	< 5	< 34	< 8
MW-56I	10/14/10	TBE	< 4	< 4	< 9	< 5	< 8	< 8	< 12	< 4	< 4	< 28	< 8
MW-56I	10/14/10	TBE	< 4	< 4	< 9	< 4	< 8	< 4	< 7	< 4	< 4	< 25	< 9
MW-56I	10/14/10	EIML	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 2	< 2	< 21	< 6
MW-57I	01/05/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 64	< 1	< 1	< 50	< 11
MW-57I	01/12/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 45	< 1	< 1	< 39	< 12
MW-57I	01/19/10	< 1	< 2	< 3	< 1	< 3	< 2	< 3	< 26	< 1	< 1	< 28	< 8
MW-57I	01/26/10	< 1	< 2	< 5	< 1	< 2	< 2	< 3	< 135	< 1	< 1	< 77	< 26
MW-57I	02/02/10	< 1	< 2	< 5	< 1	< 2	< 2	< 4	< 94	< 1	< 1	< 73	< 18
MW-57I	02/09/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 49	< 1	< 1	< 37	< 13
MW-57I	02/16/10	< 1	< 1	< 2	< 1	< 1	< 1	< 2	< 17	< 1	< 1	< 17	< 4
MW-57I	02/24/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 19	< 5
MW-57I	03/02/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 14	< 1	< 1	< 17	< 4
MW-57I	03/09/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 23	< 1	< 1	< 21	< 7
MW-57I	03/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 21	< 6
MW-57I	03/23/10	< 1	< 1	< 4	< 1	< 2	< 2	< 3	< 92	< 1	< 1	< 59	< 16
MW-57I	03/31/10	< 1	< 1	< 4	< 1	< 2	< 2	< 3	< 57	< 1	< 1	< 44	< 12
MW-57I	04/07/10	< 1	< 1	< 3	< 1	< 1	< 1	< 2	< 32	< 1	< 1	< 26	< 8
MW-57I	04/14/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 32	< 1	< 1	< 35	< 8
MW-57I	04/20/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 20	< 1	< 2	< 27	< 7
MW-57I	04/27/10	< 7	< 12	< 28	< 15	< 19	< 13	< 19	< 13	< 8	< 10	< 21	< 6
MW-57I	05/05/10	< 13	< 14	< 30	< 13	< 27	< 16	< 26	< 75	< 12	< 12	< 133	< 40
MW-57I	05/12/10	< 7	< 6	< 15	< 6	< 13	< 7	< 11	< 22	< 5	< 6	< 45	< 16
MW-57I	05/12/10	< 3	< 3	< 6	< 3	< 6	< 3	< 6	< 14	< 3	< 3	< 29	< 9
MW-57I	05/19/10	< 5	< 5	< 11	< 5	< 10	< 5	< 8	< 13	< 5	< 6	< 31	< 10
MW-57I	05/25/10	< 6	< 6	< 12	< 4	< 12	< 7	< 11	< 23	< 5	< 6	< 48	< 15

BOLDED VALUES INDICATE THE LLD WAS NOT MET

B-23

TABLE B-1.2

**CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART
OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-57I	06/02/10	< 8	< 8	< 15	< 8	< 15	< 9	< 13	< 18	< 7	< 8	< 47	< 13
MW-57I	06/08/10	< 4	< 4	< 10	< 4	< 9	< 5	< 8	< 22	< 4	< 5	< 41	< 14
MW-57I	06/15/10	< 5	< 5	< 11	< 6	< 9	< 5	< 9	< 13	< 4	< 5	< 32	< 11
MW-57I	06/22/10	< 5	< 4	< 10	< 5	< 9	< 5	< 9	< 16	< 4	< 4	< 32	< 10
MW-57I	10/13/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 8	< 3	< 3	< 20	< 6
MW-58I	07/21/10	< 8	< 8	< 17	< 9	< 17	< 8	< 15	< 14	< 8	< 9	< 38	< 15
MW-58I	07/27/10	< 4	< 4	< 9	< 4	< 10	< 4	< 8	< 8	< 4	< 4	< 22	< 7
MW-58I	08/03/10	< 8	< 7	< 15	< 8	< 15	< 8	< 13	< 15	< 8	< 9	< 39	< 13
MW-58I	08/11/10	< 3	< 3	< 7	< 3	< 7	< 4	< 6	< 9	< 3	< 3	< 22	< 7
MW-58I	08/18/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 7	< 3	< 3	< 19	< 6
MW-58I	08/24/10	< 5	< 5	< 10	< 5	< 9	< 5	< 8	< 14	< 4	< 5	< 31	< 12
MW-58I	10/14/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 9	< 2	< 2	< 17	< 6
MW-59I	03/24/10	< 1	< 2	< 5	< 1	< 3	< 2	< 4	< 117	< 1	< 1	< 76	< 22
MW-59I	03/30/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 43	< 1	< 1	< 34	< 12
MW-59I	04/06/10	< 1	< 2	< 3	< 1	< 2	< 2	< 3	< 35	< 1	< 1	< 38	< 13
MW-59I	04/13/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 34	< 1	< 2	< 35	< 8
MW-59I	04/21/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 14	< 1	< 1	< 20	< 7
MW-59I	04/28/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 13	< 2	< 2	< 23	< 6
MW-59I	05/05/10	< 2	< 2	< 4	< 1	< 3	< 2	< 3	< 9	< 2	< 2	< 16	< 6
MW-59I	05/11/10	< 5	< 6	< 12	< 5	< 12	< 6	< 11	< 19	< 6	< 6	< 41	< 13
MW-59I	05/18/10	< 4	< 4	< 9	< 5	< 7	< 4	< 7	< 11	< 3	< 4	< 27	< 8
MW-59I	05/26/10	< 3	< 4	< 8	< 4	< 8	< 4	< 7	< 15	< 3	< 4	< 31	< 10
MW-59I	06/02/10	< 4	< 4	< 8	< 4	< 8	< 5	< 8	< 12	< 5	< 4	< 27	< 7
MW-59I	06/08/10	< 2	< 3	< 5	< 2	< 5	< 3	< 5	< 13	< 2	< 2	< 23	< 8
MW-59I	06/16/10	< 2	< 2	< 6	< 2	< 4	< 3	< 4	< 13	< 2	< 2	< 23	< 7
MW-59I	06/22/10	< 2	< 2	< 5	< 2	< 4	< 3	< 4	< 10	< 2	< 2	< 20	< 6
MW-59I	06/29/10	< 2	< 2	< 6	< 2	< 5	< 2	< 4	< 14	< 2	< 2	< 24	< 8
MW-59I	07/07/10	< 3	< 3	< 6	< 2	< 6	< 3	< 5	< 12	< 3	< 3	< 23	< 7
MW-59I	07/13/10	< 2	< 3	< 5	< 3	< 4	< 2	< 5	< 12	< 2	< 2	< 23	< 7
MW-59I	07/21/10	< 10	< 9	< 17	< 7	< 17	< 9	< 16	< 15	< 8	< 9	< 42	< 10
MW-59I	07/28/10	< 9	< 9	< 20	< 9	< 19	< 10	< 17	< 15	< 9	< 10	< 45	< 14
MW-59I	08/03/10	< 7	< 7	< 14	< 9	< 16	< 8	< 13	< 14	< 7	< 7	< 40	< 12
MW-59I	08/10/10	< 4	< 5	< 8	< 4	< 8	< 4	< 7	< 13	< 4	< 4	< 29	< 7
MW-59I	08/17/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 7	< 3	< 3	< 18	< 5

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATIO

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140	
MW-59I	08/24/10	< 4	< 4	< 8	< 4	< 7	< 4	< 8	< 14	< 4	< 4	< 30	< 8	
MW-59I	10/13/10	< 4	< 5	< 10	< 5	< 10	< 5	< 8	< 12	< 4	< 5	< 30	< 9	
MW-60I	05/18/10	< 5	< 6	< 12	< 7	< 11	< 5	< 10	< 15	< 5	< 6	< 35	< 10	
MW-60I	07/21/10	< 7	< 7	< 15	< 6	< 17	< 9	< 14	< 12	< 7	< 8	< 34	< 10	
MW-60I	07/27/10	< 5	< 5	< 10	< 5	< 11	< 5	< 8	< 9	< 6	< 5	< 24	< 8	
MW-60I	08/03/10	< 6	< 7	< 14	< 7	< 15	< 7	< 13	< 14	< 7	< 7	< 39	< 13	
MW-60I	08/11/10	< 5	< 5	< 12	< 6	< 11	< 5	< 10	< 15	< 5	< 5	< 36	< 11	
MW-60I	08/18/10	< 3	< 3	< 7	< 3	< 7	< 4	< 6	< 7	< 3	< 3	< 19	< 6	
MW-60I	08/24/10	< 4	< 4	< 9	< 4	< 9	< 5	< 8	< 12	< 4	< 4	< 29	< 10	
MW-60I	10/14/10	TBE	< 4	< 4	< 9	< 4	< 8	< 5	< 8	< 14	< 4	< 4	< 30	< 9
MW-60I	10/14/10	TBE	< 3	< 3	< 8	< 3	< 6	< 3	< 6	< 14	< 3	< 3	< 29	< 9
MW-60I	10/14/10	EIML	< 1	< 2	< 3	< 2	< 3	< 1	< 3	< 9	< 2	< 1	< 15	< 3
MW-61I	07/21/10	< 8	< 8	< 16	< 8	< 17	< 9	< 14	< 14	< 10	< 9	< 38	< 11	
MW-61I	07/27/10	< 4	< 4	< 8	< 4	< 8	< 4	< 7	< 8	< 4	< 4	< 22	< 6	
MW-61I	08/03/10	< 7	< 7	< 15	< 7	< 15	< 9	< 13	< 15	< 7	< 8	< 38	< 13	
MW-61I	08/11/10	< 4	< 5	< 9	< 4	< 8	< 4	< 8	< 11	< 4	< 4	< 28	< 9	
MW-61I	08/18/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 8	< 3	< 3	< 19	< 6	
MW-61I	08/24/10	< 3	< 4	< 8	< 4	< 7	< 4	< 7	< 14	< 3	< 4	< 30	< 9	
MW-62	03/10/10	< 1	< 2	< 3	< 1	< 2	< 2	< 2	< 31	< 1	< 1	< 33	< 11	
MW-62	03/17/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 18	< 1	< 1	< 21	< 7	
MW-62	03/24/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 15	< 1	< 1	< 20	< 6	
MW-62	03/30/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 20	< 2	< 2	< 31	< 10	
MW-62	04/06/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 10	< 2	< 2	< 18	< 6	
MW-62	04/13/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 14	< 1	< 1	< 16	< 5	
MW-62	04/20/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 10	< 1	< 2	< 17	< 5	
MW-62	04/28/10	< 2	< 2	< 5	< 2	< 4	< 3	< 4	< 11	< 2	< 2	< 20	< 7	
MW-62	05/04/10	< 1	< 1	< 4	< 1	< 2	< 2	< 3	< 14	< 1	< 1	< 20	< 5	
MW-62	05/12/10	< 2	< 3	< 5	< 2	< 5	< 3	< 5	< 13	< 2	< 2	< 23	< 5	
MW-62	05/18/10	< 4	< 5	< 10	< 5	< 9	< 5	< 8	< 13	< 4	< 5	< 31	< 9	
MW-62	05/27/10	< 2	< 2	< 5	< 3	< 5	< 2	< 4	< 8	< 2	< 2	< 16	< 6	
MW-62	06/03/10	< 4	< 4	< 8	< 4	< 7	< 4	< 7	< 12	< 4	< 4	< 26	< 8	
MW-62	06/09/10	< 3	< 3	< 7	< 3	< 7	< 4	< 6	< 14	< 3	< 3	< 28	< 9	

BOLDED VALUES INDICATE THE LLD WAS NOT MET

B-25

TABLE B-1.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-62	06/16/10	< 2	< 2	< 5	< 2	< 3	< 2	< 4	< 11	< 2	< 2	< 21	< 6
MW-62	06/23/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 10	< 3	< 3	< 22	< 7
MW-62	06/29/10	< 4	< 4	< 9	< 4	< 9	< 4	< 7	< 12	< 4	< 4	< 26	< 9
MW-62	07/13/10	< 2	< 2	< 5	< 2	< 4	< 3	< 4	< 14	< 2	< 2	< 23	< 6
MW-62	07/21/10	< 8	< 8	< 14	< 7	< 15	< 8	< 16	< 15	< 8	< 8	< 41	< 13
MW-62	07/28/10	< 8	< 9	< 17	< 8	< 19	< 9	< 15	< 15	< 9	< 9	< 41	< 10
MW-62	08/04/10	< 7	< 8	< 17	< 7	< 17	< 8	< 14	< 14	< 8	< 8	< 40	< 14
MW-62	08/10/10	< 4	< 5	< 11	< 5	< 10	< 5	< 8	< 15	< 5	< 5	< 33	< 10
MW-62	08/17/10	< 5	< 5	< 10	< 4	< 9	< 6	< 9	< 15	< 5	< 6	< 33	< 9
MW-62	08/25/10	< 4	< 4	< 8	< 3	< 7	< 4	< 6	< 13	< 3	< 4	< 27	< 8
MW-62	10/13/10	< 3	< 3	< 7	< 3	< 7	< 3	< 6	< 7	< 3	< 4	< 17	< 6
MW-63I	07/21/10	< 9	< 9	< 18	< 8	< 23	< 10	< 17	< 15	< 12	< 10	< 40	< 12
MW-63I	07/27/10	< 5	< 4	< 10	< 5	< 11	< 5	< 8	< 10	< 5	< 5	< 25	< 7
MW-63I	08/03/10	< 8	< 8	< 16	< 7	< 14	< 9	< 12	< 14	< 7	< 7	< 37	< 12
MW-63I	08/11/10	< 4	< 4	< 9	< 4	< 8	< 4	< 8	< 13	< 4	< 5	< 31	< 8
MW-63I	08/18/10	< 5	< 5	< 11	< 6	< 10	< 6	< 10	< 12	< 5	< 5	< 31	< 11
MW-63I	08/24/10	< 3	< 4	< 7	< 3	< 7	< 4	< 6	< 13	< 3	< 3	< 27	< 7
MW-63I	10/14/10	< 2	< 2	< 5	< 3	< 5	< 3	< 5	< 11	< 2	< 3	< 22	< 6
MW-64	03/10/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 30	< 1	< 1	< 33	< 9
MW-64	03/17/10	< 1	< 2	< 5	< 1	< 3	< 2	< 3	< 179	< 1	< 1	< 96	< 20
MW-64	03/24/10	< 1	< 1	< 4	< 1	< 3	< 2	< 3	< 80	< 1	< 1	< 58	< 19
MW-64	03/31/10	< 1	< 2	< 4	< 2	< 2	< 2	< 3	< 65	< 1	< 1	< 51	< 16
MW-64	04/07/10	< 1	< 2	< 3	< 1	< 3	< 2	< 3	< 48	< 1	< 1	< 40	< 11
MW-64	04/14/10	< 1	< 1	< 3	< 1	< 2	< 2	< 2	< 14	< 1	< 1	< 19	< 7
MW-64	04/20/10	< 1	< 1	< 3	< 1	< 2	< 2	< 3	< 14	< 1	< 1	< 21	< 6
MW-64	04/27/10	< 1	< 1	< 4	< 1	< 2	< 1	< 3	< 13	< 1	< 1	< 19	< 5
MW-64	05/05/10	< 4	< 4	< 11	< 4	< 9	< 5	< 8	< 24	< 4	< 4	< 42	< 12
MW-64	05/12/10	< 2	< 3	< 5	< 3	< 5	< 3	< 4	< 13	< 2	< 3	< 25	< 7
MW-64	05/19/10	< 4	< 5	< 9	< 4	< 9	< 5	< 9	< 14	< 4	< 5	< 31	< 9
MW-64	05/25/10	< 3	< 3	< 6	< 3	< 4	< 3	< 5	< 14	< 2	< 3	< 24	< 8

BOLDED VALUES INDICATE THE LLD WAS NOT MET

B-26

TABLE B-1.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATIO

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-64	06/02/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 7	< 3	< 3	< 16	< 6
MW-64	06/08/10	< 3	< 3	< 7	< 3	< 7	< 3	< 6	< 14	< 3	< 3	< 28	< 10
MW-64	06/15/10	< 4	< 4	< 9	< 4	< 8	< 4	< 8	< 12	< 4	< 4	< 29	< 9
MW-64	06/22/10	< 2	< 2	< 4	< 3	< 4	< 2	< 4	< 6	< 2	< 2	< 15	< 4
MW-64	06/29/10	< 2	< 2	< 3	< 1	< 3	< 2	< 3	< 15	< 2	< 2	< 25	< 6
MW-64	07/07/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 9	< 2	< 2	< 17	< 4
MW-64	07/14/10	< 3	< 3	< 6	< 2	< 5	< 3	< 5	< 11	< 2	< 2	< 24	< 7
MW-64	07/21/10	< 9	< 8	< 17	< 9	< 18	< 8	< 14	< 14	< 8	< 9	< 42	< 11
MW-64	07/27/10	< 4	< 4	< 8	< 3	< 8	< 4	< 7	< 6	< 3	< 4	< 19	< 6
MW-64	08/03/10	< 7	< 7	< 13	< 7	< 14	< 7	< 11	< 15	< 7	< 7	< 39	< 10
MW-64	08/11/10	< 4	< 5	< 9	< 4	< 8	< 5	< 8	< 13	< 4	< 5	< 30	< 9
MW-64	08/18/10	< 4	< 4	< 11	< 4	< 9	< 5	< 8	< 10	< 4	< 4	< 25	< 9
MW-64	08/24/10	< 4	< 4	< 10	< 5	< 9	< 5	< 8	< 15	< 4	< 5	< 32	< 10
MW-64	10/13/10	< 3	< 3	< 7	< 3	< 7	< 4	< 7	< 9	< 3	< 4	< 23	< 7
MW-65	03/10/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 29	< 1	< 1	< 30	< 8
MW-65	03/17/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 14	< 1	< 1	< 19	< 5
MW-65	03/24/10	< 1	< 1	< 3	< 1	< 2	< 2	< 3	< 16	< 1	< 1	< 20	< 4
MW-65	03/30/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 18	< 2	< 2	< 27	< 10
MW-65	04/06/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 13	< 3	< 3	< 23	< 7
MW-65	04/13/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 20	< 5
MW-65	04/21/10	< 2	< 2	< 5	< 1	< 4	< 2	< 4	< 12	< 2	< 2	< 22	< 6
MW-65	04/28/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 15	< 2	< 3	< 26	< 9
MW-65	05/05/10	< 1	< 2	< 3	< 1	< 3	< 2	< 3	< 12	< 1	< 2	< 20	< 6
MW-65	05/11/10	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 13	< 2	< 2	< 22	< 6
MW-65	05/18/10	< 4	< 4	< 8	< 4	< 8	< 4	< 7	< 11	< 4	< 4	< 26	< 8
MW-65	05/26/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 13	< 3	< 3	< 26	< 8
MW-65	06/02/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 7	< 2	< 3	< 18	< 5
MW-65	06/08/10	< 2	< 3	< 6	< 2	< 5	< 2	< 4	< 12	< 2	< 2	< 22	< 6
MW-65	06/16/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 21	< 6
MW-65	06/22/10	< 3	< 3	< 8	< 3	< 6	< 4	< 7	< 15	< 3	< 3	< 29	< 9

BOLDDED VALUES INDICATE THE LLD WAS NOT MET

B-27

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATIO

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-65	06/29/10	< 4	< 4	< 9	< 4	< 8	< 5	< 8	< 14	< 4	< 4	< 32	< 9
MW-65	07/13/10	< 2	< 3	< 6	< 2	< 4	< 2	< 5	< 14	< 2	< 2	< 21	< 7
MW-65	07/21/10	< 8	< 7	< 17	< 6	< 13	< 7	< 14	< 11	< 7	< 8	< 33	< 12
MW-65	07/28/10	< 9	< 10	< 20	< 9	< 22	< 10	< 16	< 15	< 11	< 11	< 45	< 15
MW-65	08/03/10	< 7	< 7	< 15	< 8	< 14	< 7	< 12	< 13	< 6	< 8	< 31	< 9
MW-65	08/10/10	< 3	< 3	< 7	< 3	< 6	< 4	< 5	< 11	< 3	< 3	< 23	< 7
MW-65	08/17/10	< 5	< 5	< 10	< 4	< 9	< 5	< 9	< 13	< 4	< 5	< 29	< 9
MW-65	08/24/10	< 4	< 4	< 9	< 4	< 8	< 4	< 7	< 14	< 4	< 4	< 29	< 9
MW-65	10/12/10	< 5	< 5	< 10	< 5	< 9	< 5	< 9	< 14	< 5	< 5	< 31	< 10
MW-66I	07/21/10	< 9	< 9	< 16	< 8	< 16	< 9	< 15	< 14	< 8	< 10	< 40	< 11
MW-66I	07/29/10	< 9	< 9	< 19	< 7	< 18	< 9	< 16	< 13	< 8	< 8	< 41	< 10
MW-66I	08/05/10	< 6	< 6	< 11	< 5	< 13	< 6	< 11	< 12	< 7	< 6	< 31	< 8
MW-66I	08/10/10	< 4	< 4	< 8	< 3	< 7	< 4	< 7	< 13	< 3	< 4	< 27	< 7
MW-66I	08/17/10	< 4	< 4	< 9	< 5	< 8	< 5	< 8	< 11	< 4	< 5	< 27	< 9
MW-66I	08/25/10	< 4	< 5	< 9	< 4	< 7	< 5	< 8	< 14	< 4	< 4	< 34	< 9
MW-66I	10/12/10	< 3	< 3	< 7	< 3	< 6	< 4	< 6	< 12	< 3	< 3	< 26	< 8
MW-67	03/10/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 19	< 1	< 1	< 17	< 7
MW-67	03/17/10	< 1	< 1	< 3	< 1	< 1	< 1	< 2	< 123	< 1	< 1	< 63	< 23
MW-67	03/24/10	< 1	< 1	< 3	< 1	< 1	< 1	< 2	< 57	< 1	< 1	< 37	< 12
MW-67	03/30/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 40	< 1	< 1	< 36	< 11
MW-67	04/06/10	< 1	< 2	< 4	< 2	< 2	< 2	< 3	< 38	< 1	< 1	< 33	< 10
MW-67	04/13/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 36	< 1	< 1	< 35	< 10
MW-67	04/20/10	< 1	< 1	< 3	< 1	< 2	< 2	< 2	< 15	< 1	< 1	< 20	< 6
MW-67	04/28/10	< 1	< 2	< 3	< 1	< 3	< 1	< 2	< 12	< 1	< 1	< 18	< 6
MW-67	05/04/10	< 2	< 2	< 5	< 3	< 4	< 3	< 5	< 13	< 2	< 2	< 23	< 7
MW-67	05/12/10	< 2	< 3	< 5	< 3	< 6	< 3	< 5	< 12	< 2	< 3	< 23	< 6
MW-67	05/12/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 13	< 2	< 3	< 25	< 8
MW-67	05/18/10	< 4	< 4	< 9	< 4	< 8	< 4	< 7	< 13	< 3	< 4	< 26	< 8
MW-67	05/27/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 13	< 3	< 4	< 25	< 8
MW-67	06/03/10	< 2	< 2	< 3	< 2	< 3	< 1	< 3	< 4	< 1	< 2	< 9	< 3

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATIO

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140	
MW-67	06/09/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 13	< 3	< 3	< 25	< 8	
MW-67	06/15/10	< 4	< 4	< 9	< 4	< 7	< 4	< 7	< 12	< 3	< 4	< 25	< 9	
MW-67	06/23/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 6	< 2	< 2	< 16	< 4	
MW-67	06/29/10	< 1	< 2	< 4	< 2	< 4	< 2	< 3	< 14	< 2	< 2	< 21	< 4	
MW-67	07/07/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 10	< 2	< 2	< 18	< 5	
MW-67	07/13/10	< 1	< 2	< 5	< 2	< 4	< 2	< 3	< 11	< 2	< 2	< 20	< 7	
MW-67	07/21/10	< 9	< 10	< 18	< 9	< 22	< 11	< 16	< 15	< 9	< 10	< 41	< 15	
MW-67	07/28/10	< 10	< 9	< 19	< 10	< 20	< 11	< 17	< 15	< 8	< 10	< 43	< 9	
MW-67	08/04/10	< 6	< 6	< 13	< 6	< 13	< 6	< 11	< 12	< 5	< 7	< 30	< 11	
MW-67	08/10/10	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 11	< 2	< 2	< 21	< 7	
MW-67	08/17/10	< 4	< 4	< 9	< 4	< 8	< 5	< 8	< 11	< 4	< 4	< 26	< 9	
MW-67	08/25/10	< 4	< 4	< 9	< 4	< 8	< 4	< 8	< 15	< 4	< 5	< 31	< 10	
MW-67	10/14/10	TBE	< 4	< 4	< 9	< 5	< 9	< 5	< 8	< 10	< 4	< 4	< 26	< 9
MW-67	10/14/10	TBE	< 3	< 3	< 7	< 4	< 7	< 4	< 7	< 8	< 3	< 3	< 21	< 6
MW-67	10/14/10	EIML	< 2	< 3	< 9	< 2	< 4	< 2	< 4	< 9	< 3	< 3	< 19	< 5
MW-68I	07/21/10	< 9	< 9	< 16	< 8	< 16	< 8	< 15	< 13	< 8	< 8	< 37	< 11	
MW-68I	07/29/10	< 9	< 11	< 24	< 13	< 25	< 11	< 14	< 12	< 10	< 8	< 40	< 14	
MW-68I	08/05/10	< 7	< 7	< 15	< 7	< 15	< 7	< 13	< 12	< 7	< 8	< 37	< 11	
MW-68I	08/10/10	< 4	< 4	< 9	< 4	< 8	< 4	< 7	< 13	< 4	< 4	< 29	< 9	
MW-68I	08/17/10	< 4	< 4	< 9	< 4	< 9	< 5	< 8	< 11	< 4	< 4	< 27	< 8	
MW-68I	08/25/10	< 3	< 3	< 7	< 3	< 6	< 4	< 6	< 10	< 3	< 3	< 23	< 7	
MW-68I	10/12/10	< 2	< 2	< 5	< 3	< 4	< 2	< 4	< 12	< 2	< 2	< 23	< 7	
MW-69I	07/21/10	< 6	< 6	< 11	< 6	< 14	< 7	< 12	< 10	< 6	< 7	< 31	< 10	
MW-69I	07/28/10	< 9	< 8	< 22	< 8	< 20	< 9	< 16	< 14	< 8	< 8	< 43	< 10	
MW-69I	08/04/10	< 5	< 5	< 11	< 5	< 9	< 6	< 9	< 9	< 5	< 5	< 27	< 8	
MW-69I	08/10/10	< 4	< 4	< 8	< 3	< 7	< 4	< 6	< 13	< 3	< 4	< 29	< 9	
MW-69I	08/17/10	< 4	< 5	< 9	< 4	< 9	< 5	< 8	< 14	< 5	< 5	< 31	< 8	
MW-69I	08/25/10	< 4	< 4	< 9	< 4	< 9	< 4	< 8	< 12	< 4	< 4	< 27	< 9	
MW-69I	10/12/10	< 3	< 3	< 7	< 3	< 6	< 4	< 6	< 10	< 3	< 3	< 24	< 7	
MW-70I	07/21/10	< 8	< 8	< 14	< 8	< 18	< 9	< 15	< 14	< 10	< 9	< 39	< 11	

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TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATIO

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-70I	07/28/10	< 8	< 10	< 17	< 9	< 17	< 9	< 15	< 15	< 8	< 9	< 41	< 10
MW-70I	08/04/10	< 6	< 6	< 12	< 7	< 13	< 6	< 12	< 11	< 5	< 6	< 33	< 10
MW-70I	08/10/10	< 4	< 4	< 10	< 5	< 9	< 5	< 8	< 14	< 4	< 4	< 32	< 10
MW-70I	08/17/10	< 3	< 4	< 8	< 3	< 7	< 4	< 6	< 10	< 3	< 4	< 24	< 8
MW-70I	08/25/10	< 4	< 4	< 9	< 3	< 8	< 4	< 7	< 14	< 4	< 4	< 28	< 9
MW-70I	10/12/10	< 4	< 4	< 8	< 3	< 8	< 4	< 7	< 13	< 3	< 4	< 26	< 8
MW-71	08/10/10	< 6	< 8	< 16	< 7	< 18	< 8	< 14	< 14	< 8	< 8	< 37	< 12
MW-71	08/18/10	< 5	< 6	< 11	< 5	< 10	< 6	< 9	< 13	< 5	< 5	< 32	< 10
MW-71	10/13/10	TBE	< 4	< 8	< 4	< 7	< 4	< 7	< 13	< 3	< 4	< 27	< 9
MW-71	10/13/10	TBE	< 3	< 7	< 3	< 6	< 3	< 6	< 11	< 3	< 3	< 23	< 7
MW-71	10/13/10	EI ML	< 3	< 7	< 2	< 3	< 4	< 4	< 8	< 3	< 2	< 11	< 5
MW-72	08/10/10	< 3	< 3	< 7	< 3	< 6	< 4	< 6	< 12	< 3	< 3	< 25	< 6
MW-72	08/18/10	< 5	< 5	< 10	< 5	< 9	< 5	< 9	< 13	< 5	< 5	< 30	< 10
MW-72	10/13/10	< 2	< 2	< 5	< 3	< 4	< 2	< 4	< 9	< 2	< 2	< 19	< 6
MW-72	10/13/10	< 4	< 4	< 9	< 4	< 8	< 4	< 7	< 12	< 4	< 4	< 28	< 8
VAULT 1	05/21/10	< 21	< 20	< 41	195 ± 20	< 43	< 20	< 35	< 30	< 20	531 ± 36	< 89	< 26
W-10	10/12/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 14	< 3	< 3	< 28	< 8
W-12	10/12/10	< 4	< 4	< 9	< 4	< 8	< 4	< 8	< 12	< 4	< 4	< 29	< 9
W-13	10/12/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 10	< 3	< 3	< 24	< 7
W-14	10/13/10	< 3	< 2	< 6	< 3	< 5	< 3	< 4	< 8	< 2	< 3	< 18	< 5
W-15	10/13/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 9	< 2	< 3	< 20	< 4
W-16	10/13/10	< 3	< 3	< 6	< 2	< 5	< 3	< 4	< 8	< 2	< 2	< 17	< 6
W-24	10/12/10	< 3	< 3	< 7	< 4	< 7	< 4	< 6	< 13	< 3	< 3	< 28	< 9
W-3	01/27/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 92	< 1	< 1	< 62	< 19
W-3	02/23/10	< 1	< 2	< 4	< 2	< 2	< 2	< 4	< 42	< 1	< 1	< 41	< 10
W-3	03/22/10	< 1	< 1	< 4	< 1	< 2	< 1	< 3	< 20	< 1	< 1	< 23	< 7
W-3	10/12/10	< 3	< 3	< 7	< 3	< 7	< 4	< 6	< 9	< 3	< 3	< 21	< 6
W-34	10/12/10	< 3	< 3	< 7	< 3	< 6	< 4	< 6	< 13	< 3	< 3	< 26	< 8
W-4	01/27/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 117	< 1	< 1	< 69	< 16
W-4	02/24/10	< 1	< 1	< 4	< 1	< 2	< 2	< 2	< 31	< 1	< 1	< 27	< 10

BOLDED VALUES INDICATE THE LLD WAS NOT MET

B-30

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATIO

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
W-4	03/22/10	< 1	< 1	< 3	< 1	< 2	< 2	< 3	< 21	< 1	< 1	< 22	< 7
W-4	10/12/10	< 5	< 5	< 10	< 5	< 9	< 5	< 9	< 14	< 4	< 5	< 31	< 11
W-4K	01/06/10	< 1	< 2	< 6	< 1	< 3	< 2	< 4	< 290	< 1	< 1	< 129	< 39
W-4K	01/26/10	< 1	< 2	< 5	< 1	< 2	< 2	< 4	< 150	< 1	< 1	< 93	< 21
W-4K	02/24/10	< 1	< 2	< 3	< 1	< 2	< 2	< 3	< 40	< 1	< 1	< 37	< 7
W-4K	03/22/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 16	< 1	< 1	< 19	< 5
W-4K	04/27/10	< 2	< 3	< 5	< 2	< 5	< 3	< 4	< 9	< 2	< 2	< 19	< 6
W-4K	07/28/10	< 5	< 5	< 11	< 5	< 12	< 5	< 9	< 9	< 5	< 5	< 25	< 9
W-5	01/27/10	< 1	< 1	< 3	< 1	< 2	< 2	< 2	< 86	< 1	< 1	< 51	< 18
W-5	02/24/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 37	< 1	< 1	< 37	< 10
W-5	03/22/10	< 1	< 2	< 4	< 1	< 3	< 1	< 3	< 22	< 1	< 1	< 26	< 8
W-5	10/12/10	< 5	< 5	< 11	< 5	< 11	< 6	< 10	< 11	< 5	< 5	< 30	< 10
W-5C	10/14/10	< 4	< 4	< 8	< 4	< 8	< 4	< 7	< 11	< 3	< 4	< 26	< 9
W-5K	10/14/10	< 3	< 3	< 7	< 3	< 6	< 4	< 6	< 13	< 3	< 3	< 28	< 7
W-6	01/27/10	< 1	< 2	< 6	< 1	< 3	< 2	< 3	< 119	< 1	< 2	< 77	< 21
W-6	02/23/10	< 1	< 2	< 3	< 1	< 2	< 2	< 3	< 40	< 1	< 1	< 35	< 9
W-6	03/22/10	< 1	< 2	< 3	< 1	< 2	< 1	< 2	< 20	< 1	< 1	< 25	< 8
W-6	10/12/10	< 5	< 5	< 9	< 4	< 9	< 5	< 8	< 10	< 4	< 5	< 27	< 9
W-7	10/12/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 13	< 3	< 3	< 27	< 8
W-73 BATCH TANK	10/20/10	< 2	< 2	< 5	< 2	< 4	< 3	< 4	< 15	< 2	< 2	< 24	< 7
W-9	10/13/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 12	< 2	< 3	< 24	< 8

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BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-I.3 CONCENTRATIONS OF "HARD-TO-DETECTS" IN GROUNDWATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION PERIOD	AM-241	CM-242	CM-243/244	PU-238	PU-239/240	U-233-234	U-235	U-238	FE-55	NI-63
MW-50	05/12/10	< 0.1	< 0.02	< 0.08	< 0.1	< 0.1				< 127	< 5.0
MW-55	05/12/10	< 0.1	< 0.03	< 0.06	< 0.2	< 0.1				< 151	< 3.6
MW-56I	05/12/10	< 0.0	< 0.04	< 0.12	< 0.1	< 0.1				< 150	< 4.3
MW-57I	05/12/10	< 0.1	< 0.02	< 0.04	< 0.1	< 0.1				< 197	< 4.3
MW-67	05/12/10	< 0.2	< 0.08	< 0.07	< 0.2	< 0.1				< 123	< 4.5
W-73 BATCH TANK	10/20/10	< 0.2	< 0.10	< 0.14	< 0.1	< 0.2	0.2 \pm 0.1	< 0.2	0.3 \pm 0.1	< 106	< 4.6

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MCD	01/01/10	< 169					
MCD	01/02/10	< 167					
MCD	01/03/10	< 168					
MCD	01/04/10	< 151					
MCD	01/05/10	< 147					
MCD	01/06/10	< 153					
MCD	01/07/10	< 169					
MCD	01/08/10	< 163					
MCD	01/09/10	< 167					
MCD	01/10/10	< 165					
MCD	01/11/10	< 177					
MCD	01/12/10	< 170					
MCD	01/13/10	< 165					
MCD	01/14/10	< 164					
MCD	01/15/10	< 163					
MCD	01/16/10	< 165					
MCD	01/17/10	< 166					
MCD	01/18/10	< 152					
MCD	01/19/10	< 162					
MCD	01/20/10	< 159					
MCD	01/21/10	< 157					
MCD	01/22/10	< 157					
MCD	01/23/10	< 157					
MCD	01/24/10	< 156					
MCD	01/25/10	< 158					
MCD	01/26/10	< 153					
MCD	01/27/10	< 152					
MCD	01/28/10	< 150					
MCD	01/29/10	< 149					
MCD	01/30/10	< 145					
MCD	01/31/10	< 149					
MCD	02/01/10	< 143					
MCD	02/02/10	< 164					
MCD	02/03/10	< 160					
MCD	02/04/10	< 160					
MCD	02/05/10	< 159					
MCD	02/06/10	< 168					
MCD	02/07/10	< 167					
MCD	02/08/10	< 164					
MCD	02/09/10	< 167					
MCD	02/10/10	< 167					
MCD	02/11/10	< 165					
MCD	02/12/10	< 169					
MCD	02/13/10	< 170					
MCD	02/14/10	< 168					
MCD	02/15/10	< 164					
MCD	02/16/10	< 163					
MCD	02/17/10	< 148					
MCD	02/18/10	< 153					
MCD	02/19/10	< 149					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MCD	02/20/10	< 149					
MCD	02/21/10	< 163					
MCD	02/22/10	< 160					
MCD	02/23/10	< 181					
MCD	02/24/10	< 179					
MCD	02/25/10	< 180					
MCD	02/26/10	< 160					
MCD	02/27/10	< 146					
MCD	02/28/10	< 149					
MCD	03/01/10	< 176					
MCD	03/02/10	< 176					
MCD	03/03/10	< 173					
MCD	03/04/10	< 161					
MCD	03/05/10	< 162					
MCD	03/06/10	< 162					
MCD	03/07/10	< 162					
MCD	03/08/10	< 162					
MCD	03/09/10	< 161					
MCD	03/10/10	< 172					
MCD	03/11/10	< 154					
MCD	03/12/10	< 157					
MCD	03/13/10	< 155					
MCD	03/14/10	< 154					
MCD	03/15/10	< 172					
MCD	03/16/10	< 170					
MCD	03/17/10	< 171					
MCD	03/18/10	< 168					
MCD	03/19/10	< 172					
MCD	03/20/10	< 154					
MCD	03/21/10	< 155					
MCD	03/22/10	< 151					
MCD	03/23/10	< 159					
MCD	03/24/10	< 157					
MCD	03/25/10	< 151					
MCD	03/26/10	< 152					
MCD	03/27/10	< 155					
MCD	03/28/10	< 152					
MCD	03/29/10	< 166					
MCD	03/30/10	< 172					
MCD	03/31/10	< 175					
MCD	04/01/10	< 172					
MCD	04/02/10	< 163					
MCD	04/03/10	< 162					
MCD	04/04/10	< 165					
MCD	04/05/10	< 169					
MCD	04/06/10	< 175					
MCD	04/07/10	< 160					
MCD	04/08/10	< 179					
MCD	04/09/10	< 177					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MCD	04/10/10	< 178					
MCD	04/11/10	< 178					
MCD	04/12/10	< 177					
MCD	04/13/10	< 179					
MCD	04/14/10	< 179					
MCD	04/15/10	< 181					
MCD	04/16/10	< 181					
MCD	04/17/10	< 178					
MCD	04/18/10	< 178					
MCD	04/19/10	< 174					
MCD	04/20/10	< 181					
MCD	04/21/10	< 160					
MCD	04/22/10	< 166					
MCD	04/23/10	< 164					
MCD	04/24/10	< 160					
MCD	04/25/10	< 181					
MCD	04/26/10	< 177					
MCD	04/27/10	< 175					
MCD	04/28/10	< 164					
MCD	04/29/10	< 162					
MCD	04/30/10	< 168					
MCD	05/01/10	< 176					
MCD	05/02/10	< 172					
MCD	05/03/10	< 170					
MCD	05/04/10	< 165					
MCD	05/05/10	< 179					
MCD	05/06/10	< 179					
MCD	05/07/10	< 180					
MCD	05/08/10	< 158					
MCD	05/09/10	< 158					
MCD	05/10/10	< 180					
MCD	05/11/10	< 178					
MCD	05/12/10	< 167					
MCD	05/13/10	< 160					
MCD	05/14/10	< 164					
MCD	05/15/10	< 166					
MCD	05/16/10	< 167					
MCD	05/17/10	< 168					
MCD	05/18/10	< 168					
MCD	05/19/10	< 176					
MCD	05/20/10	< 176					
MCD	05/21/10	< 172					
MCD	05/22/10	< 157					
MCD	05/23/10	< 153					
MCD	05/24/10	< 154					
MCD	05/25/10	< 154					
MCD	05/26/10	< 157					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MCD	05/27/10	< 156					
MCD	05/28/10	< 154					
MCD	05/29/10	< 153					
MCD	05/30/10	< 154					
MCD	05/31/10	< 161					
MCD	06/01/10	< 157					
MCD	06/02/10	< 176					
MCD	06/03/10	< 152					
MCD	06/04/10	< 152					
MCD	06/05/10	< 151					
MCD	06/06/10	< 153					
MCD	06/07/10	< 157					
MCD	06/08/10	< 157					
MCD	06/09/10	< 168					
MCD	06/10/10	< 182					
MCD	06/11/10	< 160					
MCD	06/12/10	< 160					
MCD	06/13/10	< 166					
MCD	06/14/10	< 156					
MCD	06/15/10	< 159					
MCD	06/16/10	< 168					
MCD	06/17/10	< 176					
MCD	06/18/10	< 171					
MCD	06/19/10	< 170					
MCD	06/20/10	< 174					
MCD	06/21/10	< 177					
MCD	06/22/10	< 174					
MCD	06/23/10	< 171					
MCD	06/24/10	< 170					
MCD	06/25/10	< 170					
MCD	06/26/10	< 173					
MCD	06/27/10	< 166					
MCD	06/28/10	< 161					
MCD	06/29/10	< 162					
MCD	06/30/10	< 159					
MCD	07/01/10	< 157					
MCD	07/02/10	< 157					
MCD	07/03/10	< 159					
MCD	07/04/10	< 159					
MCD	07/05/10	< 159					
MCD	07/06/10	< 159					
MCD	07/07/10	< 157					
MCD	07/08/10	< 168					
MCD	07/09/10	< 166					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MCD	07/10/10	< 164					
MCD	07/11/10	< 166					
MCD	07/12/10	< 167					
MCD	07/13/10	< 170					
MCD	07/14/10	< 162					
MCD	07/15/10	< 160					
MCD	07/16/10	< 161					
MCD	07/17/10	< 161					
MCD	07/18/10	< 158					
MCD	07/19/10	< 169					
MCD	07/20/10	< 167					
MCD	07/21/10	< 177					
MCD	07/22/10	< 177					
MCD	07/23/10	< 179					
MCD	07/24/10	< 177					
MCD	07/25/10	< 177					
MCD	07/26/10	< 181					
MCD	07/27/10	< 164					
MCD	07/28/10	< 167					
MCD	07/29/10	< 148					
MCD	07/30/10	< 151					
MCD	07/31/10	< 152					
MCD	08/01/10	< 150					
MCD	08/02/10	< 150					
MCD	08/03/10	< 148					
MCD	08/04/10	< 183					
MCD	08/05/10	< 175					
MCD	08/06/10	< 174					
MCD	08/07/10	< 172					
MCD	08/08/10	< 177					
MCD	08/09/10	< 179					
MCD	08/10/10	< 173					
MCD	08/11/10	< 174					
MCD	08/12/10	< 168					
MCD	08/13/10	< 175					
MCD	08/14/10	< 175					
MCD	08/15/10	< 173					
MCD	08/16/10	< 169					
MCD	08/17/10	< 173					
MCD	08/18/10	< 172					
MCD	08/19/10	< 177					
MCD	08/20/10	< 166					
MCD	08/21/10	< 171					
MCD	08/22/10	< 164					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MCD	08/23/10	< 164					
MCD	08/24/10	< 164					
MCD	08/25/10	< 169					
MCD	08/26/10	< 167					
MCD	08/27/10	< 166					
MCD	08/28/10	< 170					
MCD	08/29/10	< 168					
MCD	09/01/10	< 175					
MCD	09/08/10	< 170					
MCD	09/15/10	< 167					
MCD	09/22/10	< 170					
MCD	09/29/10	< 171					
MCD	10/06/10	< 159					
MCD	10/11/10	< 177	< 0.6	< 74	< 10	419 \pm 40	< 21
MCD	10/21/10	< 158	< 0.6	< 85	< 10	507 \pm 51	< 21
MCD	10/21/10	< 167					
MCD	10/21/10	< 161					
MCD	10/23/10	< 167					
MCD	10/24/10	< 167					
MCD	10/26/10	< 167					
MCD	10/27/10	< 168					
MCD	10/28/10	< 152					
MCD	10/29/10	< 160					
MCD	10/31/10	< 158					
MCD	11/01/10	< 159					
MCD	11/01/10	< 163					
MCD	11/02/10	< 159					
MCD	11/02/10	< 163					
MCD	11/03/10	< 162					
MCD	11/10/10	< 176					
MCD	11/16/10	< 170					
MCD	11/16/10	< 163					
MCD	11/17/10	< 173					
MCD	11/17/10	< 162					
MCD	11/18/10	< 166					
MCD	11/19/10	< 163					
MCD	11/20/10	< 163					
MCD	11/21/10	< 162					
MCD	11/22/10	< 163					
MCD	11/23/10	< 165					
MCD	11/24/10	< 160					
MCD	11/25/10	< 155					
MCD	11/26/10	< 157					
MCD	11/27/10	< 158					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
MCD	11/28/10	< 154					
MCD	11/29/10	< 157					
MCD	11/30/10	< 159					
MCD	12/01/10	< 157					
MCD	12/02/10	< 162					
MCD	12/03/10	< 166					
MCD	12/04/10	< 167					
MCD	12/05/10	< 167					
MCD	12/06/10	< 162					
MCD	12/07/10	< 167					
MCD	12/08/10	< 167					
MCD	12/09/10	< 166					
MCD	12/10/10	< 164					
MCD	12/11/10	< 167					
MCD	12/12/10	< 167					
MCD	12/13/10	< 169					
MCD	12/14/10	< 166					
MCD	12/15/10	< 167					
MCD	12/16/10	< 165					
MCD	12/17/10	< 165					
MCD	12/18/10	< 165					
MCD	12/19/10	< 163					
MCD	12/20/10	< 166					
MCD	12/21/10	< 163					
MCD	12/22/10	< 165					
MCD	12/23/10	< 173					
MCD	12/25/10	< 193					
MCD	12/26/10	< 192					
MCD	12/27/10	< 161					
MCD	12/28/10	< 154					
MCD	12/29/10	< 154					
MCD	12/30/10	< 155					
MCD	12/31/10	< 156					
SW-1	01/01/10	< 166					
SW-1	01/02/10	< 164					
SW-1	01/03/10	< 148					
SW-1	01/04/10	< 154					
SW-1	01/05/10	< 151					
SW-1	01/06/10	< 152					
SW-1	01/07/10	< 155					
SW-1	01/08/10	< 169					
SW-1	01/09/10	< 168					
SW-1	01/10/10	< 166					
SW-1	01/11/10	< 176					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-1	01/12/10	< 175					
SW-1	01/13/10	< 166					
SW-1	01/14/10	< 162					
SW-1	01/15/10	< 167					
SW-1	01/16/10	< 155					
SW-1	01/17/10	< 159					
SW-1	01/18/10	< 160					
SW-1	01/19/10	< 166					
SW-1	01/20/10	< 161					
SW-1	01/21/10	< 157					
SW-1	01/22/10	< 155					
SW-1	01/23/10	< 158					
SW-1	01/24/10	< 156					
SW-1	01/25/10	< 155					
SW-1	01/26/10	< 137					
SW-1	01/27/10	< 152					
SW-1	01/28/10	< 163					
SW-1	01/29/10	< 148					
SW-1	01/30/10	< 145					
SW-1	01/31/10	< 148					
SW-1	02/01/10	< 147					
SW-1	02/02/10	< 147					
SW-1	02/03/10	< 156					
SW-1	02/04/10	< 163					
SW-1	02/05/10	< 161					
SW-1	02/06/10	< 165					
SW-1	02/07/10	< 165					
SW-1	02/08/10	< 166					
SW-1	02/09/10	< 164					
SW-1	02/10/10	< 169					
SW-1	02/11/10	< 162					
SW-1	02/12/10	< 166					
SW-1	02/13/10	< 173					
SW-1	02/14/10	< 165					
SW-1	02/15/10	< 167					
SW-1	02/16/10	< 166					
SW-1	02/17/10	< 156					
SW-1	02/18/10	< 153					
SW-1	02/19/10	< 151					
SW-1	02/20/10	< 147					
SW-1	02/21/10	< 153					
SW-1	02/22/10	< 160					
SW-1	02/23/10	< 179					
SW-1	02/24/10	< 180					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-1	02/25/10	< 176					
SW-1	02/26/10	< 162					
SW-1	02/27/10	< 164					
SW-1	02/28/10	< 152					
SW-1	03/01/10	< 174					
SW-1	03/02/10	< 174					
SW-1	03/03/10	< 174					
SW-1	03/04/10	< 175					
SW-1	03/05/10	< 163					
SW-1	03/06/10	< 164					
SW-1	03/07/10	< 158					
SW-1	03/08/10	< 160					
SW-1	03/09/10	< 159					
SW-1	03/10/10	< 174					
SW-1	03/11/10	< 154					
SW-1	03/12/10	< 154					
SW-1	03/13/10	< 155					
SW-1	03/14/10	< 153					
SW-1	03/15/10	< 173					
SW-1	03/16/10	< 170					
SW-1	03/17/10	< 171					
SW-1	03/18/10	< 173					
SW-1	03/19/10	< 166					
SW-1	03/20/10	< 152					
SW-1	03/21/10	< 153					
SW-1	03/22/10	< 152					
SW-1	03/23/10	< 153					
SW-1	03/24/10	< 151					
SW-1	03/25/10	< 156					
SW-1	03/26/10	< 156					
SW-1	03/27/10	< 148					
SW-1	03/28/10	< 158					
SW-1	03/29/10	< 165					
SW-1	03/30/10	< 173					
SW-1	03/31/10	< 172					
SW-1	04/01/10	< 176					
SW-1	04/02/10	< 165					
SW-1	04/03/10	< 165					
SW-1	04/04/10	< 163					
SW-1	04/05/10	< 168					
SW-1	04/06/10	< 171					
SW-1	04/07/10	< 160					
SW-1	04/08/10	< 171					
SW-1	04/09/10	< 179					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-1	04/10/10	< 178					
SW-1	04/11/10	< 175					
SW-1	04/12/10	< 179					
SW-1	04/13/10	< 179					
SW-1	04/14/10	< 180					
SW-1	04/15/10	< 181					
SW-1	04/16/10	< 180					
SW-1	04/17/10	< 179					
SW-1	04/18/10	< 179					
SW-1	04/19/10	< 179					
SW-1	04/20/10	< 182					
SW-1	04/21/10	< 163					
SW-1	04/22/10	< 158					
SW-1	04/23/10	< 161					
SW-1	04/24/10	< 163					
SW-1	04/25/10	< 164					
SW-1	04/26/10	< 178					
SW-1	04/27/10	< 177					
SW-1	04/28/10	< 163					
SW-1	04/29/10	< 162					
SW-1	04/30/10	< 169					
SW-1	05/01/10	< 170					
SW-1	05/02/10	< 179					
SW-1	05/03/10	< 166					
SW-1	05/04/10	< 170					
SW-1	05/05/10	< 178					
SW-1	05/06/10	< 181					
SW-1	05/07/10	< 183					
SW-1	05/08/10	< 161					
SW-1	05/09/10	< 160					
SW-1	05/10/10	< 179					
SW-1	05/11/10	< 177					
SW-1	05/12/10	< 158					
SW-1	05/13/10	< 166					
SW-1	05/14/10	< 166					
SW-1	05/15/10	< 167					
SW-1	05/16/10	< 167					
SW-1	05/17/10	< 165					
SW-1	05/18/10	< 170					
SW-1	05/19/10	< 173					
SW-1	05/20/10	< 173					
SW-1	05/21/10	< 174					
SW-1	05/22/10	< 155					
SW-1	05/23/10	< 153					
SW-1	05/24/10	< 155					
SW-1	05/25/10	< 152					
SW-1	05/26/10	< 156					
SW-1	05/27/10	< 158					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-1	05/28/10	< 153					
SW-1	05/29/10	< 158					
SW-1	05/30/10	< 157					
SW-1	05/31/10	< 160					
SW-1	06/01/10	< 157					
SW-1	06/02/10	< 159					
SW-1	06/03/10	< 157					
SW-1	06/04/10	< 152					
SW-1	06/05/10	< 152					
SW-1	06/06/10	< 156					
SW-1	06/07/10	< 159					
SW-1	06/08/10	< 151					
SW-1	06/09/10	< 149					
SW-1	06/10/10	< 186					
SW-1	06/11/10	< 181					
SW-1	06/12/10	< 161					
SW-1	06/13/10	< 158					
SW-1	06/14/10	< 159					
SW-1	06/15/10	< 157					
SW-1	06/16/10	< 171					
SW-1	06/17/10	< 174					
SW-1	06/18/10	< 174					
SW-1	06/19/10	< 170					
SW-1	06/20/10	< 176					
SW-1	06/21/10	< 169					
SW-1	06/22/10	< 171					
SW-1	06/23/10	< 170					
SW-1	06/24/10	< 171					
SW-1	06/25/10	< 163					
SW-1	06/26/10	< 163					
SW-1	06/27/10	< 171					
SW-1	06/28/10	< 164					
SW-1	06/29/10	< 165					
SW-1	06/30/10	< 161					
SW-1	07/01/10	< 158					
SW-1	07/02/10	< 158					
SW-1	07/03/10	< 159					
SW-1	07/04/10	< 158					
SW-1	07/05/10	< 158					
SW-1	07/06/10	< 156					
SW-1	07/07/10	< 159					
SW-1	07/08/10	< 167					
SW-1	07/09/10	< 168					
SW-1	07/10/10	< 167					
SW-1	07/11/10	< 165					
SW-1	07/12/10	< 170					
SW-1	07/13/10	< 168					
SW-1	07/14/10	< 164					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-1	07/15/10	< 161					
SW-1	07/16/10	< 159					
SW-1	07/17/10	< 159					
SW-1	07/18/10	< 160					
SW-1	07/19/10	< 165					
SW-1	07/20/10	< 162					
SW-1	07/21/10	< 174					
SW-1	07/22/10	< 176					
SW-1	07/23/10	< 177					
SW-1	07/24/10	< 177					
SW-1	07/25/10	< 176					
SW-1	07/26/10	< 178					
SW-1	07/27/10	< 177					
SW-1	07/28/10	< 166					
SW-1	07/29/10	< 147					
SW-1	07/30/10	< 147					
SW-1	07/31/10	< 152					
SW-1	08/01/10	< 171					
SW-1	08/02/10	< 152					
SW-1	08/03/10	< 149					
SW-1	08/04/10	< 150					
SW-1	08/05/10	< 167					
SW-1	08/06/10	< 179					
SW-1	08/07/10	< 175					
SW-1	08/08/10	< 176					
SW-1	08/09/10	< 175					
SW-1	08/10/10	< 179					
SW-1	08/11/10	< 175					
SW-1	08/12/10	< 166					
SW-1	08/13/10	< 167					
SW-1	08/14/10	< 171					
SW-1	08/15/10	< 172					
SW-1	08/16/10	< 173					
SW-1	08/17/10	< 173					
SW-1	08/18/10	< 172					
SW-1	08/19/10	< 181					
SW-1	08/20/10	< 179					
SW-1	08/21/10	< 167					
SW-1	08/22/10	< 164					
SW-1	08/23/10	< 163					
SW-1	08/24/10	< 169					
SW-1	08/25/10	< 167					
SW-1	08/26/10	< 167					
SW-1	08/27/10	< 169					
SW-1	08/28/10	< 169					
SW-1	08/29/10	< 169					
SW-1	09/01/10	< 172					
SW-1	09/08/10	< 169					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-1	09/15/10	< 180					
SW-1	09/22/10	< 170					
SW-1	09/29/10	< 159					
SW-1	10/06/10	< 159					
SW-1	10/11/10	< 176	< 0.6	< 88	< 10	479 ± 49	< 21
SW-1	10/21/10	< 161					
SW-1	10/28/10	< 155					
SW-1	11/03/10	< 162					
SW-1	11/10/10	< 178					
SW-1	11/17/10	< 173					
SW-1	11/24/10	< 156					
SW-1	12/01/10	< 156					
SW-1	12/08/10	< 161					
SW-1	12/15/10	< 167					
SW-1	12/22/10	< 163					
SW-1	12/30/10	< 172					
SW-2	01/01/10	< 168					
SW-2	01/02/10	< 170					
SW-2	01/03/10	< 170					
SW-2	01/04/10	< 150					
SW-2	01/05/10	< 149					
SW-2	01/06/10	< 152					
SW-2	01/07/10	< 174					
SW-2	01/08/10	< 169					
SW-2	01/09/10	< 168					
SW-2	01/10/10	< 164					
SW-2	01/11/10	< 173					
SW-2	01/12/10	< 176					
SW-2	01/13/10	< 164					
SW-2	01/14/10	< 165					
SW-2	01/15/10	< 158					
SW-2	01/16/10	< 166					
SW-2	01/17/10	< 163					
SW-2	01/18/10	< 163					
SW-2	01/19/10	< 164					
SW-2	01/20/10	< 155					
SW-2	01/21/10	< 157					
SW-2	01/22/10	< 159					
SW-2	01/23/10	< 156					
SW-2	01/24/10	< 155					
SW-2	01/25/10	< 157					
SW-2	01/26/10	< 149					
SW-2	01/27/10	< 155					
SW-2	01/28/10	< 148					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-2	01/29/10	< 146					
SW-2	01/30/10	< 145					
SW-2	01/31/10	< 147					
SW-2	02/01/10	< 148					
SW-2	02/02/10	< 160					
SW-2	02/03/10	< 163					
SW-2	02/04/10	< 157					
SW-2	02/05/10	< 160					
SW-2	02/06/10	< 165					
SW-2	02/07/10	< 166					
SW-2	02/08/10	< 165					
SW-2	02/09/10	< 167					
SW-2	02/10/10	< 162					
SW-2	02/11/10	< 165					
SW-2	02/12/10	< 165					
SW-2	02/13/10	< 169					
SW-2	02/14/10	< 169					
SW-2	02/15/10	< 166					
SW-2	02/16/10	< 169					
SW-2	02/17/10	< 154					
SW-2	02/18/10	< 147					
SW-2	02/19/10	< 151					
SW-2	02/20/10	< 145					
SW-2	02/21/10	< 144					
SW-2	02/22/10	< 157					
SW-2	02/23/10	< 181					
SW-2	02/24/10	< 179					
SW-2	02/25/10	< 178					
SW-2	02/26/10	< 165					
SW-2	02/27/10	< 152					
SW-2	02/28/10	< 145					
SW-2	03/01/10	< 172					
SW-2	03/02/10	< 177					
SW-2	03/03/10	< 174					
SW-2	03/04/10	< 155					
SW-2	03/05/10	< 163					
SW-2	03/06/10	< 164					
SW-2	03/07/10	< 162					
SW-2	03/08/10	< 162					
SW-2	03/09/10	< 165					
SW-2	03/10/10	< 176					
SW-2	03/11/10	< 155					
SW-2	03/12/10	< 158					
SW-2	03/13/10	< 153					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-2	03/14/10	< 152					
SW-2	03/15/10	< 171					
SW-2	03/16/10	< 172					
SW-2	03/17/10	< 174					
SW-2	03/18/10	< 170					
SW-2	03/19/10	< 153					
SW-2	03/20/10	< 151					
SW-2	03/21/10	< 153					
SW-2	03/22/10	< 154					
SW-2	03/23/10	< 155					
SW-2	03/24/10	< 153					
SW-2	03/25/10	< 152					
SW-2	03/26/10	< 156					
SW-2	03/27/10	< 156					
SW-2	03/28/10	< 153					
SW-2	03/29/10	< 164					
SW-2	03/30/10	< 169					
SW-2	03/31/10	< 173					
SW-2	04/01/10	< 174					
SW-2	04/02/10	< 164					
SW-2	04/03/10	< 165					
SW-2	04/04/10	< 165					
SW-2	04/05/10	< 171					
SW-2	04/06/10	< 173					
SW-2	04/07/10	< 161					
SW-2	04/08/10	< 180					
SW-2	04/09/10	< 179					
SW-2	04/10/10	< 176					
SW-2	04/11/10	< 181					
SW-2	04/12/10	< 178					
SW-2	04/13/10	< 176					
SW-2	04/14/10	< 180					
SW-2	04/15/10	< 179					
SW-2	04/16/10	< 186					
SW-2	04/17/10	< 179					
SW-2	04/18/10	< 197					
SW-2	04/19/10	< 177					
SW-2	04/20/10	< 182					
SW-2	04/21/10	< 161					
SW-2	04/22/10	< 163					
SW-2	04/23/10	< 169					
SW-2	04/24/10	< 160					
SW-2	04/25/10	< 164					
SW-2	04/26/10	< 176					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-2	04/27/10	< 170					
SW-2	04/27/10	< 177					
SW-2	04/28/10	< 160					
SW-2	04/29/10	< 168					
SW-2	04/30/10	< 164					
SW-2	05/01/10	< 170					
SW-2	05/02/10	< 172					
SW-2	05/03/10	< 169					
SW-2	05/04/10	< 168					
SW-2	05/05/10	< 180					
SW-2	05/06/10	< 180					
SW-2	05/07/10	< 182					
SW-2	05/08/10	< 162					
SW-2	05/09/10	< 164					
SW-2	05/10/10	< 183					
SW-2	05/11/10	< 180					
SW-2	05/12/10	< 165					
SW-2	05/13/10	< 163					
SW-2	05/14/10	< 166					
SW-2	05/15/10	< 168					
SW-2	05/16/10	< 167					
SW-2	05/17/10	< 165					
SW-2	05/18/10	< 170					
SW-2	05/19/10	< 175					
SW-2	05/20/10	< 172					
SW-2	05/21/10	< 169					
SW-2	05/22/10	< 158					
SW-2	05/23/10	< 153					
SW-2	05/24/10	< 156					
SW-2	05/25/10	< 153					
SW-2	05/26/10	< 157					
SW-2	05/27/10	< 156					
SW-2	05/28/10	< 157					
SW-2	05/29/10	< 154					
SW-2	05/30/10	< 156					
SW-2	05/31/10	< 160					
SW-2	06/01/10	< 162					
SW-2	06/02/10	< 159					
SW-2	06/03/10	< 156					
SW-2	06/04/10	< 151					
SW-2	06/05/10	< 154					
SW-2	06/06/10	< 146					
SW-2	06/07/10	< 150					
SW-2	06/08/10	< 150					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-2	06/09/10	< 169					
SW-2	06/10/10	< 173					
SW-2	06/11/10	< 167					
SW-2	06/12/10	< 157					
SW-2	06/13/10	< 155					
SW-2	06/14/10	< 157					
SW-2	06/15/10	< 160					
SW-2	06/16/10	< 167					
SW-2	06/17/10	< 170					
SW-2	06/18/10	< 169					
SW-2	06/19/10	< 168					
SW-2	06/20/10	< 173					
SW-2	06/21/10	< 168					
SW-2	06/22/10	< 174					
SW-2	06/23/10	< 168					
SW-2	06/24/10	< 161					
SW-2	06/25/10	< 165					
SW-2	06/26/10	< 173					
SW-2	06/27/10	< 168					
SW-2	06/28/10	< 162					
SW-2	06/29/10	< 160					
SW-2	06/30/10	< 160					
SW-2	07/01/10	< 164					
SW-2	07/02/10	< 164					
SW-2	07/03/10	< 169					
SW-2	07/04/10	< 166					
SW-2	07/05/10	< 162					
SW-2	07/06/10	< 170					
SW-2	07/07/10	< 165					
SW-2	07/08/10	< 169					
SW-2	07/09/10	< 166					
SW-2	07/10/10	< 168					
SW-2	07/11/10	< 169					
SW-2	07/12/10	< 169					
SW-2	07/13/10	< 166					
SW-2	07/14/10	< 160					
SW-2	07/15/10	< 160					
SW-2	07/16/10	< 157					
SW-2	07/17/10	< 179					
SW-2	07/18/10	< 180					
SW-2	07/19/10	< 159					
SW-2	07/20/10	< 166					
SW-2	07/21/10	< 174					
SW-2	07/22/10	< 180					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-2	07/23/10	< 178					
SW-2	07/24/10	< 176					
SW-2	07/25/10	< 175					
SW-2	07/26/10	< 175					
SW-2	07/27/10	< 177					
SW-2	07/28/10	< 163					
SW-2	07/29/10	< 149					
SW-2	07/30/10	< 150					
SW-2	07/31/10	< 146					
SW-2	08/01/10	< 149					
SW-2	08/02/10	< 149					
SW-2	08/03/10	< 152					
SW-2	08/04/10	< 149					
SW-2	08/05/10	< 166					
SW-2	08/06/10	< 174					
SW-2	08/07/10	< 175					
SW-2	08/08/10	< 174					
SW-2	08/09/10	< 174					
SW-2	08/10/10	< 174					
SW-2	08/11/10	< 173					
SW-2	08/12/10	< 168					
SW-2	08/13/10	< 173					
SW-2	08/14/10	< 174					
SW-2	08/15/10	< 177					
SW-2	08/16/10	< 171					
SW-2	08/17/10	< 172					
SW-2	08/18/10	< 175					
SW-2	08/19/10	< 182					
SW-2	08/20/10	< 181					
SW-2	08/21/10	< 166					
SW-2	08/22/10	< 165					
SW-2	08/23/10	< 164					
SW-2	08/24/10	< 166					
SW-2	08/25/10	< 170					
SW-2	08/26/10	< 165					
SW-2	08/27/10	< 170					
SW-2	08/28/10	< 171					
SW-2	08/29/10	< 169					
SW-2	08/30/10	< 173					
SW-2	08/31/10	< 172					
SW-2	09/01/10	< 173					
SW-2	09/02/10	< 173					
SW-2	09/03/10	< 172					
SW-2	09/04/10	< 175					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-2	09/05/10	< 168					
SW-2	09/06/10	< 169					
SW-2	09/07/10	< 168					
SW-2	09/08/10	< 170					
SW-2	09/09/10	< 168					
SW-2	09/10/10	< 181					
SW-2	09/11/10	< 177					
SW-2	09/12/10	< 181					
SW-2	09/13/10	< 179					
SW-2	09/14/10	< 178					
SW-2	09/15/10	< 168					
SW-2	09/16/10	< 176					
SW-2	09/17/10	< 176					
SW-2	09/18/10	< 176					
SW-2	09/19/10	< 180					
SW-2	09/20/10	< 180					
SW-2	09/21/10	< 178					
SW-2	09/22/10	< 173					
SW-2	09/23/10	< 173					
SW-2	09/24/10	< 173					
SW-2	09/25/10	< 171					
SW-2	09/26/10	< 170					
SW-2	09/27/10	< 159					
SW-2	09/28/10	< 173					
SW-2	09/29/10	< 172					
SW-2	09/30/10	< 162					
SW-2	10/01/10	< 158					
SW-2	10/02/10	< 162					
SW-2	10/03/10	< 158					
SW-2	10/04/10	< 161					
SW-2	10/05/10	< 164					
SW-2	10/06/10	< 175					
SW-2	10/07/10	< 173					
SW-2	10/08/10	< 176					
SW-2	10/09/10	< 172					
SW-2	10/10/10	< 170					
SW-2	10/11/10	< 175	< 0.6	< 87	< 10	484 \pm 50	< 21
SW-2	10/12/10	< 172					
SW-2	10/13/10	< 176					
SW-2	10/14/10	< 174					
SW-2	10/17/10	< 165					
SW-2	10/18/10	< 163					
SW-2	10/19/10	< 165					
SW-2	10/20/10	< 163					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-2	10/21/10	< 163					
SW-2	10/22/10	< 166					
SW-2	10/23/10	< 166					
SW-2	10/24/10	< 162					
SW-2	10/25/10	< 164					
SW-2	10/26/10	< 160					
SW-2	10/27/10	< 157					
SW-2	10/28/10	< 152					
SW-2	10/29/10	< 154					
SW-2	10/30/10	< 151					
SW-2	10/31/10	< 154					
SW-2	11/01/10	< 162					
SW-2	11/02/10	< 169					
SW-2	11/03/10	< 162					
SW-2	11/04/10	< 170					
SW-2	11/05/10	< 176					
SW-2	11/06/10	< 175					
SW-2	11/07/10	< 174					
SW-2	11/08/10	< 171					
SW-2	11/09/10	< 176					
SW-2	11/10/10	< 177					
SW-2	11/11/10	< 167					
SW-2	11/12/10	< 166					
SW-2	11/13/10	< 167					
SW-2	11/14/10	< 166					
SW-2	11/15/10	< 167					
SW-2	11/16/10	< 172					
SW-2	11/17/10	< 162					
SW-2	11/18/10	< 165					
SW-2	11/19/10	< 163					
SW-2	11/20/10	< 160					
SW-2	11/21/10	< 163					
SW-2	11/22/10	< 165					
SW-2	11/23/10	< 164					
SW-2	11/24/10	< 159					
SW-2	11/25/10	< 156					
SW-2	11/26/10	< 159					
SW-2	11/27/10	< 159					
SW-2	11/28/10	< 159					
SW-2	11/29/10	< 156					
SW-2	11/30/10	< 159					
SW-2	12/01/10	< 156					
SW-2	12/02/10	< 162					
SW-2	12/03/10	< 164					

TABLE B-II.1 CONCENTRATIONS OF TRITIUM, STRONTIUM-90, GROSS ALPHA AND GROSS BETA IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90	GR-A (DIS)	GR-A (SUS)	GR-B (DIS)	GR-B (SUS)
SW-2	12/04/10	< 165					
SW-2	12/05/10	< 162					
SW-2	12/06/10	< 167					
SW-2	12/07/10	< 163					
SW-2	12/08/10	< 162					
SW-2	12/09/10	< 168					
SW-2	12/10/10	< 165					
SW-2	12/11/10	< 167					
SW-2	12/12/10	< 170					
SW-2	12/14/10	< 181					
SW-2	12/15/10	< 167					
SW-2	12/16/10	< 166					
SW-2	12/17/10	< 166					
SW-2	12/18/10	< 168					
SW-2	12/19/10	< 164					
SW-2	12/20/10	< 167					
SW-2	12/21/10	< 163					
SW-2	12/22/10	< 170					
SW-2	12/23/10	< 172					
SW-2	12/24/10	< 171					
SW-2	12/25/10	< 171					
SW-2	12/26/10	< 170					
SW-2	12/27/10	< 171					
SW-2	12/29/10	< 154					
SW-2	12/30/10	< 154					
SW-2	12/31/10	< 156					
SW-3	04/27/10	< 153					

TABLE B-II.2

CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140	
B-54	SW-1	01/01/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 43	< 1	< 1	< 36	< 12
	SW-1	01/02/10	< 1	< 2	< 5	< 1	< 2	< 2	< 3	< 99	< 1	< 1	< 60	< 18
	SW-1	01/03/10	< 1	< 1	< 3	< 1	< 2	< 2	< 2	< 66	< 1	< 1	< 48	< 14
	SW-1	01/04/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 36	< 1	< 1	< 28	< 5
	SW-1	01/05/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 46	< 1	< 1	< 36	< 16
	SW-1	01/06/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 42	< 1	< 1	< 41	< 11
	SW-1	01/07/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 36	< 1	< 1	< 33	< 9
	SW-1	01/08/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 68	< 1	< 1	< 55	< 16
	SW-1	01/09/10	< 1	< 1	< 4	< 1	< 1	< 2	< 3	< 45	< 1	< 1	< 38	< 12
	SW-1	01/10/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 38	< 1	< 1	< 27	< 8
	SW-1	01/11/10	< 1	< 1	< 5	< 1	< 2	< 2	< 3	< 584	< 1	< 1	< 184	< 56
	SW-1	01/12/10	< 1	< 2	< 5	< 1	< 2	< 2	< 3	< 550	< 1	< 1	< 180	< 58
	SW-1	01/13/10	< 1	< 1	< 3	< 1	< 2	< 2	< 2	< 44	< 1	< 1	< 38	< 12
	SW-1	01/14/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 34	< 1	< 1	< 30	< 9
	SW-1	01/15/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 33	< 1	< 1	< 29	< 8
	SW-1	01/16/10	< 1	< 2	< 3	< 1	< 2	< 2	< 3	< 43	< 1	< 1	< 35	< 12
	SW-1	01/17/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 35	< 1	< 1	< 30	< 9
	SW-1	01/18/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 42	< 1	< 1	< 37	< 12
	SW-1	01/19/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 45	< 1	< 1	< 40	< 11
	SW-1	01/20/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 25	< 1	< 1	< 26	< 7
	SW-1	01/21/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 32	< 1	< 1	< 36	< 10
	SW-1	01/22/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 24	< 1	< 1	< 27	< 9
	SW-1	01/23/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 32	< 1	< 1	< 35	< 9
	SW-1	01/24/10	< 1	< 1	< 4	< 1	< 2	< 1	< 2	< 24	< 1	< 1	< 24	< 7
	SW-1	01/25/10	< 1	< 1	< 4	< 1	< 2	< 2	< 3	< 23	< 1	< 1	< 23	< 9
	SW-1	01/26/10	< 1	< 2	< 3	< 1	< 2	< 1	< 3	< 24	< 1	< 1	< 23	< 9
	SW-1	01/27/10	< 1	< 1	< 3	< 1	< 3	< 1	< 2	< 31	< 1	< 1	< 30	< 9

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-1	01/28/10	< 1	< 1	< 4	< 1	< 2	< 1	< 2	< 29	< 1	< 1	< 28	< 8
SW-1	01/29/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 22	< 1	< 1	< 22	< 6
SW-1	01/30/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 18	< 1	< 1	< 17	< 6
SW-1	01/31/10	< 1	< 2	< 3	< 1	< 3	< 2	< 2	< 25	< 1	< 1	< 26	< 8
SW-1	02/01/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 18	< 1	< 1	< 21	< 5
SW-1	02/02/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 17	< 1	< 1	< 17	< 6
SW-1	02/03/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 21	< 1	< 1	< 20	< 7
SW-1	02/04/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 28	< 1	< 1	< 24	< 7
SW-1	02/05/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 22	< 1	< 1	< 22	< 7
SW-1	02/06/10	< 1	< 2	< 4	< 2	< 2	< 2	< 3	< 24	< 1	< 2	< 27	< 7
SW-1	02/07/10	< 1	< 2	< 3	< 1	< 2	< 2	< 3	< 19	< 1	< 1	< 23	< 7
SW-1	02/08/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 17	< 5
SW-1	02/09/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 27	< 1	< 1	< 27	< 8
SW-1	02/10/10	< 1	< 1	< 2	< 1	< 1	< 1	< 2	< 19	< 1	< 1	< 21	< 7
SW-1	02/11/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 19	< 1	< 1	< 19	< 7
SW-1	02/12/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 20	< 1	< 1	< 22	< 8
SW-1	02/13/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 18	< 1	< 1	< 20	< 5
SW-1	02/14/10	< 1	< 1	< 3	< 1	< 2	< 2	< 3	< 20	< 1	< 1	< 22	< 4
SW-1	02/15/10	< 1	< 1	< 4	< 1	< 2	< 1	< 2	< 17	< 1	< 1	< 21	< 6
SW-1	02/16/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 14	< 1	< 1	< 17	< 5
SW-1	02/17/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 13	< 2	< 2	< 21	< 6
SW-1	02/18/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 13	< 2	< 2	< 22	< 7
SW-1	02/19/10	< 2	< 2	< 4	< 2	< 3	< 2	< 4	< 11	< 2	< 2	< 18	< 6
SW-1	02/20/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 9	< 1	< 1	< 16	< 5
SW-1	02/21/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 14	< 2	< 3	< 27	< 9
SW-1	02/22/10	< 2	< 2	< 5	< 2	< 4	< 2	< 3	< 9	< 2	< 2	< 17	< 6
SW-1	02/23/10	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 13	< 2	< 3	< 22	< 7

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2

CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-1	02/24/10	< 2	< 2	< 5	< 2	< 4	< 2	< 3	< 10	< 2	< 2	< 18	< 6
SW-1	02/25/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 9	< 2	< 2	< 18	< 6
SW-1	02/26/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 14	< 3	< 3	< 27	< 7
SW-1	02/27/10	< 2	< 3	< 6	< 2	< 5	< 3	< 4	< 10	< 2	< 2	< 19	< 7
SW-1	02/28/10	< 2	< 2	< 5	< 2	< 4	< 2	< 3	< 9	< 2	< 2	< 17	< 5
SW-1	03/01/10	< 1	< 1	< 2	< 1	< 1	< 1	< 1	< 7	< 1	< 1	< 10	< 2
SW-1	03/02/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 15	< 1	< 1	< 21	< 7
SW-1	03/03/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 11	< 1	< 1	< 19	< 5
SW-1	03/04/10	< 1	< 2	< 3	< 1	< 3	< 1	< 3	< 11	< 1	< 1	< 16	< 5
SW-1	03/05/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 16	< 2	< 2	< 23	< 7
SW-1	03/06/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 9	< 1	< 1	< 13	< 4
SW-1	03/07/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 11	< 1	< 1	< 17	< 4
SW-1	03/08/10	< 1	< 1	< 2	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 9	< 2
SW-1	03/09/10	< 1	< 1	< 3	< 1	< 3	< 1	< 2	< 8	< 1	< 1	< 13	< 4
SW-1	03/10/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 5	< 1	< 1	< 8	< 3
SW-1	03/11/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 12	< 1	< 1	< 19	< 5
SW-1	03/12/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 14	< 1	< 2	< 21	< 5
SW-1	03/13/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 11	< 1	< 1	< 17	< 4
SW-1	03/14/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 9	< 1	< 1	< 15	< 4
SW-1	03/15/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 11	< 1	< 1	< 15	< 3
SW-1	03/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 9	< 1	< 1	< 14	< 4
SW-1	03/17/10	< 2	< 2	< 4	< 2	< 3	< 2	< 4	< 11	< 2	< 2	< 18	< 6
SW-1	03/18/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 11	< 1	< 2	< 18	< 6
SW-1	03/19/10	< 2	< 2	< 4	< 1	< 3	< 2	< 3	< 12	< 1	< 2	< 19	< 6
SW-1	03/20/10	< 2	< 2	< 4	< 1	< 3	< 2	< 4	< 14	< 2	< 2	< 21	< 6
SW-1	03/21/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 11	< 2	< 3	< 22	< 7
SW-1	03/22/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 7	< 2	< 2	< 15	< 4

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-1	03/23/10	< 1	< 1	< 3	< 2	< 2	< 2	< 3	< 15	< 1	< 1	< 19	< 5
SW-1	03/24/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 11	< 1	< 1	< 15	< 4
SW-1	03/25/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 12	< 1	< 1	< 15	< 6
SW-1	03/26/10	< 1	< 1	< 3	< 1	< 2	< 2	< 2	< 12	< 1	< 1	< 18	< 5
SW-1	03/27/10	< 1	< 2	< 3	< 1	< 3	< 2	< 3	< 9	< 1	< 2	< 17	< 4
SW-1	03/28/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 20	< 6
SW-1	03/29/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 8	< 1	< 2	< 15	< 5
SW-1	03/30/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 10	< 2	< 2	< 18	< 6
SW-1	03/31/10	< 2	< 3	< 7	< 3	< 5	< 3	< 5	< 14	< 2	< 3	< 25	< 7
SW-1	04/01/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 13	< 3	< 3	< 26	< 8
SW-1	04/02/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 14	< 2	< 2	< 24	< 7
SW-1	04/03/10	< 3	< 3	< 6	< 2	< 5	< 3	< 5	< 15	< 3	< 3	< 26	< 7
SW-1	04/04/10	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 11	< 2	< 2	< 19	< 6
SW-1	04/05/10	< 3	< 4	< 7	< 3	< 6	< 4	< 6	< 14	< 4	< 4	< 26	< 6
SW-1	04/06/10	< 2	< 3	< 6	< 2	< 5	< 3	< 4	< 8	< 2	< 2	< 17	< 5
SW-1	04/07/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 13	< 2	< 3	< 25	< 8
SW-1	04/08/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 12	< 2	< 3	< 21	< 7
SW-1	04/09/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 15	< 3	< 3	< 27	< 7
SW-1	04/10/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 7	< 2	< 2	< 15	< 4
SW-1	04/11/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 6	< 2	< 2	< 14	< 4
SW-1	04/12/10	< 4	< 5	< 10	< 4	< 9	< 5	< 8	< 14	< 4	< 4	< 31	< 10
SW-1	04/13/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 6	< 2	< 2	< 14	< 4
SW-1	04/14/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 5	< 2	< 2	< 12	< 4
SW-1	10/11/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 15	< 2	< 3	< 26	< 8
SW-1	10/21/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 21	< 6
SW-1	10/28/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 21	< 7
SW-1	11/03/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 7	< 2	< 2	< 15	< 5

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TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-1	11/10/10	< 4	< 5	< 11	< 5	< 10	< 5	< 9	< 14	< 4	< 5	< 32	< 11
SW-1	11/17/10	< 3	< 3	< 5	< 3	< 5	< 3	< 5	< 9	< 3	< 3	< 19	< 7
SW-1	11/24/10	< 5	< 7	< 17	< 5	< 10	< 7	< 13	< 207	< 5	< 5	< 170	< 56
SW-1	12/01/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 43	< 2	< 2	< 44	< 15
SW-1	12/08/10	< 3	< 3	< 8	< 3	< 5	< 3	< 6	< 29	< 3	< 3	< 41	< 13
SW-1	12/15/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 14	< 2	< 3	< 27	< 8
SW-1	12/22/10	< 2	< 2	< 6	< 2	< 6	< 3	< 5	< 13	< 2	< 3	< 23	< 7
SW-1	12/30/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 20	< 6
MCD	01/01/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 47	< 1	< 1	< 39	< 10
MCD	01/02/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 87	< 1	< 1	< 58	< 21
MCD	01/03/10	< 1	< 1	< 4	< 1	< 2	< 2	< 2	< 69	< 1	< 1	< 50	< 14
MCD	01/04/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 55	< 1	< 1	< 48	< 13
MCD	01/05/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 44	< 1	< 1	< 43	< 11
MCD	01/06/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 45	< 1	< 1	< 39	< 14
MCD	01/07/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 72	< 1	< 1	< 54	< 16
MCD	01/08/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 67	< 1	< 1	< 53	< 17
MCD	01/09/10	< 1	< 1	< 4	< 1	< 3	< 2	< 3	< 52	< 1	< 1	< 46	< 14
MCD	01/10/10	< 1	< 1	< 3	< 1	< 1	< 1	< 2	< 47	< 1	< 1	< 38	< 11
MCD	01/11/10	< 1	< 1	< 4	< 1	< 2	< 2	< 3	< 426	< 1	< 1	< 143	< 39
MCD	01/12/10	< 1	< 2	< 5	< 1	< 2	< 2	< 4	< 568	< 1	< 1	< 199	< 59
MCD	01/13/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 43	< 1	< 1	< 33	< 11
MCD	01/14/10	< 1	< 1	< 4	< 1	< 2	< 1	< 2	< 39	< 1	< 1	< 33	< 12
MCD	01/15/10	< 1	< 1	< 4	< 1	< 2	< 1	< 2	< 43	< 1	< 1	< 34	< 10
MCD	01/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 37	< 1	< 1	< 31	< 11
MCD	01/17/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 34	< 1	< 1	< 30	< 9
MCD	01/18/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 53	< 1	< 1	< 42	< 12
MCD	01/19/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 53	< 1	< 1	< 48	< 12

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MCD	01/20/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 28	< 1	< 1	< 32	< 10
MCD	01/21/10	< 1	< 2	< 3	< 1	< 2	< 1	< 3	< 32	< 1	< 1	< 30	< 8
MCD	01/22/10	< 1	< 1	< 3	< 1	< 3	< 2	< 3	< 27	< 1	< 1	< 28	< 9
MCD	01/23/10	< 1	< 1	< 4	< 1	< 2	< 2	< 2	< 29	< 1	< 1	< 33	< 8
MCD	01/24/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 25	< 1	< 1	< 30	< 7
MCD	01/25/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 20	< 1	< 1	< 23	< 7
MCD	01/26/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 29	< 1	< 1	< 30	< 8
MCD	01/27/10	< 1	< 1	< 3	< 1	< 3	< 1	< 3	< 35	< 1	< 1	< 34	< 10
MCD	01/28/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 27	< 1	< 1	< 25	< 7
MCD	01/29/10	< 1	< 1	< 4	< 1	< 2	< 2	< 3	< 31	< 1	< 1	< 31	< 9
MCD	01/30/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 28	< 1	< 1	< 29	< 8
MCD	01/31/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 22	< 1	< 1	< 27	< 6
MCD	02/01/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 22	< 1	< 1	< 23	< 7
MCD	02/02/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 20	< 1	< 1	< 24	< 7
MCD	02/03/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 34	< 1	< 1	< 32	< 10
MCD	02/04/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 25	< 1	< 1	< 25	< 6
MCD	02/05/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 30	< 1	< 1	< 27	< 7
MCD	02/06/10	< 2	< 2	< 5	< 2	< 3	< 2	< 3	< 28	< 1	< 2	< 30	< 10
MCD	02/07/10	< 1	< 1	< 3	< 1	< 2	< 2	< 3	< 17	< 1	< 1	< 22	< 6
MCD	02/08/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 17	< 1	< 1	< 24	< 7
MCD	02/09/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 23	< 1	< 1	< 24	< 7
MCD	02/10/10	< 1	< 1	< 4	< 2	< 2	< 1	< 2	< 27	< 1	< 1	< 30	< 9
MCD	02/11/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 18	< 1	< 1	< 19	< 5
MCD	02/12/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 18	< 1	< 1	< 19	< 5
MCD	02/13/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 18	< 1	< 1	< 21	< 6
MCD	02/14/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 19	< 6
MCD	02/15/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 14	< 1	< 1	< 18	< 5

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2

CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MCD	02/16/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 15	< 4
MCD	02/17/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 14	< 2	< 2	< 26	< 8
MCD	02/18/10	< 2	< 2	< 3	< 1	< 3	< 2	< 3	< 11	< 2	< 2	< 19	< 5
MCD	02/19/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 14	< 2	< 2	< 21	< 6
MCD	02/20/10	< 2	< 2	< 6	< 2	< 4	< 3	< 5	< 14	< 2	< 2	< 24	< 7
MCD	02/21/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 19	< 6
MCD	02/22/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 18	< 5
MCD	02/23/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 14	< 2	< 3	< 24	< 8
MCD	02/24/10	< 2	< 3	< 5	< 2	< 5	< 3	< 5	< 14	< 2	< 3	< 25	< 6
MCD	02/25/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 14	< 2	< 3	< 25	< 8
MCD	02/26/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 20	< 5
MCD	02/27/10	< 2	< 3	< 5	< 2	< 4	< 3	< 5	< 12	< 2	< 2	< 23	< 6
MCD	02/28/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 13	< 3	< 3	< 26	< 8
MCD	03/01/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 9	< 1	< 1	< 14	< 4
MCD	03/02/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 16	< 5
MCD	03/03/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 10	< 1	< 1	< 15	< 5
MCD	03/04/10	< 3	< 3	< 7	< 2	< 5	< 3	< 6	< 27	< 3	< 3	< 38	< 9
MCD	03/05/10	< 3	< 3	< 7	< 3	< 5	< 3	< 5	< 24	< 3	< 3	< 36	< 11
MCD	03/06/10	< 1	< 1	< 4	< 1	< 3	< 2	< 3	< 12	< 1	< 1	< 18	< 6
MCD	03/07/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 13	< 1	< 1	< 20	< 5
MCD	03/08/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 7	< 1	< 1	< 13	< 4
MCD	03/09/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 7	< 1	< 1	< 11	< 3
MCD	03/10/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 4	< 1	< 1	< 8	< 2
MCD	03/11/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 13	< 1	< 2	< 22	< 7
MCD	03/12/10	< 1	< 2	< 3	< 1	< 2	< 1	< 3	< 15	< 1	< 2	< 21	< 3
MCD	03/13/10	< 1	< 1	< 3	< 1	< 2	< 2	< 2	< 15	< 1	< 2	< 20	< 4
MCD	03/14/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 10	< 1	< 1	< 16	< 4

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MCD	03/15/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 11	< 1	< 1	< 18	< 6
MCD	03/16/10	< 1	< 2	< 3	< 1	< 3	< 2	< 3	< 11	< 1	< 1	< 16	< 5
MCD	03/17/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 7	< 1	< 1	< 10	< 4
MCD	03/18/10	< 1	< 1	< 3	< 1	< 3	< 2	< 3	< 11	< 1	< 1	< 16	< 5
MCD	03/19/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 12	< 1	< 1	< 20	< 6
MCD	03/20/10	< 1	< 1	< 3	< 1	< 3	< 2	< 3	< 12	< 1	< 1	< 17	< 5
MCD	03/21/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 12	< 2	< 3	< 22	< 7
MCD	03/22/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 11	< 2	< 3	< 21	< 7
MCD	03/23/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 13	< 1	< 1	< 16	< 5
MCD	03/24/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 9	< 1	< 1	< 15	< 4
MCD	03/25/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 16	< 4
MCD	03/26/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 15	< 1	< 2	< 20	< 6
MCD	03/27/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 15	< 2	< 2	< 23	< 4
MCD	03/28/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 19	< 6
MCD	03/29/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 15	< 3	< 3	< 27	< 8
MCD	03/30/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 15	< 2	< 3	< 25	< 7
MCD	03/31/10	< 2	< 2	< 5	< 2	< 4	< 3	< 4	< 11	< 2	< 2	< 21	< 7
MCD	04/01/10	< 2	< 2	< 4	< 2	< 3	< 2	< 4	< 12	< 2	< 2	< 20	< 3
MCD	04/02/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 20	< 6
MCD	04/03/10	< 2	< 2	< 6	< 2	< 5	< 3	< 5	< 13	< 2	< 2	< 21	< 8
MCD	04/04/10	< 2	< 2	< 5	< 2	< 5	< 2	< 4	< 11	< 2	< 2	< 19	< 6
MCD	04/05/10	< 2	< 3	< 6	< 2	< 5	< 3	< 4	< 8	< 2	< 3	< 17	< 5
MCD	04/06/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 8	< 3	< 3	< 19	< 6
MCD	04/07/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 13	< 2	< 3	< 25	< 8
MCD	04/08/10	< 3	< 3	< 7	< 3	< 5	< 3	< 5	< 13	< 2	< 3	< 24	< 8
MCD	04/09/10	< 3	< 3	< 8	< 3	< 6	< 4	< 6	< 14	< 3	< 3	< 27	< 9
MCD	04/10/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 11	< 3	< 3	< 22	< 7

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TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MCD	04/11/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 8	< 2	< 3	< 19	< 6
MCD	04/12/10	< 3	< 3	< 7	< 3	< 5	< 3	< 5	< 9	< 3	< 3	< 18	< 6
MCD	04/13/10	< 3	< 3	< 5	< 2	< 6	< 3	< 5	< 9	< 3	< 3	< 18	< 5
MCD	04/14/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 8	< 3	< 3	< 18	< 6
MCD	10/11/10	< 2	< 3	< 6	< 2	< 4	< 3	< 5	< 14	< 2	< 2	< 24	< 7
MCD	10/21/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 10	< 2	< 2	< 17	< 4
MCD	10/21/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 13	< 2	< 2	< 25	< 6
MCD	10/21/10	< 2	< 2	< 5	< 3	< 5	< 3	< 4	< 12	< 2	< 3	< 23	< 8
MCD	10/23/10	< 2	< 2	< 6	< 2	< 5	< 3	< 5	< 11	< 2	< 2	< 21	< 5
MCD	10/24/10	< 2	< 2	< 5	< 3	< 5	< 2	< 4	< 9	< 2	< 2	< 19	< 7
MCD	10/26/10	< 3	< 4	< 8	< 4	< 6	< 4	< 6	< 13	< 3	< 4	< 28	< 9
MCD	10/27/10	< 3	< 2	< 6	< 3	< 5	< 3	< 4	< 8	< 2	< 3	< 19	< 6
MCD	10/28/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 20	< 6
MCD	10/29/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 21	< 6
MCD	10/31/10	< 3	< 3	< 7	< 4	< 6	< 4	< 7	< 13	< 3	< 3	< 27	< 8
MCD	11/01/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 13	< 3	< 3	< 26	< 7
MCD	11/01/10	< 2	< 3	< 6	< 2	< 4	< 3	< 4	< 30	< 2	< 2	< 38	< 12
MCD	11/02/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 8	< 2	< 2	< 16	< 5
MCD	11/02/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 28	< 2	< 2	< 37	< 11
MCD	11/03/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 7	< 2	< 2	< 13	< 4
MCD	11/10/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 9	< 3	< 3	< 21	< 6
MCD	11/16/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 10	< 3	< 3	< 23	< 6
MCD	11/16/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 13	< 3	< 3	< 24	< 8
MCD	11/17/10	< 2	< 2	< 5	< 3	< 5	< 3	< 5	< 8	< 2	< 3	< 18	< 6
MCD	11/17/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 11	< 2	< 3	< 21	< 7
MCD	11/18/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 9	< 2	< 2	< 20	< 7
MCD	11/19/10	< 2	< 3	< 5	< 3	< 5	< 3	< 5	< 9	< 2	< 3	< 19	< 5

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MCD	11/20/10	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 7	< 2	< 3	< 17	< 5
MCD	11/21/10	< 3	< 3	< 7	< 3	< 5	< 3	< 5	< 9	< 3	< 3	< 21	< 6
MCD	11/22/10	< 2	< 2	< 5	< 2	< 5	< 2	< 4	< 7	< 2	< 2	< 15	< 4
MCD	11/23/10	< 5	< 6	< 11	< 6	< 11	< 5	< 10	< 14	< 5	< 6	< 33	< 12
MCD	11/24/10	< 2	< 2	< 5	< 2	< 3	< 2	< 4	< 57	< 1	< 2	< 56	< 16
MCD	11/25/10	< 2	< 2	< 4	< 2	< 3	< 2	< 4	< 55	< 1	< 2	< 48	< 15
MCD	11/26/10	< 1	< 1	< 4	< 1	< 2	< 2	< 3	< 44	< 1	< 1	< 40	< 13
MCD	11/27/10	< 1	< 1	< 4	< 2	< 3	< 2	< 3	< 47	< 1	< 1	< 39	< 14
MCD	11/28/10	< 2	< 2	< 4	< 1	< 3	< 2	< 3	< 36	< 1	< 1	< 40	< 13
MCD	11/29/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 41	< 1	< 2	< 41	< 11
MCD	11/30/10	< 2	< 2	< 5	< 2	< 3	< 2	< 3	< 39	< 1	< 2	< 42	< 13
MCD	12/01/10	< 2	< 2	< 5	< 2	< 3	< 2	< 4	< 48	< 1	< 2	< 45	< 14
MCD	12/02/10	< 2	< 3	< 7	< 2	< 5	< 3	< 5	< 34	< 2	< 2	< 43	< 12
MCD	12/03/10	< 2	< 2	< 5	< 2	< 4	< 3	< 5	< 28	< 2	< 2	< 41	< 13
MCD	12/04/10	< 2	< 3	< 7	< 2	< 6	< 4	< 6	< 38	< 2	< 3	< 46	< 15
MCD	12/05/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 35	< 2	< 3	< 47	< 13
MCD	12/06/10	< 2	< 2	< 6	< 2	< 4	< 2	< 4	< 27	< 2	< 2	< 37	< 13
MCD	12/07/10	< 3	< 3	< 8	< 3	< 6	< 4	< 6	< 30	< 2	< 3	< 46	< 14
MCD	12/08/10	< 2	< 2	< 6	< 2	< 4	< 2	< 5	< 22	< 2	< 2	< 32	< 11
MCD	12/09/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 22	< 2	< 2	< 29	< 8
MCD	12/10/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 22	< 2	< 2	< 29	< 10
MCD	12/11/10	< 2	< 2	< 5	< 3	< 4	< 2	< 4	< 15	< 2	< 2	< 24	< 8
MCD	12/12/10	< 2	< 3	< 6	< 3	< 5	< 3	< 6	< 15	< 2	< 2	< 26	< 8
MCD	12/13/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 13	< 2	< 2	< 22	< 7
MCD	12/14/10	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 13	< 2	< 3	< 23	< 6
MCD	12/15/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 9	< 2	< 2	< 17	< 5
MCD	12/16/10	< 3	< 3	< 8	< 3	< 7	< 4	< 6	< 29	< 3	< 3	< 41	< 11

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MCD	12/17/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 12	< 2	< 2	< 21	< 6
MCD	12/18/10	< 3	< 3	< 7	< 4	< 6	< 4	< 6	< 22	< 3	< 3	< 37	< 11
MCD	12/19/10	< 2	< 2	< 5	< 2	< 4	< 2	< 3	< 11	< 2	< 2	< 22	< 6
MCD	12/20/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 20	< 5
MCD	12/21/10	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 12	< 2	< 2	< 24	< 8
MCD	12/22/10	< 2	< 3	< 5	< 2	< 5	< 3	< 5	< 13	< 2	< 2	< 24	< 7
MCD	12/23/10	< 2	< 3	< 6	< 2	< 4	< 3	< 5	< 14	< 2	< 3	< 24	< 7
MCD	12/25/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 14	< 3	< 3	< 28	< 7
MCD	12/26/10	< 3	< 2	< 6	< 2	< 5	< 3	< 4	< 11	< 2	< 2	< 22	< 7
MCD	12/27/10	< 2	< 2	< 5	< 2	< 5	< 3	< 5	< 14	< 2	< 2	< 25	< 6
MCD	12/28/10	< 3	< 2	< 5	< 2	< 5	< 3	< 5	< 12	< 2	< 3	< 25	< 5
MCD	12/29/10	< 2	< 3	< 5	< 3	< 6	< 3	< 5	< 12	< 3	< 3	< 23	< 7
MCD	12/30/10	< 3	< 3	< 6	< 4	< 6	< 3	< 5	< 12	< 2	< 3	< 21	< 5
MCD	12/31/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 9	< 2	< 2	< 18	< 5
SW-2	01/01/10	< 1	< 2	< 5	< 1	< 3	< 2	< 3	< 60	< 1	< 1	< 48	< 15
SW-2	01/02/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 111	< 1	< 1	< 73	< 21
SW-2	01/03/10	< 1	< 2	< 5	< 1	< 2	< 2	< 4	< 96	< 1	< 1	< 66	< 20
SW-2	01/04/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 53	< 1	< 1	< 42	< 12
SW-2	01/05/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 48	< 1	< 1	< 42	< 11
SW-2	01/06/10	< 1	< 1	< 3	< 1	< 2	< 2	< 2	< 33	< 1	< 1	< 29	< 10
SW-2	01/07/10	< 1	< 2	< 5	< 2	< 2	< 2	< 3	< 82	< 1	< 1	< 56	< 16
SW-2	01/08/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 69	< 1	< 1	< 51	< 16
SW-2	01/09/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 65	< 1	< 1	< 52	< 14
SW-2	01/10/10	< 1	< 1	< 4	< 1	< 2	< 2	< 2	< 58	< 1	< 1	< 43	< 11
SW-2	01/11/10	< 1	< 2	< 5	< 1	< 2	< 2	< 3	< 462	< 1	< 1	< 158	< 44
SW-2	01/12/10	< 1	< 1	< 4	< 1	< 1	< 1	< 2	< 366	< 1	< 1	< 116	< 39
SW-2	01/13/10	< 1	< 1	< 4	< 1	< 2	< 1	< 3	< 46	< 1	< 1	< 39	< 12

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2

CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140	
B-65	SW-2	01/14/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 32	< 1	< 1	< 27	< 9
	SW-2	01/15/10	< 1	< 2	< 4	< 1	< 2	< 2	< 3	< 42	< 1	< 1	< 40	< 9
	SW-2	01/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 38	< 1	< 1	< 31	< 9
	SW-2	01/17/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 30	< 1	< 1	< 27	< 8
	SW-2	01/18/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 58	< 1	< 1	< 48	< 14
	SW-2	01/19/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 36	< 1	< 1	< 35	< 9
	SW-2	01/20/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 25	< 1	< 1	< 23	< 9
	SW-2	01/21/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 30	< 1	< 1	< 28	< 9
	SW-2	01/22/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 24	< 1	< 1	< 27	< 7
	SW-2	01/23/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 23	< 1	< 1	< 22	< 7
	SW-2	01/24/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 42	< 1	< 1	< 37	< 10
	SW-2	01/25/10	< 1	< 1	< 4	< 1	< 2	< 1	< 3	< 23	< 1	< 1	< 25	< 9
	SW-2	01/26/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 21	< 1	< 1	< 25	< 8
	SW-2	01/27/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 27	< 1	< 1	< 27	< 8
	SW-2	01/28/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 29	< 1	< 1	< 27	< 9
	SW-2	01/29/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 26	< 1	< 1	< 27	< 7
	SW-2	01/30/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 23	< 1	< 1	< 26	< 7
	SW-2	01/31/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 26	< 1	< 1	< 25	< 8
	SW-2	02/01/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 18	< 1	< 1	< 20	< 6
	SW-2	02/02/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 18	< 1	< 1	< 18	< 7
	SW-2	02/03/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 28	< 1	< 1	< 29	< 9
	SW-2	02/04/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 24	< 1	< 1	< 28	< 7
	SW-2	02/05/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 26	< 1	< 1	< 28	< 8
	SW-2	02/06/10	< 1	< 2	< 4	< 2	< 2	< 2	< 3	< 22	< 1	< 1	< 29	< 6
	SW-2	02/07/10	< 1	< 1	< 4	< 1	< 3	< 2	< 3	< 21	< 1	< 1	< 26	< 5
	SW-2	02/08/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 20	< 8
	SW-2	02/09/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 28	< 1	< 1	< 28	< 6

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	02/10/10	< 1	< 1	< 3	< 1	< 2	< 1	< 3	< 27	< 1	< 1	< 27	< 9
SW-2	02/11/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 18	< 1	< 1	< 20	< 6
SW-2	02/12/10	< 1	< 1	< 3	< 1	< 2	< 2	< 3	< 21	< 1	< 1	< 24	< 6
SW-2	02/13/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 17	< 5
SW-2	02/14/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 16	< 4
SW-2	02/15/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 14	< 1	< 1	< 19	< 5
SW-2	02/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 13	< 1	< 1	< 15	< 5
SW-2	02/17/10	< 2	< 2	< 4	< 2	< 4	< 2	< 5	< 14	< 2	< 2	< 23	< 7
SW-2	02/18/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 21	< 6
SW-2	02/19/10	< 2	< 3	< 6	< 2	< 4	< 3	< 5	< 14	< 2	< 2	< 26	< 8
SW-2	02/20/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 13	< 2	< 2	< 23	< 7
SW-2	02/21/10	< 2	< 3	< 5	< 2	< 5	< 3	< 5	< 14	< 2	< 3	< 25	< 7
SW-2	02/22/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 20	< 6
SW-2	02/23/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 14	< 2	< 3	< 25	< 8
SW-2	02/24/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 13	< 2	< 2	< 24	< 7
SW-2	02/25/10	< 2	< 3	< 6	< 2	< 4	< 3	< 5	< 13	< 2	< 3	< 24	< 7
SW-2	02/26/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 21	< 6
SW-2	02/27/10	< 3	< 3	< 6	< 2	< 5	< 3	< 5	< 12	< 2	< 3	< 22	< 7
SW-2	02/28/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 14	< 3	< 3	< 26	< 9
SW-2	03/01/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 9	< 1	< 1	< 13	< 5
SW-2	03/02/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 16	< 5
SW-2	03/03/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 10	< 1	< 1	< 16	< 4
SW-2	03/04/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 11	< 1	< 1	< 16	< 5
SW-2	03/05/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 24	< 2	< 3	< 35	< 12
SW-2	03/06/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 13	< 1	< 2	< 18	< 4
SW-2	03/07/10	< 1	< 1	< 3	< 1	< 2	< 2	< 3	< 8	< 1	< 1	< 15	< 5
SW-2	03/08/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 8	< 1	< 1	< 12	< 4

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2

CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	03/09/10	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 8	< 1	< 1	< 11	< 4
SW-2	03/10/10	< 3	< 3	< 7	< 2	< 5	< 3	< 5	< 13	< 2	< 3	< 24	< 7
SW-2	03/11/10	< 1	< 1	< 4	< 1	< 3	< 2	< 3	< 11	< 1	< 1	< 17	< 5
SW-2	03/12/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 13	< 1	< 1	< 18	< 6
SW-2	03/13/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 12	< 1	< 2	< 22	< 6
SW-2	03/14/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 9	< 1	< 1	< 15	< 5
SW-2	03/15/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 10	< 1	< 1	< 17	< 4
SW-2	03/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 8	< 1	< 1	< 14	< 4
SW-2	03/17/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 12	< 1	< 2	< 18	< 5
SW-2	03/18/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 10	< 1	< 1	< 16	< 5
SW-2	03/19/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 14	< 1	< 2	< 20	< 5
SW-2	03/20/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 13	< 1	< 1	< 21	< 6
SW-2	03/21/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 13	< 3	< 3	< 26	< 8
SW-2	03/22/10	< 3	< 2	< 6	< 3	< 5	< 3	< 5	< 9	< 2	< 2	< 19	< 6
SW-2	03/23/10	< 1	< 1	< 4	< 1	< 2	< 2	< 2	< 12	< 1	< 1	< 21	< 5
SW-2	03/24/10	< 1	< 1	< 3	< 1	< 3	< 2	< 3	< 13	< 1	< 1	< 18	< 6
SW-2	03/25/10	< 1	< 1	< 3	< 1	< 2	< 2	< 3	< 13	< 1	< 1	< 17	< 6
SW-2	03/26/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 13	< 1	< 1	< 19	< 6
SW-2	03/27/10	< 1	< 1	< 4	< 1	< 3	< 2	< 3	< 8	< 1	< 1	< 14	< 5
SW-2	03/28/10	< 2	< 2	< 6	< 2	< 5	< 3	< 4	< 11	< 2	< 2	< 20	< 7
SW-2	03/29/10	< 2	< 2	< 5	< 2	< 4	< 3	< 4	< 14	< 2	< 2	< 24	< 5
SW-2	03/30/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 15	< 2	< 2	< 25	< 7
SW-2	03/31/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 14	< 2	< 3	< 26	< 8
SW-2	04/01/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 10	< 2	< 2	< 19	< 6
SW-2	04/02/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 13	< 2	< 3	< 24	< 8
SW-2	04/03/10	< 1	< 2	< 4	< 2	< 3	< 2	< 3	< 8	< 1	< 2	< 15	< 5
SW-2	04/04/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 11	< 2	< 2	< 21	< 7

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TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	04/05/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 10	< 3	< 3	< 22	< 7
SW-2	04/06/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 6	< 2	< 2	< 14	< 5
SW-2	04/07/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 15	< 2	< 3	< 26	< 7
SW-2	04/08/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 10	< 2	< 2	< 20	< 6
SW-2	04/09/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 9	< 2	< 2	< 17	< 6
SW-2	04/10/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 9	< 2	< 3	< 20	< 6
SW-2	04/11/10	< 3	< 3	< 8	< 3	< 6	< 3	< 6	< 10	< 3	< 3	< 21	< 8
SW-2	04/12/10	< 2	< 2	< 5	< 2	< 5	< 2	< 4	< 8	< 2	< 3	< 17	< 5
SW-2	04/13/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 8	< 2	< 3	< 17	< 6
SW-2	04/14/10	< 3	< 3	< 7	< 3	< 7	< 4	< 6	< 9	< 3	< 3	< 21	< 7
SW-2	04/15/10	< 2	< 3	< 6	< 3	< 6	< 3	< 5	< 8	< 2	< 3	< 19	< 6
SW-2	04/16/10	< 2	< 2	< 5	< 2	< 5	< 3	< 5	< 7	< 2	< 3	< 16	< 4
SW-2	04/17/10	< 3	< 2	< 5	< 2	< 5	< 2	< 4	< 6	< 2	< 3	< 15	< 4
SW-2	04/18/10	< 3	< 4	< 7	< 3	< 8	< 4	< 6	< 8	< 4	< 4	< 20	< 6
SW-2	04/19/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 6	< 3	< 3	< 15	< 5
SW-2	04/20/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 6	< 3	< 3	< 15	< 4
SW-2	04/21/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 21	< 6
SW-2	04/22/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 19	< 6
SW-2	04/23/10	< 2	< 3	< 5	< 2	< 5	< 3	< 5	< 13	< 2	< 2	< 22	< 6
SW-2	04/24/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 14	< 2	< 2	< 22	< 6
SW-2	04/25/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 13	< 2	< 2	< 23	< 7
SW-2	04/26/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 21	< 7
SW-2	04/27/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 9	< 2	< 2	< 19	< 5
SW-2	04/28/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 14	< 3	< 3	< 26	< 8
SW-2	05/03/10	< 2	< 2	< 6	< 3	< 5	< 3	< 5	< 8	< 2	< 2	< 17	< 6
SW-2	05/04/10	< 3	< 3	< 6	< 3	< 6	< 3	< 6	< 8	< 3	< 3	< 20	< 6
SW-2	05/05/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 12	< 2	< 3	< 24	< 8

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TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140	
B-69	SW-2	05/06/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 13	< 3	< 3	< 26	< 8
	SW-2	05/07/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 8	< 2	< 2	< 16	< 5
	SW-2	05/08/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 11	< 3	< 3	< 22	< 7
	SW-2	05/09/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 9	< 2	< 3	< 19	< 6
	SW-2	05/10/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 8	< 2	< 3	< 19	< 6
	SW-2	05/11/10	< 3	< 3	< 6	< 3	< 5	< 3	< 4	< 7	< 2	< 3	< 17	< 5
	SW-2	05/12/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 11	< 2	< 2	< 18	< 6
	SW-2	05/13/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 13	< 2	< 2	< 23	< 6
	SW-2	05/14/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 12	< 2	< 3	< 22	< 7
	SW-2	05/15/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 11	< 2	< 2	< 22	< 7
	SW-2	05/16/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 8	< 2	< 2	< 17	< 5
	SW-2	05/17/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 10	< 2	< 3	< 19	< 6
	SW-2	05/18/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 8	< 2	< 3	< 19	< 6
	SW-2	05/19/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 9	< 3	< 3	< 19	< 6
	SW-2	05/20/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 10	< 3	< 3	< 21	< 6
	SW-2	05/21/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 8	< 2	< 3	< 19	< 6
	SW-2	05/22/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 6	< 2	< 2	< 14	< 4
	SW-2	05/23/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 6	< 2	< 3	< 15	< 5
	SW-2	05/24/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 5	< 2	< 2	< 14	< 4
	SW-2	05/25/10	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 5	< 2	< 2	< 13	< 4
	SW-2	05/26/10	< 2	< 2	< 3	< 1	< 3	< 2	< 3	< 13	< 1	< 2	< 20	< 7
	SW-2	05/27/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 15	< 2	< 2	< 24	< 7
	SW-2	05/28/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 14	< 2	< 2	< 22	< 7
	SW-2	05/29/10	< 2	< 2	< 6	< 2	< 4	< 3	< 4	< 15	< 2	< 2	< 26	< 8
	SW-2	05/30/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 14	< 2	< 2	< 25	< 6
	SW-2	05/31/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 14	< 1	< 1	< 19	< 7
	SW-2	06/01/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 13	< 1	< 1	< 15	< 6

TABLE B-II.2

CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	06/02/10	< 1	< 2	< 3	< 1	< 3	< 2	< 2	< 14	< 1	< 1	< 18	< 5
SW-2	06/03/10	< 2	< 2	< 5	< 2	< 4	< 2	< 3	< 8	< 2	< 2	< 16	< 5
SW-2	06/04/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 11	< 2	< 3	< 21	< 6
SW-2	06/05/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 10	< 3	< 3	< 21	< 7
SW-2	06/06/10	< 3	< 4	< 7	< 3	< 7	< 4	< 7	< 14	< 4	< 4	< 27	< 7
SW-2	06/07/10	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 8	< 2	< 2	< 16	< 5
SW-2	06/08/10	< 2	< 3	< 6	< 3	< 6	< 3	< 5	< 8	< 2	< 3	< 18	< 6
SW-2	06/09/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 12	< 2	< 3	< 23	< 8
SW-2	06/10/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 13	< 3	< 3	< 25	< 8
SW-2	06/11/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 10	< 2	< 3	< 20	< 7
SW-2	06/12/10	< 3	< 3	< 7	< 4	< 7	< 3	< 6	< 9	< 3	< 3	< 21	< 6
SW-2	06/13/10	< 4	< 4	< 8	< 4	< 8	< 4	< 6	< 9	< 3	< 4	< 22	< 7
SW-2	06/14/10	< 4	< 5	< 9	< 5	< 8	< 5	< 9	< 10	< 4	< 5	< 25	< 9
SW-2	06/15/10	< 4	< 4	< 8	< 4	< 8	< 4	< 7	< 8	< 4	< 4	< 21	< 6
SW-2	06/16/10	< 3	< 3	< 7	< 3	< 5	< 3	< 5	< 15	< 2	< 3	< 27	< 8
SW-2	06/17/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 13	< 2	< 2	< 22	< 7
SW-2	06/18/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 14	< 2	< 2	< 25	< 8
SW-2	06/19/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 19	< 6
SW-2	06/20/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 10	< 2	< 2	< 20	< 6
SW-2	06/21/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 12	< 2	< 2	< 23	< 7
SW-2	06/22/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 9	< 2	< 2	< 17	< 5
SW-2	06/23/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 11	< 2	< 3	< 22	< 6
SW-2	06/24/10	< 3	< 3	< 7	< 3	< 5	< 3	< 5	< 11	< 2	< 3	< 22	< 7
SW-2	06/25/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 12	< 3	< 3	< 24	< 7
SW-2	06/26/10	< 4	< 4	< 10	< 4	< 10	< 6	< 8	< 14	< 4	< 5	< 30	< 8
SW-2	06/27/10	< 5	< 5	< 11	< 4	< 12	< 6	< 7	< 13	< 4	< 5	< 33	< 11
SW-2	06/28/10	< 2	< 2	< 5	< 3	< 5	< 3	< 4	< 7	< 2	< 3	< 16	< 5

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TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	06/29/10	< 2	< 3	< 5	< 3	< 5	< 3	< 5	< 7	< 2	< 3	< 16	< 5
SW-2	06/30/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 6	< 2	< 2	< 14	< 4
SW-2	07/01/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 8	< 2	< 2	< 16	< 5
SW-2	07/02/10	< 2	< 2	< 5	< 2	< 4	< 2	< 3	< 6	< 2	< 2	< 13	< 5
SW-2	07/03/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 6	< 2	< 2	< 13	< 3
SW-2	07/04/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 5	< 2	< 2	< 12	< 4
SW-2	07/05/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 4	< 1	< 2	< 10	< 3
SW-2	07/06/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 5	< 2	< 2	< 12	< 4
SW-2	07/07/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 5	< 2	< 2	< 12	< 4
SW-2	07/08/10	< 3	< 3	< 7	< 3	< 7	< 3	< 6	< 9	< 3	< 3	< 20	< 6
SW-2	07/09/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 8	< 3	< 3	< 19	< 6
SW-2	07/10/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 5	< 2	< 2	< 11	< 3
SW-2	07/11/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 4	< 2	< 2	< 11	< 4
SW-2	07/12/10	< 4	< 4	< 7	< 4	< 8	< 4	< 7	< 7	< 4	< 4	< 19	< 6
SW-2	07/13/10	< 2	< 2	< 5	< 3	< 5	< 2	< 4	< 4	< 2	< 2	< 11	< 3
SW-2	07/14/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 5	< 2	< 2	< 12	< 3
SW-2	07/15/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 4	< 2	< 2	< 11	< 3
SW-2	07/16/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 4	< 2	< 2	< 11	< 3
SW-2	07/17/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 7	< 3	< 3	< 16	< 5
SW-2	07/18/10	< 3	< 3	< 5	< 3	< 5	< 3	< 5	< 6	< 2	< 3	< 15	< 5
SW-2	07/19/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 15	< 2	< 2	< 26	< 9
SW-2	07/20/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 14	< 2	< 2	< 22	< 6
SW-2	07/21/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 15	< 2	< 3	< 25	< 9
SW-2	07/22/10	< 3	< 3	< 7	< 3	< 5	< 3	< 5	< 15	< 2	< 3	< 26	< 7
SW-2	07/23/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 14	< 3	< 3	< 26	< 9
SW-2	07/24/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 13	< 1	< 2	< 20	< 6
SW-2	07/25/10	< 2	< 2	< 5	< 2	< 3	< 2	< 4	< 14	< 2	< 2	< 24	< 7

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TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	07/26/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 9	< 2	< 2	< 17	< 6
SW-2	07/27/10	< 2	< 2	< 6	< 3	< 5	< 3	< 5	< 11	< 2	< 2	< 20	< 6
SW-2	07/28/10	< 1	< 2	< 3	< 1	< 3	< 2	< 3	< 6	< 1	< 1	< 12	< 4
SW-2	07/29/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 9	< 1	< 1	< 15	< 5
SW-2	07/30/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 13	< 2	< 2	< 22	< 6
SW-2	07/31/10	< 2	< 3	< 5	< 2	< 5	< 3	< 5	< 14	< 3	< 2	< 25	< 7
SW-2	08/01/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 18	< 7
SW-2	08/02/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 14	< 1	< 1	< 19	< 6
SW-2	08/03/10	< 2	< 2	< 5	< 2	< 4	< 2	< 3	< 12	< 2	< 2	< 21	< 6
SW-2	08/04/10	< 2	< 3	< 6	< 2	< 5	< 3	< 4	< 14	< 2	< 2	< 24	< 7
SW-2	08/05/10	< 2	< 3	< 6	< 2	< 5	< 3	< 4	< 13	< 2	< 2	< 23	< 7
SW-2	08/06/10	< 3	< 3	< 6	< 2	< 5	< 3	< 5	< 14	< 2	< 3	< 24	< 7
SW-2	08/07/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 20	< 6
SW-2	08/08/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 9	< 1	< 2	< 15	< 5
SW-2	08/09/10	< 4	< 3	< 8	< 3	< 7	< 4	< 7	< 14	< 3	< 4	< 29	< 8
SW-2	08/10/10	< 2	< 2	< 5	< 2	< 5	< 2	< 4	< 10	< 2	< 2	< 19	< 6
SW-2	08/11/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 10	< 2	< 3	< 20	< 5
SW-2	08/12/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 19	< 6
SW-2	08/13/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 14	< 1	< 1	< 18	< 5
SW-2	08/14/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 13	< 1	< 1	< 17	< 6
SW-2	08/15/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 16	< 5
SW-2	08/16/10	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 11	< 1	< 1	< 15	< 5
SW-2	08/17/10	< 1	< 2	< 3	< 1	< 3	< 1	< 3	< 12	< 1	< 1	< 17	< 6
SW-2	08/18/10	< 1	< 2	< 3	< 1	< 3	< 2	< 2	< 10	< 1	< 1	< 17	< 5
SW-2	08/19/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 12	< 1	< 1	< 17	< 6
SW-2	08/20/10	< 2	< 2	< 5	< 2	< 3	< 2	< 4	< 14	< 2	< 2	< 22	< 6
SW-2	08/21/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 14	< 2	< 2	< 23	< 7

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TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
B-73 SW-2	08/22/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 11	< 2	< 2	< 19	< 5
SW-2	08/23/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 13	< 2	< 2	< 22	< 8
SW-2	08/24/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 18	< 6
SW-2	10/11/10	< 3	< 2	< 7	< 3	< 6	< 3	< 5	< 13	< 2	< 2	< 25	< 7
SW-2	10/17/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 13	< 2	< 2	< 23	< 6
SW-2	10/18/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 13	< 2	< 3	< 22	< 7
SW-2	10/19/10	< 2	< 2	< 4	< 3	< 4	< 2	< 4	< 12	< 2	< 2	< 21	< 6
SW-2	10/20/10	< 2	< 3	< 5	< 2	< 5	< 3	< 4	< 13	< 2	< 2	< 23	< 8
SW-2	10/21/10	< 2	< 3	< 6	< 3	< 6	< 3	< 4	< 12	< 2	< 3	< 22	< 7
SW-2	10/22/10	< 3	< 3	< 6	< 3	< 5	< 3	< 6	< 14	< 3	< 3	< 27	< 6
SW-2	10/23/10	< 3	< 3	< 7	< 3	< 5	< 3	< 5	< 15	< 3	< 3	< 27	< 9
SW-2	10/24/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 13	< 2	< 3	< 25	< 8
SW-2	10/25/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 10	< 2	< 2	< 19	< 5
SW-2	10/26/10	< 2	< 2	< 5	< 2	< 4	< 3	< 4	< 13	< 2	< 2	< 22	< 6
SW-2	10/27/10	< 2	< 2	< 5	< 2	< 4	< 3	< 4	< 13	< 2	< 3	< 22	< 4
SW-2	10/28/10	< 2	< 3	< 6	< 3	< 5	< 3	< 6	< 12	< 2	< 3	< 25	< 8
SW-2	10/29/10	< 3	< 2	< 6	< 3	< 5	< 3	< 5	< 13	< 2	< 3	< 24	< 8
SW-2	10/30/10	< 2	< 3	< 6	< 2	< 5	< 3	< 4	< 10	< 2	< 3	< 20	< 7
SW-2	10/31/10	< 3	< 3	< 8	< 3	< 6	< 3	< 6	< 14	< 3	< 4	< 27	< 10
SW-2	11/01/10	< 3	< 2	< 6	< 3	< 5	< 3	< 5	< 9	< 2	< 3	< 21	< 6
SW-2	11/02/10	< 2	< 2	< 6	< 2	< 5	< 3	< 4	< 9	< 2	< 2	< 20	< 5
SW-2	11/03/10	< 3	< 3	< 6	< 3	< 5	< 3	< 5	< 13	< 2	< 3	< 27	< 7
SW-2	11/04/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 11	< 3	< 3	< 22	< 6
SW-2	11/05/10	< 3	< 3	< 8	< 4	< 7	< 4	< 7	< 13	< 3	< 3	< 26	< 9
SW-2	11/06/10	< 4	< 5	< 10	< 4	< 9	< 5	< 8	< 14	< 4	< 4	< 29	< 11
SW-2	11/07/10	< 4	< 4	< 9	< 4	< 8	< 5	< 8	< 14	< 4	< 4	< 31	< 9
SW-2	11/08/10	< 4	< 4	< 9	< 4	< 8	< 4	< 8	< 13	< 4	< 4	< 28	< 9

TABLE B-II.2

**CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE
RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	11/09/10	< 4	< 4	< 10	< 5	< 9	< 5	< 8	< 13	< 4	< 4	< 27	< 9
SW-2	11/10/10	< 3	< 4	< 7	< 3	< 7	< 4	< 6	< 9	< 3	< 4	< 23	< 6
SW-2	11/11/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 10	< 2	< 2	< 18	< 5
SW-2	11/12/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 13	< 3	< 3	< 24	< 7
SW-2	11/13/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 19	< 6
SW-2	11/14/10	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 14	< 3	< 4	< 27	< 8
SW-2	11/15/10	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 9	< 2	< 3	< 18	< 6
SW-2	11/16/10	< 3	< 3	< 6	< 3	< 6	< 3	< 6	< 9	< 3	< 3	< 24	< 7
B-74 SW-2	11/17/10	< 2	< 2	< 3	< 2	< 3	< 2	< 3	< 6	< 2	< 2	< 13	< 3
SW-2	11/18/10	< 2	< 2	< 5	< 3	< 4	< 2	< 5	< 8	< 2	< 3	< 18	< 7
SW-2	11/19/10	< 2	< 2	< 4	< 2	< 3	< 2	< 3	< 6	< 2	< 2	< 13	< 4
SW-2	11/20/10	< 2	< 3	< 4	< 3	< 4	< 2	< 4	< 6	< 2	< 2	< 14	< 5
SW-2	11/21/10	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 6	< 2	< 2	< 15	< 4
SW-2	11/22/10	< 3	< 3	< 5	< 3	< 5	< 3	< 5	< 7	< 2	< 3	< 16	< 5
SW-2	11/23/10	< 2	< 2	< 5	< 2	< 5	< 2	< 4	< 5	< 2	< 2	< 14	< 4
SW-2	11/24/10	< 2	< 2	< 5	< 2	< 3	< 2	< 4	< 56	< 2	< 2	< 53	< 16
SW-2	11/25/10	< 2	< 2	< 5	< 1	< 3	< 2	< 4	< 53	< 2	< 2	< 48	< 16
SW-2	11/26/10	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 46	< 1	< 1	< 42	< 12
SW-2	11/27/10	< 2	< 2	< 5	< 2	< 3	< 2	< 4	< 48	< 1	< 2	< 44	< 16
SW-2	11/28/10	< 2	< 2	< 5	< 2	< 3	< 2	< 4	< 85	< 2	< 2	< 49	< 17
SW-2	11/29/10	< 2	< 3	< 6	< 2	< 4	< 3	< 4	< 63	< 2	< 2	< 56	< 13
SW-2	11/30/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 48	< 2	< 2	< 49	< 13
SW-2	12/01/10	< 2	< 2	< 6	< 2	< 4	< 3	< 4	< 52	< 2	< 2	< 54	< 13
SW-2	12/02/10	< 3	< 3	< 7	< 3	< 5	< 3	< 5	< 43	< 2	< 3	< 48	< 13
SW-2	12/03/10	< 2	< 2	< 6	< 2	< 4	< 2	< 4	< 34	< 2	< 2	< 39	< 16
SW-2	12/04/10	< 2	< 3	< 7	< 2	< 4	< 3	< 5	< 31	< 2	< 2	< 39	< 9
SW-2	12/05/10	< 3	< 4	< 8	< 3	< 6	< 4	< 6	< 35	< 3	< 3	< 48	< 15

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2

CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	12/06/10	< 2	< 2	< 6	< 2	< 4	< 3	< 4	< 28	< 2	< 2	< 35	< 11
SW-2	12/07/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 26	< 2	< 2	< 39	< 11
SW-2	12/08/10	< 3	< 3	< 8	< 3	< 7	< 3	< 6	< 31	< 3	< 3	< 43	< 11
SW-2	12/09/10	< 3	< 3	< 6	< 3	< 6	< 3	< 6	< 27	< 2	< 3	< 40	< 11
SW-2	12/10/10	< 2	< 3	< 7	< 3	< 5	< 3	< 5	< 26	< 2	< 3	< 37	< 12
SW-2	12/11/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 13	< 2	< 2	< 22	< 7
SW-2	12/12/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 18	< 2	< 3	< 27	< 9
SW-2	12/14/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 13	< 1	< 2	< 22	< 7
SW-2	12/15/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 14	< 2	< 3	< 24	< 6
SW-2	12/16/10	< 2	< 2	< 5	< 2	< 3	< 2	< 4	< 13	< 2	< 2	< 21	< 6
SW-2	12/17/10	< 2	< 2	< 4	< 2	< 4	< 2	< 3	< 12	< 2	< 2	< 19	< 6
SW-2	12/18/10	< 2	< 2	< 5	< 2	< 4	< 3	< 4	< 13	< 2	< 2	< 23	< 6
SW-2	12/19/10	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 14	< 2	< 2	< 23	< 5
SW-2	12/20/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 20	< 6
SW-2	12/21/10	< 2	< 2	< 5	< 2	< 5	< 3	< 4	< 11	< 2	< 2	< 21	< 6
SW-2	12/22/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 22	< 7
SW-2	12/23/10	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 22	< 7
SW-2	12/24/10	< 2	< 2	< 6	< 3	< 4	< 3	< 5	< 11	< 2	< 2	< 22	< 7
SW-2	12/25/10	< 3	< 4	< 8	< 4	< 7	< 3	< 6	< 14	< 3	< 3	< 30	< 9
SW-2	12/26/10	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 12	< 2	< 3	< 24	< 7
SW-2	12/27/10	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 10	< 2	< 2	< 20	< 6
SW-2	12/27/10	< 2	< 2	< 5	< 2	< 5	< 2	< 4	< 13	< 2	< 2	< 24	< 9
SW-2	12/29/10	< 2	< 2	< 6	< 3	< 5	< 3	< 5	< 14	< 2	< 3	< 23	< 6
SW-2	12/30/10	< 3	< 3	< 7	< 3	< 6	< 3	< 5	< 13	< 2	< 3	< 25	< 7
SW-2	12/31/10	< 4	< 4	< 8	< 4	< 7	< 4	< 7	< 14	< 3	< 4	< 30	< 10

BOLDED VALUES INDICATE THE LLD WAS NOT MET

B-75

TABLE B-II.3 CONCENTRATIONS OF "HARD-TO-DETECTS" IN SURFACE WATER SAMPLES COLLECTED AS PART OF THE RADIOLOGICAL GROUNDWATER PROTECTION PROGRAM, OYSTER CREEK GENERATING STATION, 2010

RESULTS IN UNITS OF PCI/LITER \pm 2 SIGMA

SITE	COLLECTION PERIOD	AM-241	CM-242	CM-243/244	PU-238	PU-239/240	U-233/234	U-235	U-238	FE-55	NI-63
MCD	10/21/2010	< 0.1	< 0.05	< 0.15	< 0.1	< 0.1	0.8 \pm 0.3	< 0.3	0.6 \pm 0.2	< 133	< 2.9