



**Pacific Gas and
Electric Company**

James R. Becker
Vice President - Diablo Canyon
Operations and Station Director

Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424

805.545.3462
Fax: 805.545.4234

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U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

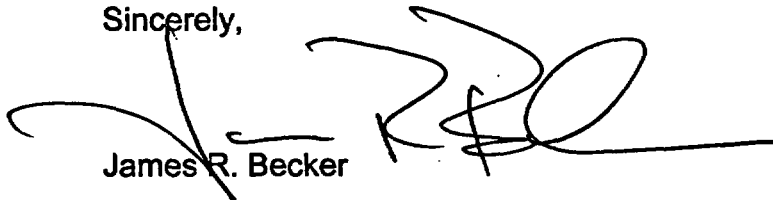
Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2
2003 Annual Radiological Environmental Operating Report

Dear Commissioners and Staff:

Enclosed is the 2003 Annual Radiological Environmental Operating Report for Diablo Canyon Power Plant, Units 1 and 2, submitted in accordance with Technical Specification 5.6.2. The enclosure contains material consistent with the objectives of the Offsite Dose Calculation Manual, and 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

Should you have any questions regarding this submittal, please contact Bob Lorenz at (925) 866-5302.

Sincerely,



James R. Becker

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Enclosure

cc: Diablo Distribution
cc/enc: Larry Allen
Edgar D. Bailey, DHS
Roger W. Briggs
Bruce S. Mallett
David L. Proulx
Girija S. Shukla

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**2003 Annual Radiological
Environmental Operating Report
Diablo Canyon Power Plant**

Prepared by
**R. W. Lorenz
D. L. Brownrigg
E. A. Gedney
B. Nekkab**

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Report No: 420DC-04.13

EXECUTIVE SUMMARY

This report contains results from the operational Radiological Environmental Monitoring Program (REMP) for Diablo Canyon Power Plant (DCPP) compiled for the period January 1, 2003, through December 31, 2003. This program is conducted in accordance with DCPP Program Directive CY2, "Radiological Monitoring and Controls Program," and RP1.ID11, "Environmental Radiological Monitoring Procedure."

The results of the 2003 REMP showed no unusual findings from plant operations, and that the operation of DCPP had no significant radiological impact on the environment. Plant operations had no significant impact on airborne radioactivity in the environment. The ambient direct radiation levels in the DCPP environs did not change and were within the preoperational range. No plant related radionuclides were detected in surface water samples. The plant had no significant impact on surface water. Food crops sampled during their growing season and milk samples collected detected only naturally occurring radioactivity; and therefore, there was no impact from plant operation. Two out of 89 marine samples contained other than naturally occurring radionuclides. Cobalt-58 was detected in two algae samples collected from Diablo Cove. The cobalt-58 detected in these algae samples was slightly above detection levels. There is no reporting level for radionuclides detected in algae samples. Low concentrations of various plant related radionuclides have been detected in algae collected from Diablo Cove several times in the operational period. However, the detected radionuclide concentrations have been random and near the lower limits of detection. Therefore, there is no increasing trend of plant related radionuclides in algae collected from Diablo Cove.

CONTENTS

| | Page |
|--|------------|
| 1 INTRODUCTION | 1-1 |
| DCPP ENVIRONMENTAL MONITORING PROGRAM | 1-1 |
| 2 SAMPLING METHODS | 2-1 |
| AIRBORNE RADIOACTIVITY | 2-1 |
| DIRECT RADIATION | 2-1 |
| WATER SAMPLES | 2-1 |
| MARINE BIOLOGICAL AND SEDIMENT SAMPLES | 2-2 |
| FOOD CROPS | 2-2 |
| MILK | 2-2 |
| 3 SAMPLE ANALYSES | 3-1 |
| AIRBORNE RADIOACTIVITY | 3-1 |
| DIRECT RADIATION | 3-1 |
| WATER SAMPLES | 3-3 |
| MARINE BIOLOGICAL AND SEDIMENT SAMPLES | 3-3 |
| FOOD CROPS | 3-3 |
| MILK | 3-3 |
| 4 QUALITY CONTROL | 4-1 |
| 5 LAND USE CENSUS | 5-1 |
| 6 RESULTS AND DISCUSSION | 6-1 |
| AIRBORNE RADIOACTIVITY | 6-1 |
| DIRECT RADIATION | 6-6 |
| WATER SAMPLES | 6-6 |
| MARINE BIOLOGICAL AND SEDIMENT SAMPLES | 6-7 |
| FOOD CROPS | 6-8 |
| MILK | 6-8 |
| 7 COMPARISON OF PREOPERATIONAL AND OPERATIONAL DATA | 7-1 |
| AIRBORNE RADIOACTIVITY | 7-1 |
| DIRECT RADIATION | 7-3 |

CONTENTS (Continued)

| | Page |
|--------------------------------------|------------|
| ALGAE SAMPLES | 7-3 |
| 8 PROGRAM VARIANCE | 8-1 |
| AIRBORNE RADIOACTIVITY | 8-1 |
| MARINE AND TERRESTRIAL SAMPLES | 8-1 |
| SUPPLEMENTAL SAMPLES | 8-1 |
| STATE SPLIT SAMPLING PROGRAM | 8-2 |
| 9 REFERENCES | 9-1 |

Appendix A:

ENVIRONMENTAL RADIATION MONITORING PROGRAM SUMMARIES

Appendix B:

ANALYTICAL RESULTS

FIGURES

| Figure | | Page |
|--------|---|------|
| 1 | Units 1 and 2 Diablo Canyon off-site stations | 1-6 |
| 2 | Units 1 and 2 Diablo Canyon on-site stations | 1-7 |
| 3 | Units 1 and 2 Diablo Canyon Power Plant - land use census | 5-4 |
| 4 | Air particulates gross beta activities | 6-2 |
| 5 | Control Chart for Air Particulate Filters..... | 7-2 |
| 6 | Control Chart for TLD data | 7-4 |
| 7 | Control Chart for Co-58 Algae (Iridaea) | 7-5 |

TABLES

| Table | | Page |
|-------|--|------|
| 1 | Summary of the Radiological Environmental Monitoring Program | 1-2 |
| 2 | Distances and Directions to Environmental Monitoring Stations | 1-4 |
| 3 | Maximum Values for Lower Limits of Detection (LLD) | 3-2 |
| 4 | Reporting Levels for Radioactivity Concentrations in Environmental Samples | 6-8 |
| A-1 | Environmental Radiological Monitoring Program Summary - Airborne | A-1 |
| A-2 | Environmental Radiological Monitoring Program Summary - Direct Radiation | A-2 |
| A-3a | Environmental Radiological Monitoring Program Summary - Surface Water | A-3 |
| A-3b | Environmental Radiological Monitoring Program Summary - Drinking Water | A-4 |
| A-4 | Environmental Radiological Monitoring Program Summary - Mussels | A-5 |
| A-5 | Environmental Radiological Monitoring Program Summary - Fish | A-6 |
| A-6 | Environmental Radiological Monitoring Program Summary - Algae | A-7 |
| A-7 | Environmental Radiological Monitoring Program Summary - Sediment | A-8 |
| A-8 | Environmental Radiological Monitoring Program Summary - Food Crops | A-9 |
| A-9 | Environmental Radiological Monitoring Program Summary - Milk | A-10 |
| A-10 | Analytics Performance Evaluation Program | A-11 |

TABLES (Continued)

| Table | | Page |
|-------|---|------|
| B-1 | State Cross-Check Results | B-1 |
| B-2 | Marine and Terrestrial Sample Data - Detected Nuclides | B-4 |
| B-3 | Airborne Radioactivity | B-5 |
| B-4 | Environmental Dosimetry | B-19 |
| B-5 | Land Use Census | B-20 |
| B-6 | Lower Limits of Detection (LLD) Exceeded | B-21 |
| B-7 | List of Marine and Terrestrial Samples Collected and Analyzed | B-22 |

Section 1

INTRODUCTION

Diablo Canyon Power Plant (DCPP) consists of two Westinghouse pressurized water reactors. Unit 1 began commercial operation in 1985, and Unit 2 began commercial operation in 1986. This report contains results from the operational Radiological Environmental Monitoring Program (REMP) for DCPP compiled for the period January 1, 2003, through December 31, 2003. This program was designed to identify and quantify ambient radioactivity concentrations in the DCPP environs and to determine whether there were any significant increases in the concentration of radionuclides, attributable to plant operations, in the critical dose pathways from the environment to man. Also included in this report are the results of PG&E's Technical and Ecological Services (TES) participation in an external lab cross check program, a discussion of the TES results compared with the results from the State of California Department of Health Services (DHS) Sanitation and Radiation Laboratory (SRL) of the same or duplicate samples, and the current land use census of the plant environs conducted by plant personnel.

DCPP ENVIRONMENTAL MONITORING PROGRAM

The REMP was conducted in accordance with DCPP Program Directive CY2, "Radiological Monitoring and Controls Program," and RP1.ID11, "Environmental Radiological Monitoring Procedure."

The environmental media selected were based on the critical dose pathways of the radionuclides from the environment to man. They included the following: direct radiation, air, water, fish, and invertebrates. Supplemental samples such as algae, local agricultural crops, and milk were also collected. The collection frequency of the samples from the different media is summarized in Table 1. The samples were collected by PG&E's DCPP personnel.

The sampling locations were determined by land use, site meteorology, and local demographics. The distances and directions to the environmental monitoring stations are listed in Table 2. The off-site and on-site stations are shown in Figures 1 and 2, respectively.

Table 1

Summary of the Radiological Environmental Monitoring Program

| Exposure Pathway and/or Sample | Sampling Locations^(b) | Type of Analysis | Collection Frequency |
|---|---|--|--|
| Direct radiation ^(a) | 31 stations (MT1, WN1, OS1, 5S1, 6S1, 8S1, 8S2, 5S3, 2D1, 4D1, 5F1, 1A1, 7D2, 7G2, 7C1, 7F1, OB1, 7D1, 4C1, OS2, 1S1, 2S1, 3S1, 4S1, 7S1, 9S1, 1C1, 5C1, 3D1, 6D1, 5F3) | Gamma exposure | Quarterly |
| Particulate filters | 7 stations (MT1, OS2, 1S1, 5F1, 7D1, 8S1, 8S2) | Gross beta, gamma isotopic | Weekly ^(c) Quarterly composite |
| Iodine cartridges | 7 stations (MT1, OS2, 1S1, 5F1, 7D1, 8S1, 8S2) | Gamma for I-131 | Weekly |
| Surface water | 3 stations (DCM, 7C2, OUT) | Gamma isotopic, tritium | Monthly |
| Drinking water | 2 stations (DW1, 5S2) | Gamma isotopic, radioiodine, tritium | Monthly |
| Sediment | Diablo Cove (DCM) Rattlesnake Canyon (7C2) | Gamma isotopic | Annually |
| Intertidal algae ^(d) | Diablo Cove (DCM) Rattlesnake Canyon (7C2) | Gamma isotopic | Quarterly if Available |
| Kelp ^(d) | Diablo Cove (DCM) Pacific Ocean North (PON) Pacific Ocean South (POS) Rattlesnake Canyon (7C2) | Gamma isotopic | Quarterly if Available |
| Milk ^(d) | 1 station (5F2) | Gamma isotopic, radioiodine | Monthly |

Table Notation:

(a) Three TLD badges are placed at each station.

(b) See Figures 1 and 2 for locations.

(c) Filters changed weekly or more frequently as required by dust loading; analyzed at least 24 hours after filter change.

(d) Supplemental sample.

Table 1 (continued)

Summary of the Radiological Environmental Monitoring Program

| Exposure Pathway and/or Sample | Sampling Locations ^(b) | Type of Analysis | Collection Frequency |
|--|---|------------------|---|
| Rockfish (Sebastes sp.) | Diablo Cove (DCM) Pacific Ocean North (PON) ^(d) Pacific Ocean South (POS) ^(d) Rattlesnake Canyon (7C2) | Gamma isotopic | Quarterly if Available |
| Perch (Family Embiotocidae) | Diablo Cove (DCM) Pacific Ocean North (PON) ^(d) Pacific Ocean South (POS) ^(d) Rattlesnake Canyon (7C2) | Gamma isotopic | Quarterly if Available |
| Fish (species unspecified) | Fish Market at Avila Pier (7D3) ^(d) Morro Bay Market (2F1) | Gamma isotopic | Quarterly if Available |
| Mussels (Mytilus californianus) | Diablo Cove (DCM) Pacific Ocean North (PON) ^(d) Pacific Ocean South (POS) ^(d) Rattlesnake Canyon (7C2) | Gamma isotopic | Quarterly if Available |
| Red abalone ^(d) (Haliotis refescens) | Diablo Cove (DCM) Rattlesnake Canyon (7C2) | Gamma isotopic | Semiannually if Available |
| Food crops ^(d) | 4 stations (5F2, 7G1, 7C1, 6C1) | Gamma isotopic | Monthly if available (6C1 is sampled quarterly) |

Table Notation:

- (a) Three TLD badges are placed at each station.
- (b) See Figures 1 and 2 for locations.
- (c) Filters changed weekly or more frequently as required by dust loading; analyzed at least 24 hours after filter change.
- (d) Supplemental sample.

Table 2
Distances and Directions to Environmental Monitoring Stations*

| Station Code ^(a) | Station Name | Radial Direction** (True Heading) (Degrees) | Radial Distance** From Plant | |
|-----------------------------|--|---|---------------------------------|---------|
| | | | (km) | (Miles) |
| ØS1 | Exclusion Fence-Northwest Corner | 320 | 0.2 | (0.1) |
| ØS2 | North Gate | 320 | 0.8 | (0.5) |
| 1S1 | Wastewater Pond | 330 | 0.6 | (0.4) |
| 2S1 | Back Road-300 m North of Plant | 0 | 0.3 | (0.2) |
| 3S1 | Road NW of 230 kV Switchyard | 23 | 0.6 | (0.4) |
| 4S1 | Back Road between Switchyard | 43 | 0.8 | (0.5) |
| 5S1 | 500 kV Switchyard | 58 | 0.6 | (0.4) |
| 5S2 | Diablo Creek Weir | 65 | 1.0 | (0.6) |
| 5S3 | Microwave Tower Road | 70 | 1.0 | (0.7) |
| 6S1 | Microwave Tower | 94 | 0.8 | (0.5) |
| 7S1 | Overlook Road | 112 | 0.5 | (0.3) |
| 8S1 | Target Range | 125 | 0.8 | (0.5) |
| 8S2 | Southwest Site Boundary (Sec. Met Tower) | 128 | 1.8 | (1.1) |
| 9S1 | South Cove | 167 | 0.6 | (0.4) |
| MT1 | Meteorological Tower | 185 | 0.3 | (0.2) |
| DCM | Diablo Cove | 270 | 0.3 | (0.2) |
| WN1 | Northwest Guard Shack | 290 | 0.3 | (0.2) |
| 1A1 | Crowbar Canyon | 327 | 2.6 | (1.6) |
| ØB1 | Point Buchon | 325 | 5.8 | (3.6) |
| 1C1 | Montana de Oro Campground | 336 | 7.5 | (4.7) |
| 4C1 | Clark Valley Gravel Pit | 45 | 9.3 | (5.8) |
| 5C1 | Junction Prefumo/See Canyon roads | 64 | 7.5 | (4.7) |
| 6C1 | Household garden (nearest site boundary) | 97.5 | 7.2 | (4.6) |
| 7C1 | Pecho Creek Ruins (Mello Farm) | 120 | 6.6 | (4.1) |
| 7C2 | Rattlesnake Canyon | 124 | 7.5 | (4.7) |
| 2D1 | Sunnyside School | 10 | 11.0 | (6.9) |
| 3D1 | Clark Valley | 24 | 9.9 | (6.2) |
| 4D1 | Los Osos School | 36 | 12.2 | (7.6) |
| 6D1 | Junction See Canyon/Davis Canyon roads | 89 | 12.0 | (7.5) |
| 7D1 | Avila Gate | 118 | 10.6 | (6.6) |
| 7D2 | Avila Beach | 110 | 12.2 | (7.6) |
| 7D3 | Avila Pier | 120 | 11.0 | (6.9) |
| 2F1 | Morro Bay (Commercial Landing) | 0 | 17.4 | (10.9) |
| 5F1 | SLO Zone 1 Substation | 68 | 17.9 | (11.2) |
| 5F2 | Cal Poly Farm | 60 | 20.2 | (12.6) |
| 5F3 | SLO County Health Department | 70 | 20.3 | (12.7) |
| 7F1 | Shell Beach | 110 | 17.3 | (10.8) |
| 7G1 | Arroyo Grande (Kawaoka Farm) | 115 | 26.9 | (16.8) |
| 7G2 | Oceano Substation | 118 | 27.7 | (17.3) |
| OUT | Plant Outfall | 270 | 0.3 | (0.2) |
| DW1 | Drinking Water | On-site | — | — |
| PON | Pacific Ocean North of Diablo Cove | 305 | 2.4 | (1.5) |
| POS | Pacific Ocean South of Diablo Cove | 145 | 1.3 | (0.8) |

*Stations are shown in Figures 1 and 2.

**The reference point used is the dome of Unit 1 containment.

Table 2 (continued)

Distances and Directions to Environmental Monitoring Stations

(a) Station Code (XYZ):

X - First number (0-9) represents the radial sector in which the station is located:

| | |
|---------------------|---------------------|
| 0 - Northwest | 5 - East-northeast |
| 1 - North-northwest | 6 - East |
| 2 - North | 7 - East-southeast |
| 3 - North-northeast | 8 - Southeast |
| 4 - Northeast | 9 - South-southeast |

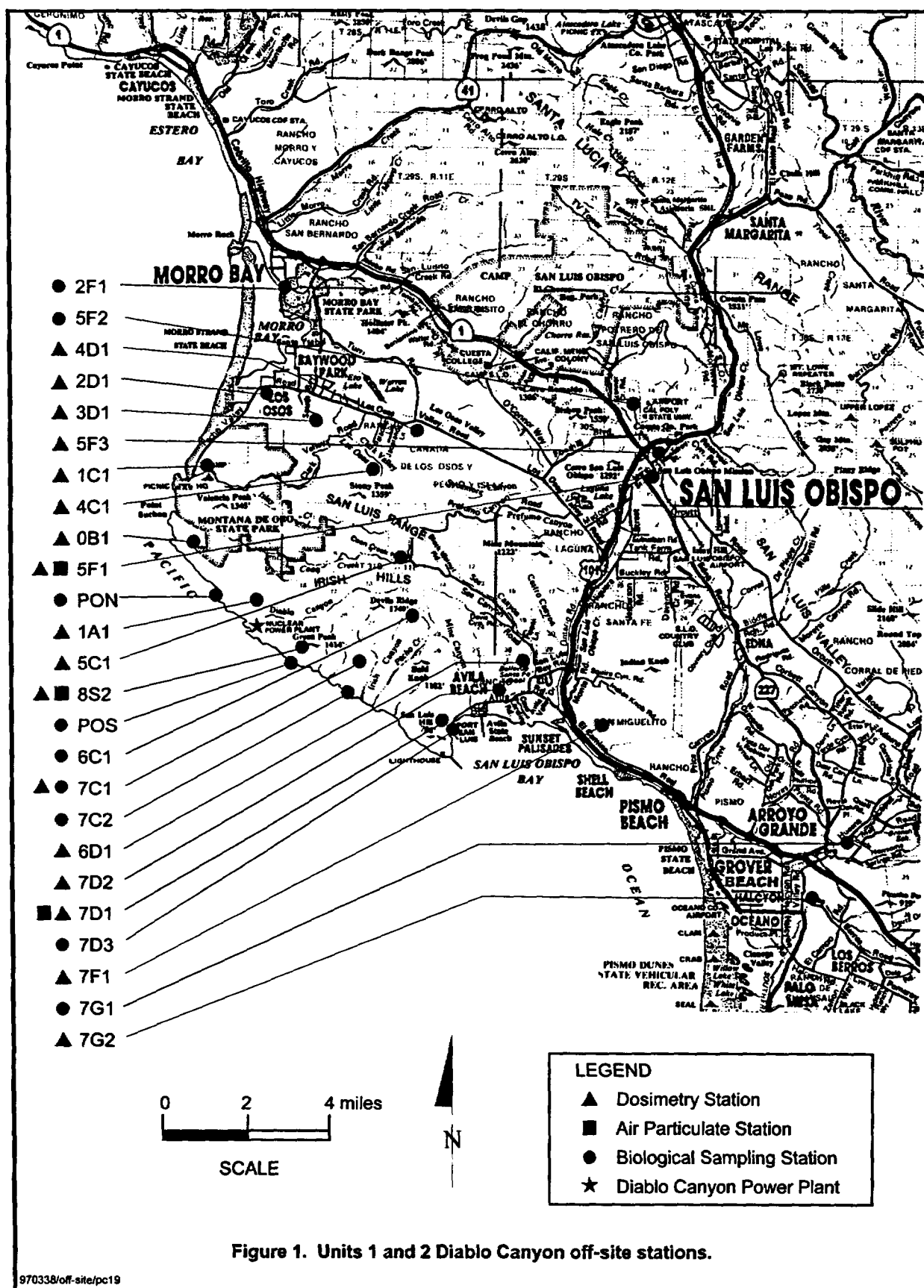
Y - Letter (S, A-H) represents the distance from the plant:

| |
|---|
| S - On-site |
| A - 0-2 miles from plant (but off-site) |
| B - 2-4 miles from plant |
| C - 4-6 miles from plant |
| D - 6-8 miles from plant |
| E - 8-10 miles from plant |
| F - 10-15 miles from plant |
| G - 15-20 miles from plant |
| H - Greater than 20 miles from plant |

Z - Second number represents the station number within the zone.

Station Code (DCM, MT1, WN1, PON, POS, OUT, DW1):

The following stations do not follow the coding system: Diablo Cove Marine (DCM), Meteorological Tower (MT1), Northwest guard shack (WN1), Pacific Ocean North (PON), Pacific Ocean South (POS), Plant Outfall (OUT), and Drinking Water (DW1).



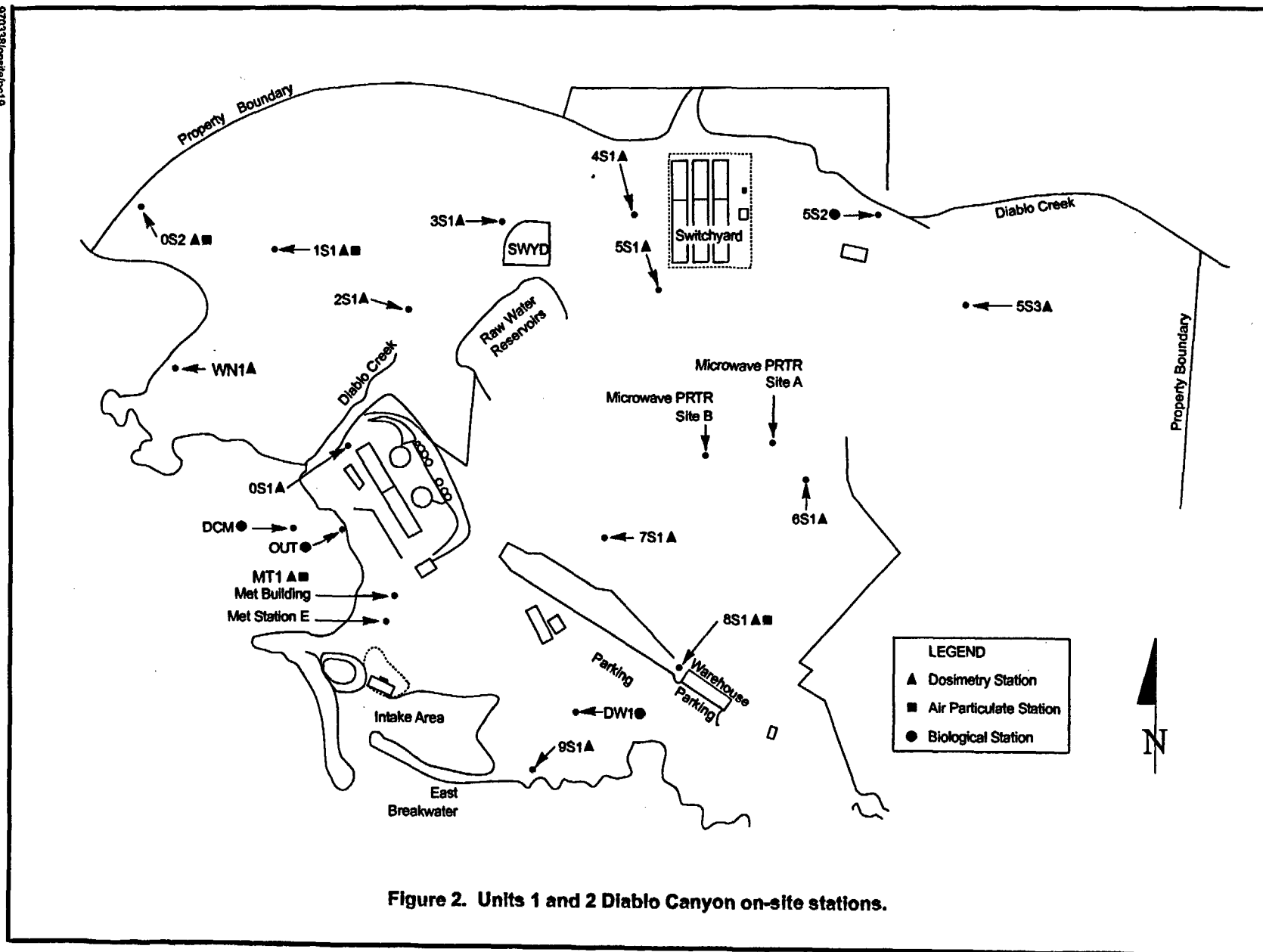


Figure 2. Units 1 and 2 Diablo Canyon on-site stations.

Section 2

SAMPLING METHODS

This section summarizes briefly the various sampling methods.

AIRBORNE RADIOACTIVITY

Air particulate and radioiodine sampling were performed weekly at six indicator stations: MT1, 0S2, 1S1, 7D1, 8S1 and 8S2, and at one control station 5F1.

Constant flow air samplers were used to draw air through paper filters to collect air particulates, and through triethylenediamine (TEDA) impregnated charcoal cartridges to collect radioiodine. The air samplers were set at a flow rate of 1.5 cubic foot per minute and were located one meter above the ground. Sample volumes were determined using gas meters which were installed downstream of the sample head. Beginning in mid-November, sample volumes were determined using flow rate and timer values.

At the end of the sampling period, the filter and cartridge were collected. All necessary data regarding the air volume readings on and off, run time, sampler time on and off, date of collection, and sampler location were recorded and submitted, along with the samples, to TES for analysis.

DIRECT RADIATION

Direct radiation was measured at 31 stations in the vicinity of DCPD using Panasonic UD814 TLD badges. These badges were replaced on a quarterly basis.

The field TLD badge packets were prepared by DCPD personnel. Control badges were carried with the field badges to measure any dose received during transit. The location, date, and time of exchange were recorded on the log sheet which accompanied the field badges.

WATER SAMPLES

Water samples (drinking water and surface water) were collected monthly. Two 1-gallon plastic bottles of each water sample type were collected at their respective locations each month.

Surface water samples were collected at Diablo Cove (station DCM), Rattlesnake Canyon (station 7C2), and at the plant outfall. Drinking water samples were collected from Diablo Creek Weir (station 5S2) located on-site and from the drinking water system at DCPD. After collection, the samples were securely sealed and labeled with sample type, location, date, time of collection, and the person performing the collection and sent to TES for analysis.

MARINE BIOLOGICAL AND SEDIMENT SAMPLES

The REMP requires only one sample of rockfish (*Sebastes* sp.), one sample of perch (family Embiotocidae), and one sample of mussels (*mytilus*) from indicator station DCM and control station 7C2. All other marine samples collected are considered supplemental. These supplemental marine samples included, but were not limited to, the following: intertidal algae, kelp, and market fish. The intertidal samples (algae and mussels) were collected quarterly during low tidal conditions. Kelp was collected quarterly from the offshore kelp bed in the vicinity of the plant. Quarterly samples of fish and an annual sample of ocean bottom sediment were collected from the plant environs by divers. Fish caught locally and purchased from the fish market were also analyzed. All samples were subject to unavailability due to seasonal fluctuations or unfavorable sampling conditions.

The samples were sealed in plastic bags immediately upon collection and labeled with sample type, location, date, time of collection, and individual performing the collection before they were sent to TES.

FOOD CROPS

The REMP requires broadleaf vegetation to be collected in the nearest off-site locations of the highest calculated annual average ground level D/Q (dispersion parameter). There is no broadleaf vegetation available that satisfies this requirement. However, representative samples of food crops in season were collected monthly from supplemental stations: Cal Poly Farm (station 5F2), Kawaoka Farm in Arroyo Grande (station 7G1), Mello Farm (station 7C1) along the site access road, and quarterly at a household garden (station 6C1). The samples were collected, sealed immediately in plastic bags, labeled with sample type, sample location, collection date, time of collection, and the individual performing the collection, and sent to TES for analysis.

MILK

There are no milking animals in the vicinity of the plant. However, supplemental samples of milk were collected monthly from Cal Poly Farm (station 5F2). Two 1-gallon plastic bottles of milk were collected each sampling period. Forty grams of sodium bisulfite preservative were added to each gallon of milk sample. The bottles were sealed and shaken thoroughly to distribute the preservative. They were labeled with sample type, sample location, date and time of collection, and the individual performing the collection, and sent to TES for analysis.

Section 3

SAMPLE ANALYSES

Samples received at TES were analyzed for radioactivity by standard methods as outlined in TES Work Instructions. The results of the analyses were reported at the 95 percent confidence level. All analyses were performed such that the lower limits of detection (LLDs), listed on Table 3, were achieved under routine conditions. The LLD is an a priori (before the fact) estimate of the activity concentration that can be practically achievable with a given measuring instrument, procedure, and type of sample. This value is not intended to be used as an a posteriori (after the fact) criterion for the presence of activity. Background fluctuation, unavoidably small sample size, the presence of interfering nuclides or other uncontrollable circumstances may occasionally render these LLDs unachievable. In such cases, the contributing factors are identified and described in this report. A brief description of the analyses of the different sample types and the general method of counting is discussed below. See Table 1 for the summary of the type of analyses that were performed on the different sample media.

AIRBORNE RADIOACTIVITY

The filter papers collected from the field were placed on individual planchets and counted for gross beta activity in a low-background, thin-window gas proportional counter. They were analyzed at least twenty-four hours after sampling to allow for radon and thoron daughter decay. Gamma isotopic analysis was then performed on quarterly composites of the filters to determine the activity concentration of gamma emitting isotopes.

Gamma isotopic analyses were also performed on the TEDA impregnated charcoal cartridges to determine the radioiodine concentration. The cartridges and filter papers were counted for a time period such that the LLDs were met.

DIRECT RADIATION

Panasonic (UD814) TLD badges were used to measure the ambient radiation level. The TLD badges were annealed and packaged to be sent out in the field by plant dosimetry personnel. After field exposure, the TLD badges were processed on-site. The badges were calibrated using a NIST-traceable cesium-137 source.

Table 3

Maximum Values for Lower Limits of Detection (LLD)^(a)

| Analysis | Water (pCi/L) | Airborne Particulate or Gas (pCi/m³) | Fish (pCi/kg, wet) | Milk (pCi/L) | Food Products (pCi/kg, wet) | Sediment (pCi/kg, dry) |
|-----------------|--------------------------|--|-------------------------------|-------------------------|--|-----------------------------------|
| Gross beta | 4 | 1x10 ⁻² | | | | |
| H-3 | 2000 | | | | | |
| Mn-54 | 15 | | 130 | | | |
| Fe-59 | 30 | | 260 | | | |
| Co-58, 60 | 15 | | 130 | | | |
| Zn-65 | 30 | | 260 | | | |
| Zr-Nb-95 | 15 | | | | | |
| I-131 | 1 ^(b) | 7x10 ⁻² | | 1 | 60 | |
| Cs-134 | 15 | 5x10 ⁻² | 130 | 15 | 60 | 150 |
| Cs-137 | 18 | 6x10 ⁻² | 150 | 18 | 80 | 180 |
| Ba-La-140 | 15 | | | 15 | | |

Table Notation:

- (a) The LLD is the smallest concentration of radioactive material in a sample that will be detected with 95 percent probability with 5 percent probability of falsely concluding that a blank observation represents a "real" signal.
For a particular measurement system (which may include radiochemical separation):

$$LLD = \frac{4.66 s_b}{E \times V \times 2.22 \times Y \times \exp(-\lambda t)}$$

where

LLD is the lower limit of detection as defined (as pCi per unit mass or volume)

s_b is the standard deviation of the background counting rate or of the counting rate of a blank sample as appropriate (as counts per minute)

E is the counting efficiency (as counts per disintegration)

V is the sample size (in units of mass or volume)

2.22 is the number of disintegrations per minute per picocurie

Y is the fractional radiochemical yield (when applicable)

λ is the radioactive decay constant for the particular radionuclide

t is the elapsed time between sample collection (or end of the sample collection period) and time of counting

The value of s_b used in the calculation of the LLD for a detection system shall be based on the actual observed variance of the background counting rate or of the counting rate of the blank samples (as appropriate) rather than on an unverified theoretically predicted variance. In calculating the LLD for a radionuclide determined by gamma ray spectrometry, the background shall include the typical contributions of other radionuclides normally present in the samples (e.g., potassium-40 in milk samples).

- (b) LLD for drinking water.

WATER SAMPLES

Gamma isotopic analyses were performed on all water sample types. To determine the activity concentration of gamma emitters, a known volume of the water sample was analyzed using a gamma spectrometer.

Tritium analyses were performed on drinking water and surface water. The water samples were distilled and analyzed for tritium using a liquid scintillation spectrometer. Iodine-131 analysis by ion exchange was also performed on each drinking water sample.

MARINE BIOLOGICAL AND SEDIMENT SAMPLES

Only the edible portion of the fish and mussels were analyzed for gamma emitters. A weighed amount of the prepared sample was analyzed using a gamma spectrometer.

The kelp blades and the pneumatocyst were prepared separately for analysis. The weighed samples were then counted on the gamma spectrometer to determine the activity concentration of gamma emitters. The results reported were based on wet weight for the marine samples.

The sediment samples were first oven-dried before performing gamma isotopic analysis. The results reported for the sediment samples were based on dry weight.

FOOD CROPS

The samples were placed in appropriate counting containers and analyzed to determine the gamma isotopic content. The results obtained were based on wet weight.

MILK

A known volume of the milk sample was first analyzed on a gamma spectrometer to determine its gamma isotopic content. Stable iodine carrier was then added to the milk sample for determination of chemical recovery of subsequent separation. The total iodine was separated from the sample by passing the sample through an anion resin column. The iodine was chemically extracted from the resin, precipitated as cuprous iodide and counted on the gamma spectrometer.

Section 4

QUALITY CONTROL

Routine quality control was performed throughout the year to ensure the accuracy of equipment and procedures used in determining the results. The TES radiological laboratory also participates in an external lab performance evaluation program and in the California State Cross-Check Program.

The Nuclear Regulatory Commission (NRC) Branch Technical Position on Radiological Environmental Monitoring Programs and the DCPD Interdepartmental Administrative Procedure, RP1.ID11, Environmental Radiological Monitoring Procedure, requires that the TES laboratory participate in the Environmental Protection Agency's Environmental Radioactivity Laboratory Intercomparison Study or equivalent program. At the end of 1998, the EPA ceased to operate their Intercomparison Study. For the years of 1999 through 2003, TES has participated in an equivalent program operated by Analytics, Inc. of Atlanta, GA. The TES participation has included all determinations (sample medium-radionuclide combination) offered by Analytics which match those as part of the REMP.

The results of TES participation in Analytics Environmental Cross Check Program for this year are shown in Appendix A, Table A-10. The agreement criteria are consistent with the guidance in NRC Inspection Procedure 84750, "Radioactive Waste Treatment, and Effluent and Environmental Monitoring." Participation included analysis of:

- gross alpha and gross beta emitters in water
- gross alpha and gross beta emitters on particulate filter
- iodine-131 and gamma emitters in milk
- tritium in water
- iodine-131 in charcoal cartridge
- gamma emitters in soil
- gamma emitters in vegetation
- gamma emitters in water

For the December milk and water samples from the cross-check sample supplier (Analytics), the TES gamma spectrometry software reported Co-57 activity when none was supposed to be present. Also, the Cs-134 result for both samples was biased high, contrary to the usual low bias which is expected when the Cs-134 sum peak correction is not applied. Subsequent investigation determined that a trace of

Eu-152 (rather than Co-57) was present in the samples, and that the TES gamma spectrometry software had identified the 121.8 keV peak of Eu-152 as the 122 keV peak of Co-57.

Analytics was contacted to ascertain if these samples could have been contaminated with Eu-152. TES was informed that although Analytics did not analyze the final diluted sample that was distributed, no other participant in these cross-checks reported Eu-152 or Co-57. Also, TES determined that prior to the December samples, both the laboratory at Analytics and the TES laboratory had received an NIST cross-check sample which contained a relatively high concentration of Eu-152 and Cs-134. TES has concluded that both the December milk and water samples were contaminated (either in the Analytics laboratory or at the TES laboratory) with a fraction of the NIST sample.

For the June soil sample from Analytics, the TES gamma spectrometry software identified a peak at approximately 88 keV as Cd-109 activity, when no Cd-109 was supposed to be present. This peak could have been produced by Lead and/or Bismuth x-rays from naturally occurring radioisotopes normally present in soil. Since other gamma peaks for Cd-109 have lower (and less easily detectable) energies, the spectrum does not provide sufficient information to confirm the presence of Cd-109. Therefore, TES has concluded that Cd-109 should not be reported in soil samples unless at least one other peak in the spectrum can be identified as coming from Cd-109.

The 1998 state cross-check report, "California Nuclear Power Plant Environmental Surveillance Report," showed that there were no discrepancies between the results obtained by the state of California Sanitation and Radiation Laboratory (SRL) and TES. The table of TES results for the 2003 cross-check program can be found in Appendix B, Table B-1. The DHS has yet to issue a report for 1999 through 2002. Since TES has been informed that these reports have a low priority with DHS, TES requested and obtained the results from the SRL of their comparable analyses of duplicate and split samples from the DCPD environs. TES review of this data versus that of the TES laboratory for the year 2002 (the last full year of available data) showed that there continues to be good agreement between the two laboratories. TES intends to continue to perform our own comparison of the two laboratories data until the DHS resumes producing a cross-check report.

Section 5

LAND USE CENSUS

Diablo Canyon Power Plant (DCPP) radiation protection personnel conducted a Land Use Census in the vicinity of DCPP for 2003. The land use census is based on Nuclear Regulatory Commission (NRC), Regulatory Guide 4.8, "Environmental Technical Specifications for Nuclear Power Plants", 10 CFR 50 Appendix I section IV. B. 3, and required by DCPP Program Directive CY2, "Radiological Monitoring and Controls Program."

DCPP IDAP RP1.ID11, "Environmental Radiological Monitoring Procedure", requires identification of the nearest milk animal, nearest residence, and the nearest broadleaf producing garden greater than 50 square meters (500 square feet) in each of the landward meteorological sectors within a distance of 8 kilometers (5 miles) of the plant. The census is conducted at least once per year during the growing season (between Feb 15 and Dec 1) for the Diablo Canyon environs.

The 2003 Land Use Census was conducted using GPS (global positioning), phone, face-to-face interviews, exploration, and data from the 2002 Land Use Census. Twelve individual landowners or tenants were contacted between June 5th and September 11th, 2003. Two landowners were unavailable for contact.

No milk animals were identified within the first 8 kilometers (5 miles) of any sector.

The nearest residence, relative to all sectors, is a small trailer 1.93 kilometers (1.2 miles) northwest of the plant (occupied approximately 1 month per year). Ranchers use this trailer during cattle round-ups. The nearest residence in each sector is summarized in B-5.

The census identified one household garden greater than 50 square meters (500 square feet) that produces broadleaf vegetation. This garden is located in the East sector at 7.24 kilometers (4.5 miles) from DCPP Unit 1.

Much of the area outside the plant site boundary is used for rotational cattle grazing by four separate cattle operations. Various numbers of cattle or calves are sold to mass market at the end of each year. Goats are allowed to graze within the plant site boundary for weed abatement. Some of the ranchers slaughter small numbers of cattle and goats for personal consumption.

The rancher in the northern cattle operation has about 50 cattle outside the plant site boundary and

utilizes the NW, NNW, N, and NNE sectors. About 50 calves are to be sold to mass market in 2003. This rancher slaughtered 2 calves in 2003 for personal consumption. Additionally, he managed about 350 goats that were used for weed abatement in all landward sectors within the plant site boundary. During 2003, approximately 80 goats are to be sold in mass-market auction. This rancher does not plan to slaughter any goats in 2003 for his personal consumption.

The rancher in the NNE cattle operation has about 100 cattle outside the plant site boundary. About 100 calves are to be sold to mass market in 2003. This rancher does not plan to slaughter any cattle for his personal consumption.

The rancher in the ENE cattle operation has about 80 cattle outside the plant site boundary. About 80 calves are to be sold to mass market in 2003. This rancher slaughtered one steer in 2003 for personal consumption.

The rancher in the southern cattle operation manages about 600 cattle outside the plant site boundary and utilizes the E, ESE, and SE sectors. Harris Ranch Beef Corporation owned these cattle and sold all of them to mass market in 2003. This rancher does not plan to slaughter any cattle in 2003 for personal consumption.

A farm is located on the coastal plateau, along the site access road, in the east-southeast (ESE) sector. The farm starts at approximately 4.8 km and extends to 7.2 km (3 to 4.5 miles) from the plant. This commercial farm produces no broadleaf vegetation. The farm area is about 100 acres of land with 6 to 10 rotational plantings per year (not all 100 acres planted at any one time). Commercial crops consist of about 75% legumes (sugar peas) and 25% cereal grass (oat hay). Farm workers occupy this area during the day.

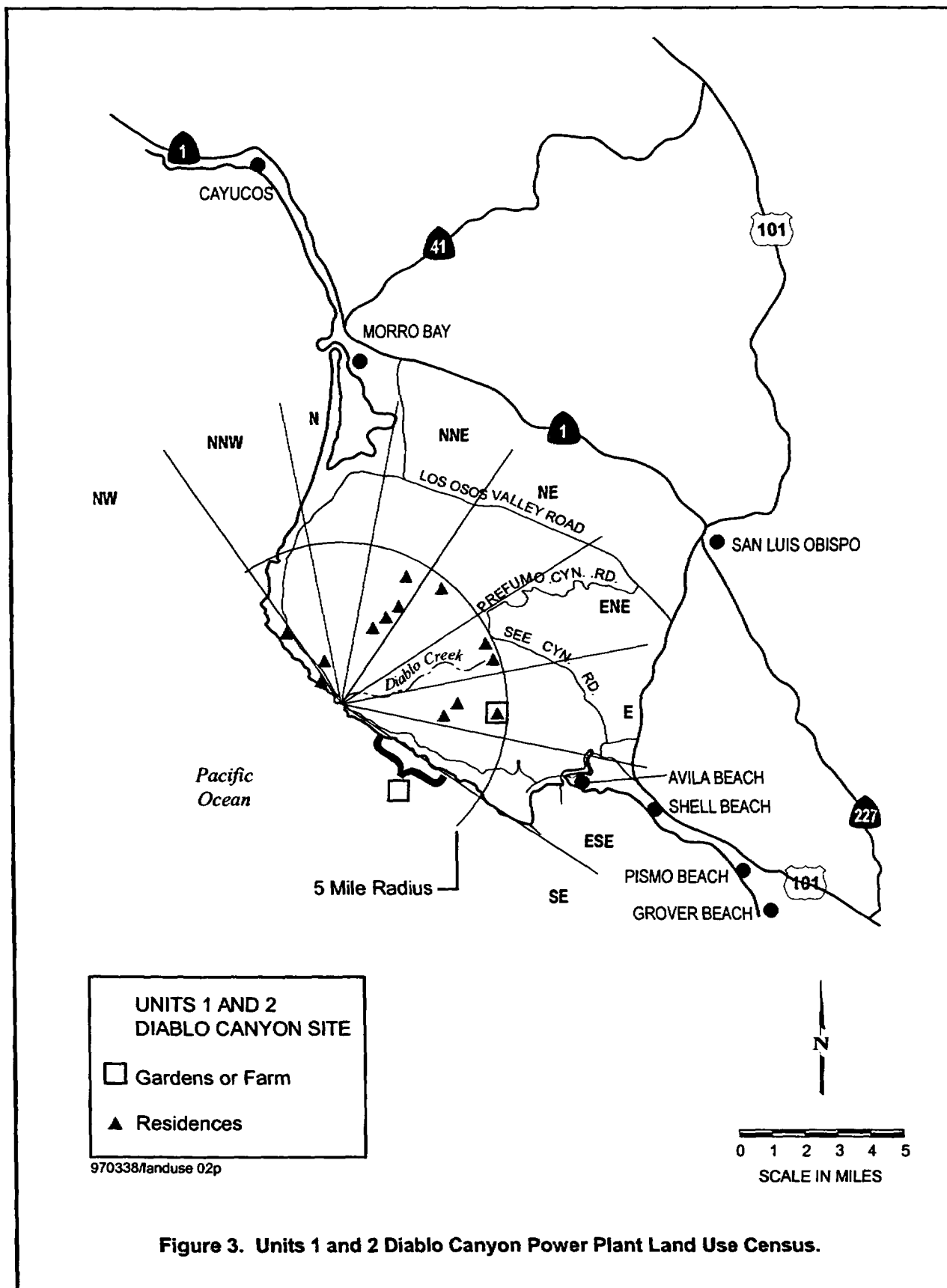
Two landowners take wild game for personal consumption in the NNE, NE, and ENE sectors between 4.83 to 8.0 kilometers (3 - 5 miles) from the plant. This wild game consists of approximately 2 deer and 4 wild pigs per landowner.

There is a California State Park Ranger Office in the north-northwest (NNW) sector at 7.483 kilometers (4.65 miles) from the plant. Approximately 3 people occupy this office during work hours, Monday thru Friday from 1000 - 1500.

There is a public campground located in the north-northwest (NNW) sector at Montana de Oro State Park at 7.387 kilometers (4.59 miles). This campground is near Spooner's Cove.

A total of 13 residences were identified within the 8-kilometer (5-mile) radius of the plant, which were confirmed or appear to be occupied during 2003. Ownership for some of the properties were changed in the 2003 Land Use Census. Two abandoned structures are located in each of the NNW and NNE sectors.

Table B-5 summarizes the nearest residences in each meteorological sector. Figure 3 shows the locations of the residences and gardens in the vicinity of DCP.



RESULTS AND DISCUSSION

The results for the DCPD REMP are listed in Appendices A and B. The \pm terms listed in the tables in the appendices are the uncertainties within the 95 percent confidence level. The tables in Appendix A present summaries of the results, formatted in accordance with current NRC guidelines (NRC Branch Technical Position, Revision 1, November 1979). Appendix A also includes the results of the performance evaluation studies. The tables in Appendix B contain analytical results of the individual samples which were supplied to the state laboratory. The LLD for the nuclides of interest listed in Table 3 were met for all analyses performed except for the sample listed in Table B-6. The LLD for iodine-131 was not met for this water sample due to the acidification of the sample prior to the separation of the iodine from the sample by ion exchange. This error in sample processing made the determination of iodine-131 content by ion exchange not possible. The sample was analyzed by gamma spectrum analysis, but this technique failed to achieve the required LLD for iodine-131. The water samples that are to be processed by ion exchange are now set aside prior to acidifying other water samples. The analytical results for the different sample types are discussed below. This discussion includes results from supplemental samples collected and analyzed. The reporting levels for radioactivity concentrations in environmental samples are listed in Table 4, page 6-8.

AIRBORNE RADIOACTIVITY

Air particulates and radioiodine samples were collected weekly from six indicator stations (MT1, ØS2, 1S1, 7D1, 8S1, and 8S2) in the DCPD environs and one control station (5F1). A total of 364 air particulate filters and 364 iodine cartridges were collected and analyzed. The data collected for the air-sampling program is summarized in Appendix A, Table A-1.

Air Particulates

Gross beta activity was detected in every weekly air particulate sample collected from all indicator and control stations. The range for the indicator stations was 0.004 - 0.047 pCi/m³ with a mean of 0.012 pCi/m³. The range for the control station was 0.004 - 0.042 pCi/m³ with a mean of 0.012 pCi/m³. Comparison of the data showed that the mean values of gross beta activities for the indicator stations were consistent with those obtained for the control station. The gross beta activities detected at the air sampling stations are tabulated in Appendix B, Table B-3 and shown in Figure 4.

Gamma isotopic analyses were performed on quarterly composites of the air particulate filters from each station. All samples collected during the year contained only naturally occurring radioactivity.

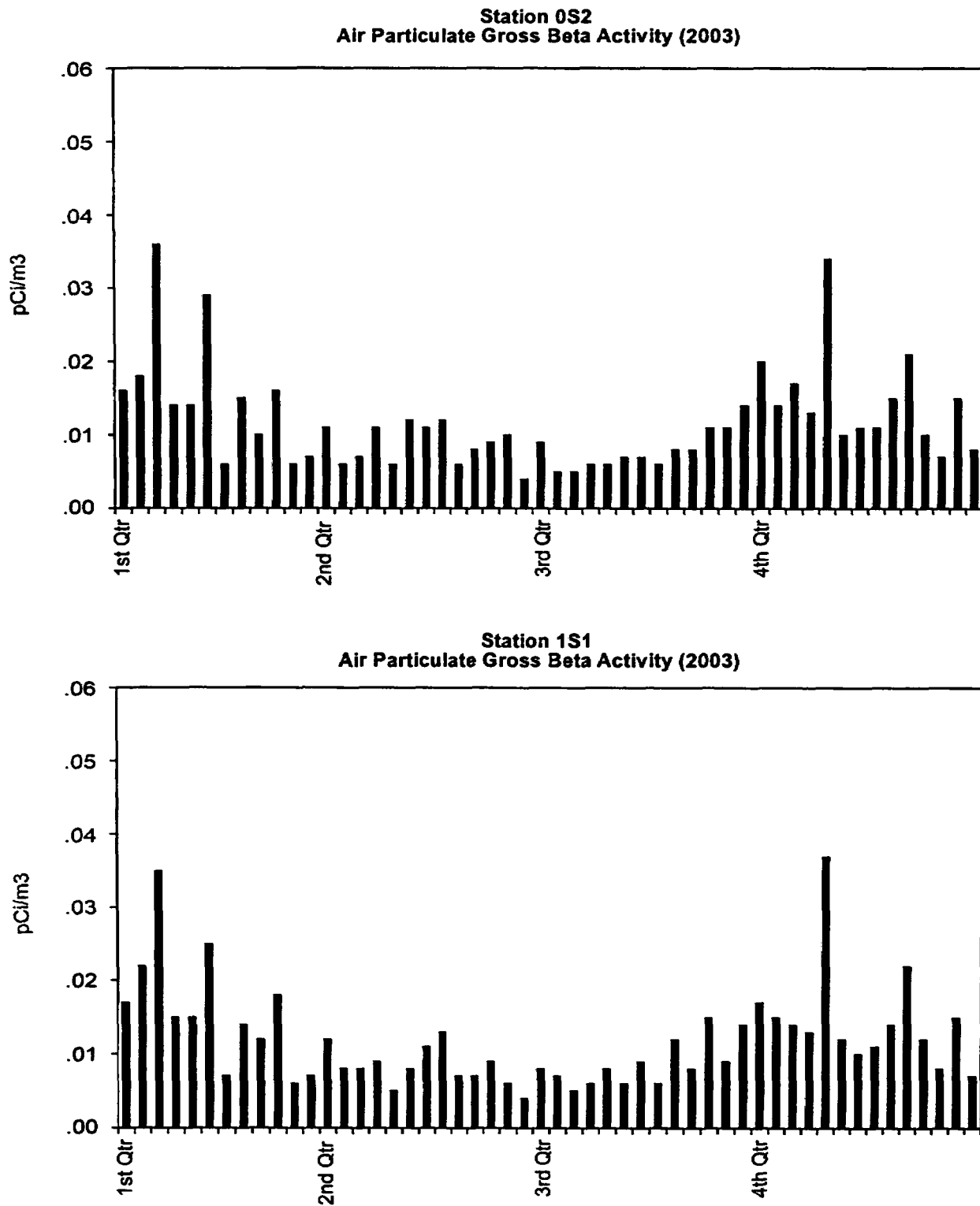
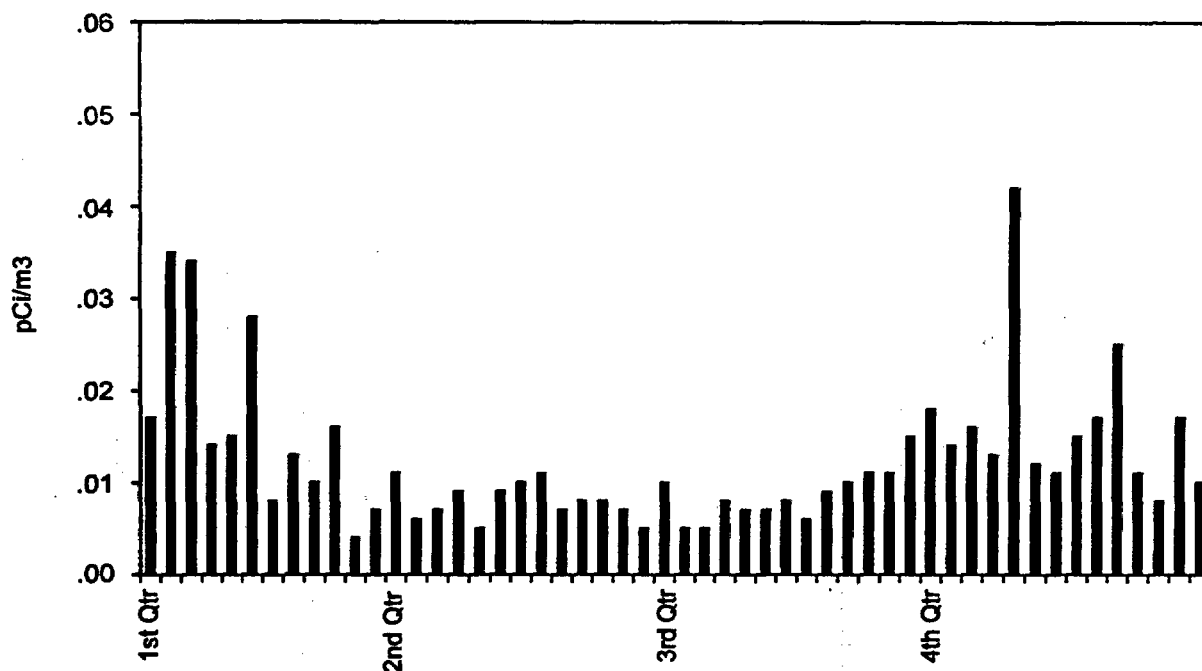


Figure 4. Air particulate gross beta activities.

990308/03-0S2 and 1S1

**Station 5F1
Air Particulate Gross Beta Activity (2003)**



**Station 7D1
Air Particulate Gross Beta Activity (2003)**

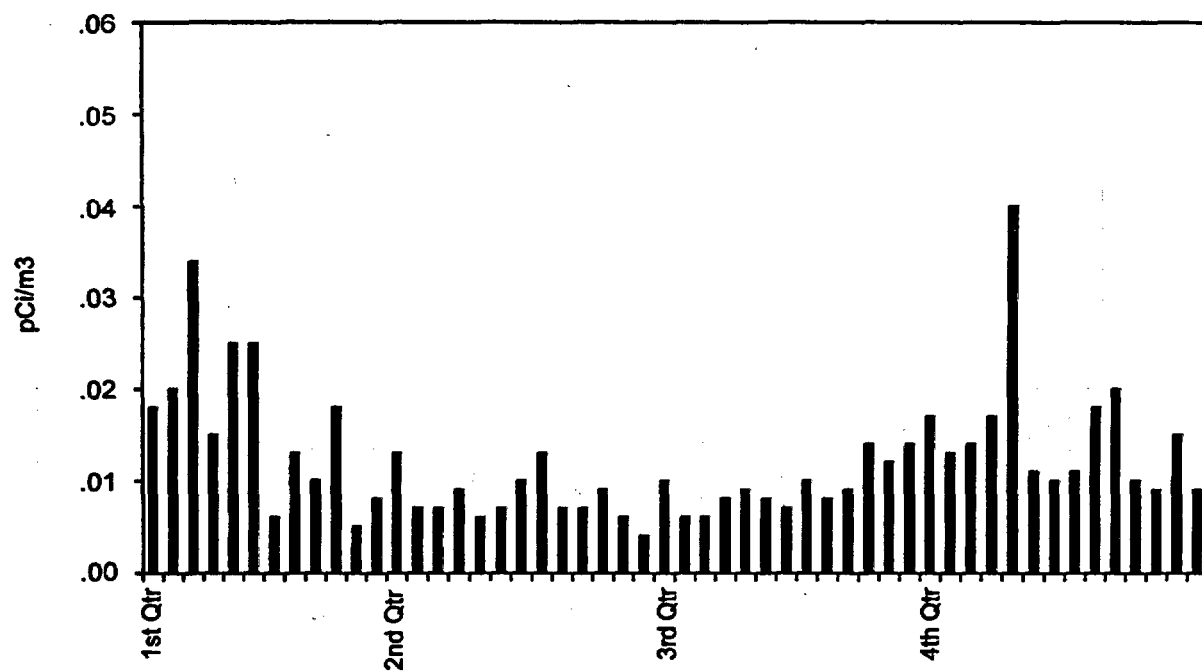
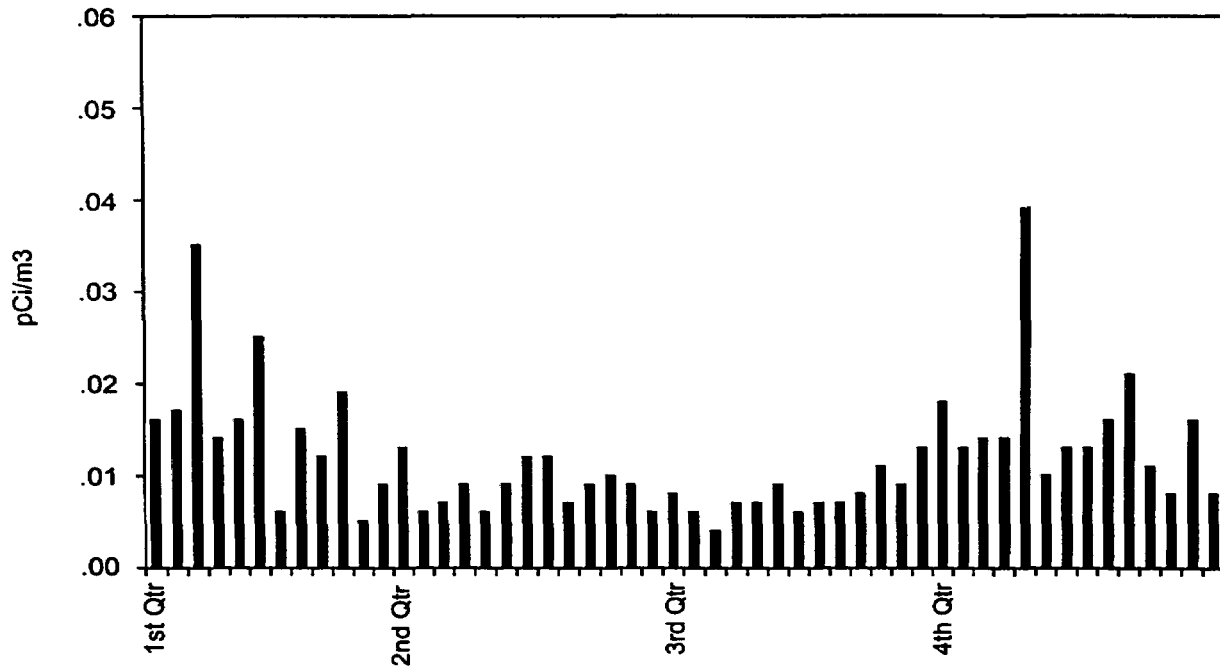


Figure 4. continued.

990308/03-5F1 and 7D1

**Station 8S1
Air Particulate Gross Beta Activity (2003)**



**Station 8S2
Air Particulate Gross Beta Activity (2003)**

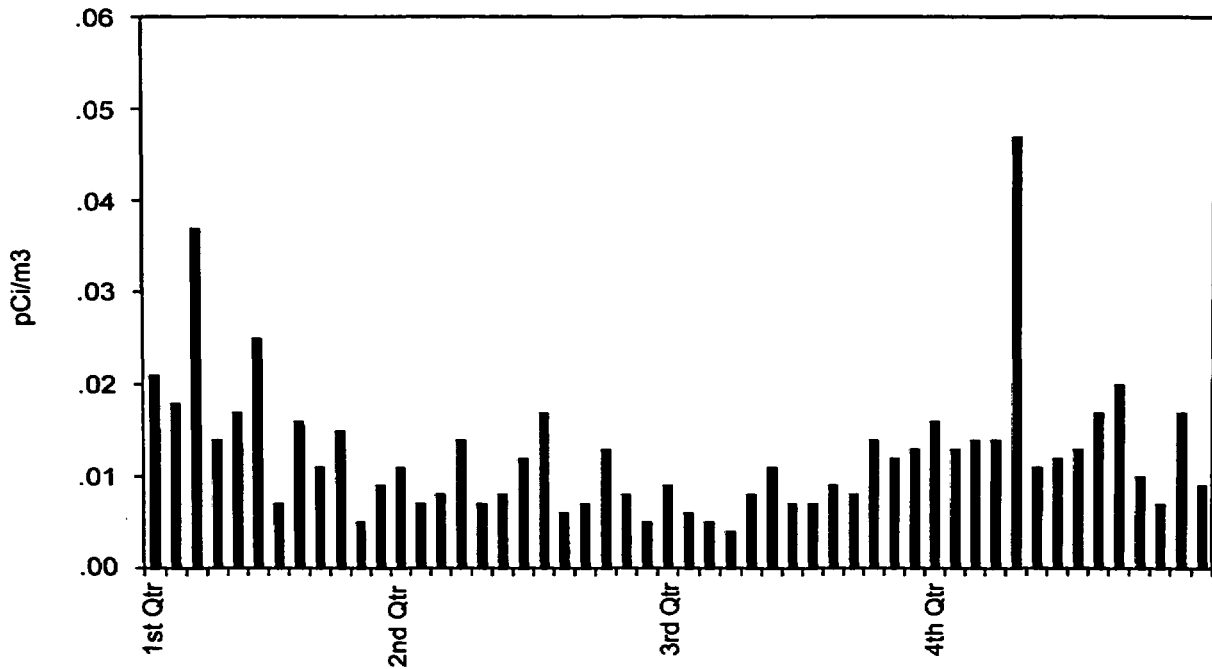
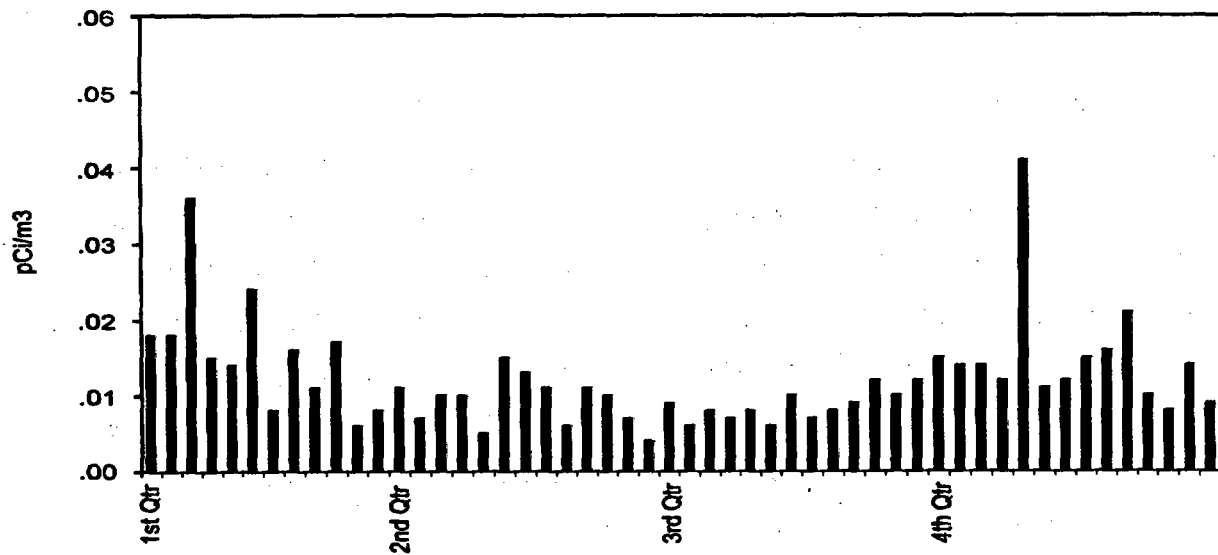


Figure 4. continued.

990308/03-8S1 and 8S2

**Station MT1
Air Particulate Gross Beta Activity (2003)**



990308/03-MT1

Figure 4. continued.

Radioiodine

A total of 364 iodine cartridges were analyzed for iodine-131. Iodine-131 was detected in two iodine cartridges which were collected during the week of February 5 – 12, 2003. The levels detected were just over our detection level and considerably below the required LLDs for iodine cartridges. The results were communicated with the plant staff, and plant Chemistry personnel confirmed that there had been a small iodine release during this week. The iodine release occurred during the initial breach of the reactor coolant system at the beginning of a refueling outage.

DIRECT RADIATION

TLD badges from 31 stations were collected on a quarterly basis and processed. A total of 372 TLD badges were distributed to field locations (three TLD badges at each location) and processed. The quarterly average exposure level from all indicator stations ranged from 9.6 – 23.6 mR/qtr with a mean of 14.3 mR/qtr. The exposure level at the control station 5F1 ranged from 16.8 – 19.8 mR/qtr with a mean of 17.9 mR/qtr. The exposure levels for 2003 did not differ significantly from the previous year, or from the pre-operational data. They indicate that the operation of DCPD did not significantly affect the ambient radiation exposure levels in the plant environs. See Appendix A, Table A-2, for the TLD data summary and Appendix B, Table B-4, for the individual station data.

On March 25, 2003, the configuration and location of dosimeter station 5F3 was modified. Previously, all of the dosimeter stations included a PVC dosimeter holder except for the station at 5F3. The TLD packet at this location had previously been placed within the air monitor shelter at this location. So that all field TLD packets would be exposed while within the same TLD enclosure, a PVC TLD holder was installed at this station.

The air monitoring shelter at 5F3 is located on a concrete patio that is below ground level and has concrete retaining walls on two sides. The standard PVC TLD holder was installed at ground level adjacent to one of the retaining walls. The TLD holder was placed such that the TLD packet would be approximately 1 meter above the surface of the ground during the exposure period. After the reconfiguration of this TLD station, the exposure measured at this station is approximately 25% less than the historic values for this station.

WATER SAMPLES

A total of 60 water samples (24 drinking water samples, 36 surface water samples) were collected and analyzed. The results of the water samples collected from the indicator and control stations are summarized in Appendix A, Tables A-3 (a) and (b).

Gamma isotopic and tritium analyses were performed on all water samples. No tritium or plant related gamma emitters were detected in any surface water sample or drinking water sample.

Iodine-131 analysis by ion exchange was also performed on all drinking water except for the sample collected at DW1 in February. Iodine-131 was not detected in any drinking water samples. The water sample data indicates that the operation of DCPD did not have any significant impact on water in the plant environs.

MARINE BIOLOGICAL AND SEDIMENT SAMPLES

A total of 91 marine biological and sediment samples were collected from the indicator, control and supplemental stations. They included 36 fish samples, 13 mussel samples, 40 algae samples, and 2 ocean bottom sediment samples. Table B-7 lists the marine samples collected for 2003. The results obtained from the indicator stations and control station are summarized in Appendix A, Tables A-4 to A-7. The individual samples and their detected nuclides are listed in Appendix B, Table B-2.

Abalone

Red abalone were not collected in 2003. It is unlikely that abalone will be collected at DCPD in the future as the California Marine, Sport Fishing Regulations were amended on December 8, 2000 to state that no abalone can be taken south of San Francisco Bay.

California Mussels

A total of 13 mussel samples were collected from stations DCM, 7C2, PON and POS. All samples contained only naturally occurring radioactivity.

Fish

A total of 36 fish samples from stations DCM, 7C2, PON, POS and 7D3 were analyzed. All samples contained only naturally occurring radioactivity. The operation of DCPD had no detectable impact on fish in the plant environs.

Algae

A total of 40 algae samples were collected from stations DCM, 7C2, PON, and POS. These samples are supplemental to the REMP. Two samples collected from DCM contained a small, but detectable level of cobalt-58. All other samples contained only naturally occurring radioactivity.

Sediment

An annual sample of ocean bottom sediment was collected from stations DCM and 7C2. Only naturally occurring radioactivity was detected in these samples. The data indicated no increasing trend in isotope concentration. The operation of DCPD had no detectable impact in ocean sediment in the plant environs.

FOOD CROPS

A total of 38 vegetative samples were collected from four supplemental stations: Cal Poly Farm (station 5F2), Kawaoka Farm (station 7G1), Mello Farm (station 7C1), and a household garden (station 6C1). All of the samples analyzed contained only naturally occurring radioactivity. The operation of DCPD had no detectable impact on food crops in the plant environs.

MILK

A total of 12 monthly milk samples were collected from Cal Poly Farm, station 5F2. Iodine-131 was not detected in any of the samples. The samples contained only natural radioactivity. The operation of the plant had no detectable impact on this environmental medium.

Table 4
Reporting Levels for Radioactivity Concentrations in Environmental Samples

| Analysis | Water (pCi/L) | Airborne Particulate or Gas (pCi/m ³) | Fish (pCi/kg, wet) | Milk (pCi/L) | Food Products (pCi/kg, wet) |
|-----------|-----------------------|--|-----------------------|-----------------|--------------------------------|
| H-3 | 20,000 ^(a) | | | | |
| Mn-54 | 1,000 | | 30,000 | | |
| Fe-59 | 400 | | 10,000 | | |
| Co-58 | 1,000 | | 30,000 | | |
| Co-60 | 300 | | 10,000 | | |
| Zn-65 | 300 | | 20,000 | | |
| Zr-Nb-95 | 400 | | | | |
| I-131 | 2 ^(b) | 0.9 | | 3 | 100 |
| Cs-134 | 30 | 10 | 1,000 | 60 | 1,000 |
| Cs-137 | 50 | 20 | 2,000 | 70 | 2,000 |
| Ba-La-140 | 200 | | | 300 | |

Table Notation:

- (a) For drinking water samples. This is the 40 CFR Part 141 value. If no drinking water pathway exists, a value of 30,000 pCi/L may be used.
- (b) If no drinking water pathway exists, a value of 20 pCi/L may be used.

Section 7

COMPARISON OF PREOPERATIONAL AND OPERATIONAL DATA

Routine (annual) comparisons are performed on data collected for the radiological environmental monitoring program with the data collected during the preoperational period. DCPD began commercial operation in 1985. The preoperational data from the period from 1981 to 1984 are used as the preoperational baseline.

The data is analyzed using the combined Shewart-CUSUM control chart technique in which log-transformed radioactivity concentration or radiation exposure levels are compared over time. This technique assumes that the data distribution is log-normally distributed, and the log-transformed data is used in the control charts. First the data are standardized by subtracting the overall mean radioactivity level for the station from the current observation and then dividing by the overall standard deviation for that station. The control charts are used to test whether fluctuations in the standardized data are random or from a change in the concentration of a particular parameter. For air particulate gross beta activity and TLD measurements, the standardized difference between the indicator and control stations is trended on these charts.

Plant related radioactivity was detected in two sample media during 2003. Iodine was detected in air cartridge at two Stations during the same week. Co-58 was measured in two intertidal algae samples collected from DCM. The Shewart-CUSUM control charts for Co-58 in algae, air particulate gross beta activity, and TLD measurements are shown and discussed below. Shewart-CUSUM control chart is not utilized for iodine activity as there is no way that iodine can build up in the environment due to its short half-life. All other CUSUM charts showed basically flat data since the last time that the radioactivity type and sampled media contained a detectible result. Detectible results noted in the past are described in the past annual report(s) in which the detectible result was initially noted.

AIRBORNE RADIOACTIVITY

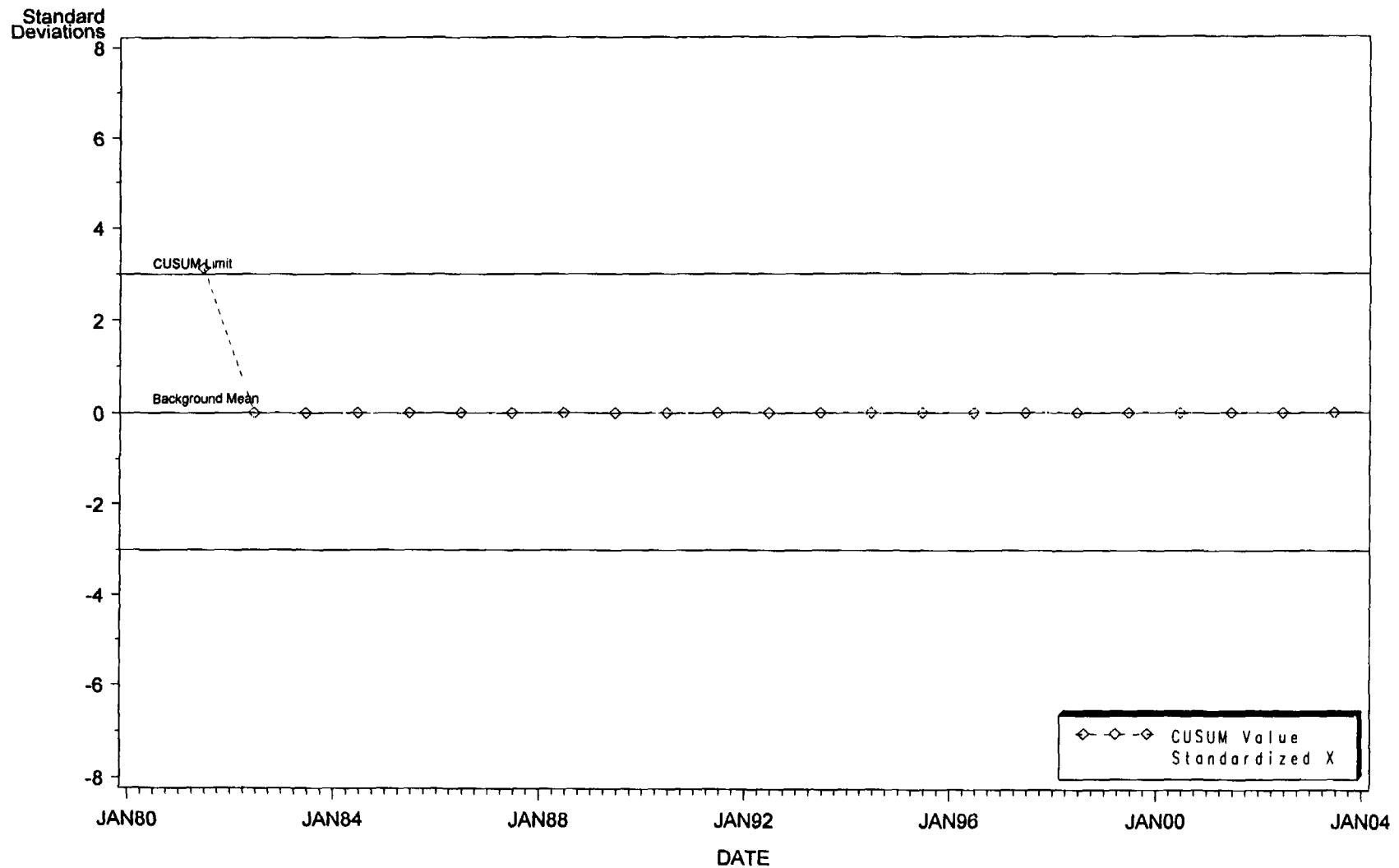
Air Particulates

The Shewart-CUSUM control chart for gross beta activities in air particulates (see Figure 5) showed that there is no increasing trend during the operational years (1985-2003), and that the range during the operational period remained within the preoperational range (1981-1984). The high gross beta activity in 1981 was attributed to fallout from Chinese atmospheric nuclear weapons testing.

DIABLO CANYON POWER PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Annual Report - 2003

Figure 5. Control Chart for Air Particulate Filters - Difference Between Indicator and Control Station Annual Means



In 2003, only naturally occurring radioactivity was detected. The mean concentration of gross beta activity of the indicator stations was comparable to those of the control station. It can be concluded that the plant operations had no detectable impact on the air particulate medium.

DIRECT RADIATION

The control chart for direct radiation measured by TLDs (see Figure 6) showed that there has been no increasing trend during the operational years. In past annual reports, the Shewart-CUSUM control chart for the TLD represented different comparisons. Until 1997, the chart compared the average of the indicator stations to the average of Stations 2F2, 4D1, and 5F1. After 1997 until this year, only value for 5F1 was used as the control value leaving the past data the same. This change was made since Station 2F2 was no longer monitored since PG&E no longer operated the Morro Bay Power Plant.

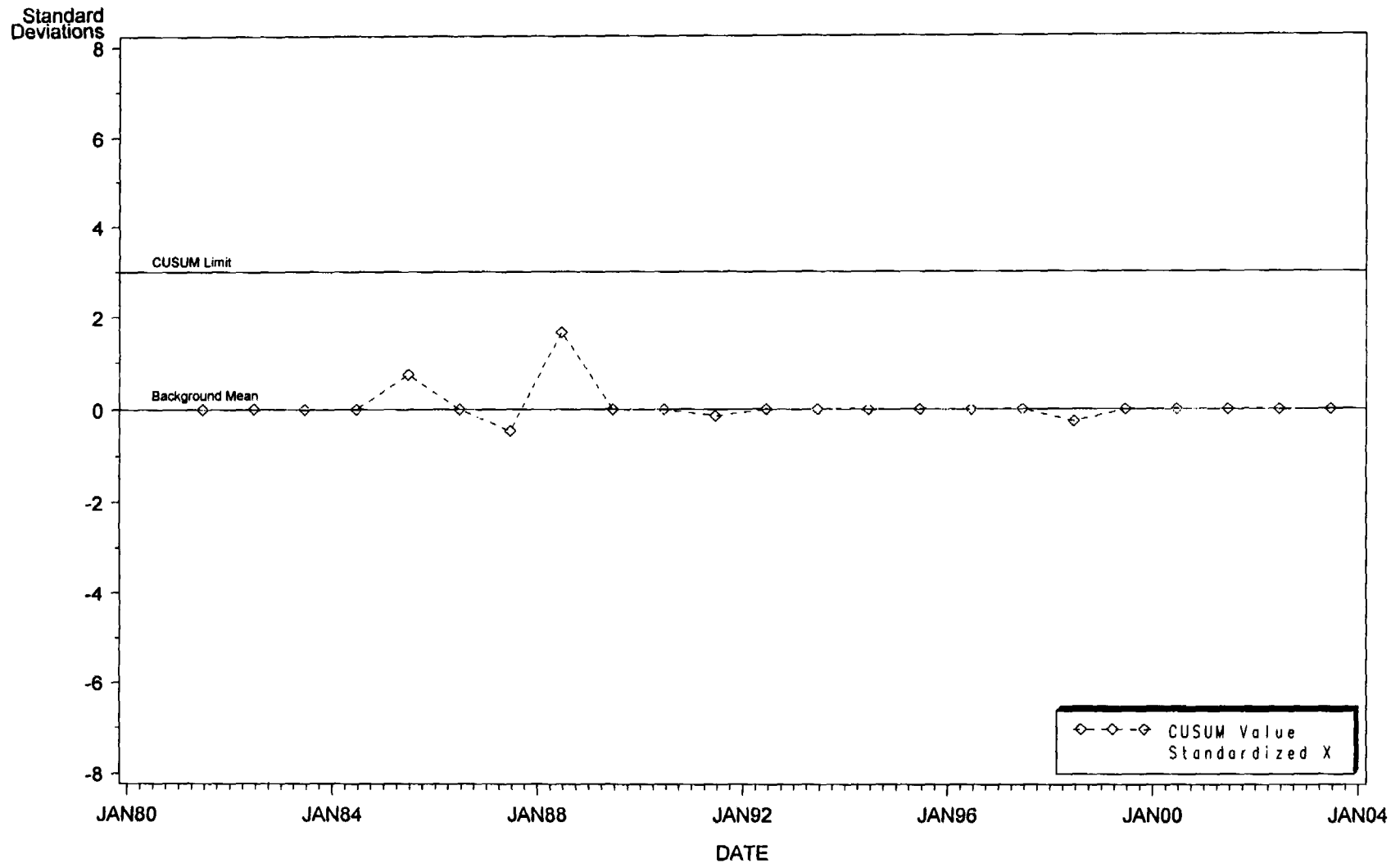
This year in order that the comparison compare like values throughout the comparison period, the past average value for the control stations has been replaced with the corresponding value for Station 5F1 for each year shown in the graph. Thus, this years control chart compares values from the average of the indicator stations with the values obtained at Station 5F1 for the entire period.

ALGAE SAMPLES

Algae sampling is not a REMP requirement and is therefore considered a supplemental sample. There is no reporting requirement for radioactivity levels in algae. Two species of algae are normally collected from DCM quarterly when available. Several times during the operational period small concentrations of various plant related radioactivity have been detected in the algae. These radioactivity concentrations detected have been random in the past so one can conclude that there is no increasing trend in radioactivity concentrations in algae from Diablo Cove. Co-58 was measured in two Iridaea samples from DCM during 2003. The control chart for Co-58 in algae (Iridaea) is shown as Figure 7.

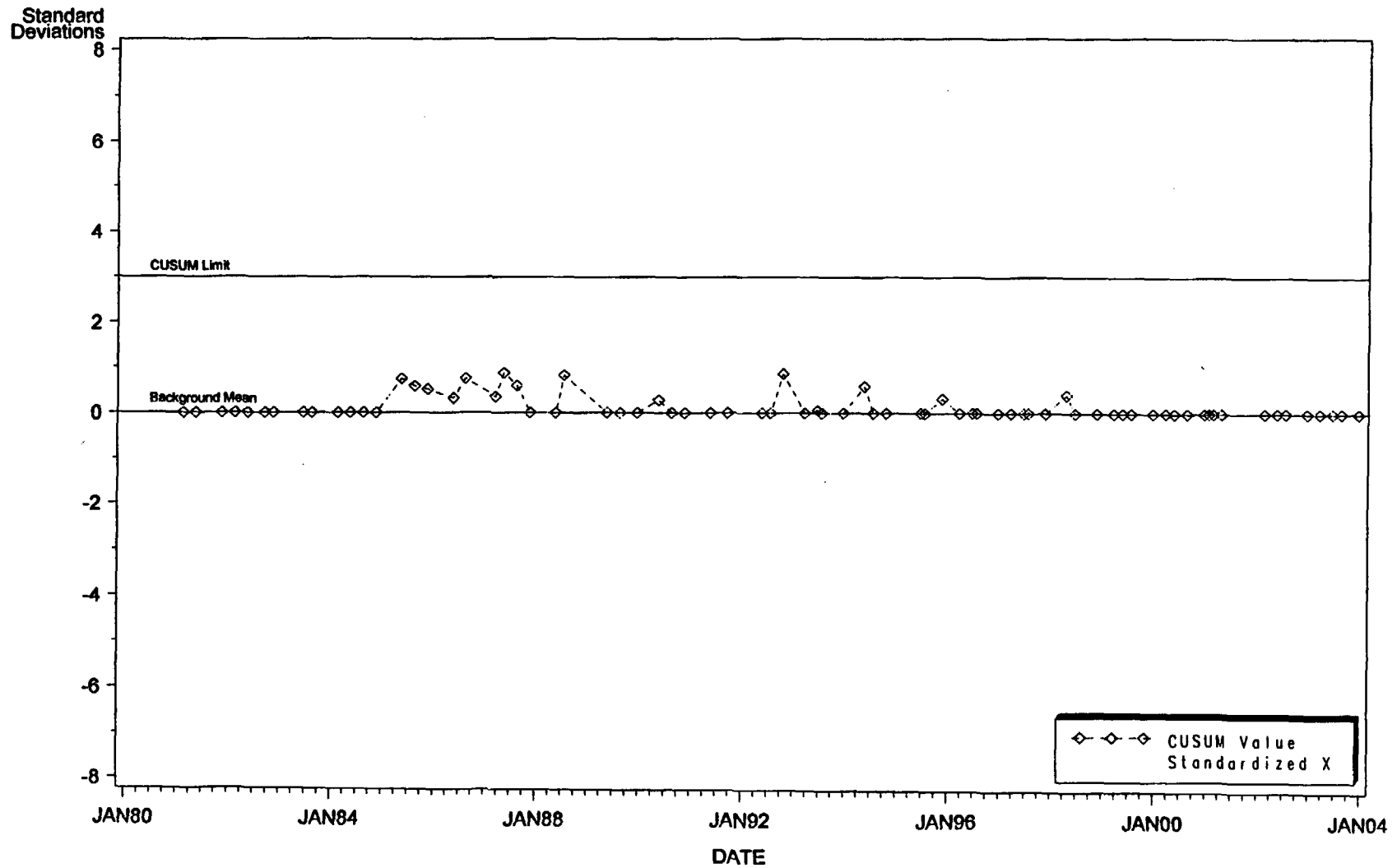
DIABLO CANYON POWER PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM Annual Report - 2003

Figure 6. Control Chart for TLD Data - Difference Between Indicator and Control Station Annual Means



**DIABLO CANYON POWER PLANT
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM**
Annual Report - 2003

Figure 7. Control Chart for Co-58 Levels in Algae- Station DCM



TECHNICAL AND ECOLOGICAL SERVICES
Health Physics Unit

Section 8

PROGRAM VARIANCE

The DCPD REMP includes both required and supplemental samples. This section describes the variances with the required samples.

AIRBORNE RADIOACTIVITY

The mean percent availability for all on-site and off-site samplers was 99.6 percent. That is, on average, all samplers were up and running 99.6 percent of the time. Some sampling time (less than 3 hours each) was lost at station 5F1 and OS2 during the first week of the year due to power outages. At station 7D1, approximately 1 hour of sampling was lost during the week of 3/19 – 3/26. At Station 5F1 approximately 84 hours of sampling time was lost during the week of 8/20 due to a blown fuse in the sampler, and approximately 82 hours of sampling was lost during the week of 8/27 due to a non-functioning cooling fan. At Station 5F1 approximately 97 hours of sampling time was lost during the week of 9/17. The malfunctioning sampler was replaced with another sampler during the weekly sample change.

MARINE AND TERRESTRIAL SAMPLES

All marine samples were collected as scheduled (including allowable variation) except for the following: mussel samples from Station PON were not collected during the second, third, and fourth quarters due to small size and small numbers of mussels available during these sampling periods. All terrestrial samples were collected as scheduled (including allowable variation) except for vegetation sample from Station 5F2 during February which were not available due to the season.

As mentioned earlier, the California Department of Fish and Game has issued regulations prohibiting the collection of abalone along the central and southern coast of California. PG&E considers it unlikely that collection of abalone will be allowed in the DCPD environs in the near future. Note that the sampling of abalone is supplemental to the REMP.

SUPPLEMENTAL SAMPLES

As a supplement to the routine sampling program, sand samples were collected in February and December and well water samples were collected in August. These samples were analyzed using gamma spectrum analysis and tritium analyses for the water samples.

Sand was collected from Cayucos, Moonstone, San Simeon, and Avila Beaches (all beaches within San Luis Obispo County) during February. Cesium-137 was detected in the sand at San Simeon Beach at

13.8 +/- 7.9 pCi/kg which is at the detection level for the gamma analysis technique used. The minimum detectable activity (MDA) for the other sand samples collected ranged from 13.3 – 14.9 pCi/kg for cesium-137. Other than the cesium-137, all other identified activity was due to naturally occurring radioisotopes. During December, duplicate samples of beach sand from Avila Beach and a sand sample from Cayucos Beach were collected. Cesium-137 was detected in the sand collected at Cayucos Beach at a level of 18.3 pCi/kg and one of the samples from Avila Beach at 12.6 pCi/kg. The other sample from Avila Beach had a MDA for Cs-137 of 15.1 pCi/kg. From the sand analyses this year and in 2002, the concentration of Cs-137 in beach sand in San Luis County appears to be in the range of 15 pCi/kg which is also the approximate MDA for the gamma analysis technique used. This level of Cs-137 is to be expected from global fallout and since the level detected in beach sand appears virtually the same both far north and 7 miles south of the site, the Cs-137 does not appear to be plant related.

Water samples were collected from two on-site wells during August 2003. These samples were also collected as supplemental samples. These samples were analyzed for tritium content. No tritium was detected in these samples.

STATE SPLIT SAMPLING PROGRAM

All samples scheduled to be split with the California Department of Health Services Sanitation and Radiation Laboratory (SRL) were supplied to the state laboratory except for the fish sample collected from Station DCM during the third quarter. This sample was inadvertently disposed of prior to being shipped to the SRL laboratory.

Section 9

REFERENCES

1. DCPP Interdepartmental Administrative Procedure (IDAP), RP1.ID11, "Environmental Radiological Monitoring Procedure."
2. NRC Branch Technical Position, Revision 1, November 1979.
3. DCPP Program Directive, CY2, "Radiological Monitoring and Controls Program."

Appendix A

ENVIRONMENTAL RADIATION MONITORING PROGRAM SUMMARIES

Table A-1
Environmental Radiological Monitoring Program Summary

| | | | |
|----------------------|--|---------------|-------------------|
| Name of Facility | Diablo Canyon Power Plant | Docket No. | 50-275 and 50-323 |
| Location of Facility | San Luis Obispo, California (County, State) | Report Period | 1/1/03 - 12/31/03 |

| Medium or Pathway Sampled (Unit of Measurement) | Type and Total Number of Analyses Performed | Lower Limit of Detection ^(a) (LLD) | Indicator with Highest Annual Mean | | All Indicator Locations Mean ^(b) Range ^(b) | All Control Locations Mean ^(b) Range ^(b) | Number of Reportable Occurrences |
|--|---|--|------------------------------------|---|--|--|----------------------------------|
| | | | Name, Distance and Direction | Mean ^(b) Range ^(b) | | | |
| Airborne (pCi/m ³) | <u>Cartridge</u> | | | | | | |
| | ¹³¹ I (364) | | | | 1.4E-2(2/312) 9.0E-3–1.8E-2 | None detected | 0 |
| | <u>Air Particulates</u> | | | | | | |
| | Gross Beta (364) | | Sta. 8S2 1.1 mi., 128° | 1.3E-2 4.0E-3–4.7E-2 | 1.2E-2(312/312) 4.0E-3–4.7E-2 | 1.2E-2(52/52) 4.0E-3–4.2E-2 | 0 |
| | Gamma Isotopic (364) | | | | None detected | None detected | 0 |

Table Notation:

(a) Unless specified, all required LLDs were met in accordance with Table 3.

(b) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

ND Radionuclides of interest other than naturally occurring were not detected.

Table A-2
Environmental Radiological Monitoring Program Summary

| | | | |
|----------------------|--|---------------|-------------------|
| Name of Facility | Diablo Canyon Power Plant | Docket No. | 50-275 and 50-323 |
| Location of Facility | San Luis Obispo, California (County, State) | Report Period | 1/1/03 - 12/31/03 |

| Medium or Pathway Sampled (Unit of Measurement) | Type and Total Number of Analyses Performed | Lower Limit of Detection ^(a) (LLD) | Indicator with Highest Annual Mean | | All Indicator Locations Mean ^(b) Range ^(b) | All Control Locations Mean ^(b) Range ^(b) | Number of Reportable Occurrences |
|---|--|--|---------------------------------------|---|---|---|--|
| | | | Name, Distance and Direction | Mean ^(b) Range ^(b) | | | |
| Direct radiation (mR) | TLD Packet ^(c) (372) | 3 mR/qtr | Sta. 5S1 0.4 mi, 58° | 23.5 mR/qtr | 14.3 mR/qtr | Sta. 5F1 | 0 |
| | | | | (12/12) | (360/360) | (12/12) | |
| | | | | 23.2–23.6 mR/qtr | 9.6–23.6 mR/qtr | 16.8–19.8 mR/qtr | |
| | | | | 93.8 mR/yr | 65.2 mR/yr (360/360) 40.0–93.8 mR/yr | 71.6 mR/yr | |

Table Notation:

- (a) Sensitivity of TLD system.
- (b) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.
- (c) 93 TLD packets are distributed quarterly at 31 locations.

Table A-3a
Environmental Radiological Monitoring Program Summary

| | | | |
|----------------------|---|---------------|--------------------------|
| Name of Facility | <u>Diablo Canyon Power Plant</u> | Docket No. | <u>50-275 and 50-323</u> |
| Location of Facility | <u>San Luis Obispo, California</u> (County, State) | Report Period | <u>1/1/03 - 12/31/03</u> |

| Medium or Pathway Sampled (Unit of Measurement) | Type and Total Number of Analyses Performed | Lower Limit of Detection ^(a) (LLD) | Indicator with Highest Annual Mean | | All Indicator Locations Mean ^(b) Range ^(b) | All Control Locations Mean ^(b) Range ^(b) | Number of Reportable Occurrences |
|---|---|---|------------------------------------|--|--|--|----------------------------------|
| | | | Name, Distance and Direction | Mean ^(b) Range ^(b) | | | |
| Surface water (pCi/L) | Gamma Isotopic (36) | | | | Sta. DCM Sta. OUT | Sta. 7C2 | 0 |
| | ⁵⁴ Mn | | | | None detected | None detected | |
| | ⁵⁹ Fe | | | | None detected | None detected | |
| | ⁵⁸ Co | | | | None detected | None detected | |
| | ⁶⁰ Co | | | | None detected | None detected | |
| | ⁶⁵ Zn | | | | None detected | None detected | |
| | ⁹⁵ Zr | | | | None detected | None detected | |
| | ⁹⁵ Nb | | | | None detected | None detected | |
| | ¹³¹ I | | | | None detected | None detected | |
| | ¹³⁴ Cs | | | | None detected | None detected | |
| | ¹³⁷ Cs | | | | None detected | None detected | |
| | ¹⁴⁰ Ba-La | | | | None detected | None detected | |
| | | | | | None detected | None detected | |
| | | | | | None detected | None detected | |
| | Tritium Analysis (36) | | Sta. DCM | | | | |
| | ³ H | | 0.2mi, 270° | | None detected | None detected | 0 |

Table Notation:

- (a) Unless specified, all required LLDs were met in accordance with Table 3.
- (b) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

Table A-3b
Environmental Radiological Monitoring Program Summary

| | | | |
|----------------------|---|---------------|--------------------------|
| Name of Facility | <u>Diablo Canyon Power Plant</u> | Docket No. | <u>50-275 and 50-323</u> |
| Location of Facility | <u>San Luis Obispo, California</u> (County, State) | Report Period | <u>1/1/03 - 12/31/03</u> |

| Medium or Pathway Sampled (Unit of Measurement) | Type and Total Number of Analyses Performed | Lower Limit Of Detection ^(a) (LLD) | Locations Name, Distance and Direction | Mean ^(b) Range ^(b) | Number of Reportable Occurrences |
|--|---|--|--|---|----------------------------------|
| Drinking water (pCi/L) | Tritium (24) | | Sta. 5S2, DW1 | None detected | 0 |
| | Gamma Isotopic (24) | | | | 0 |
| | ⁵⁴ Mn | | | None detected | |
| | ⁵⁹ Fe | | | None detected | |
| | ⁵⁸ Co | | | None detected | |
| | ⁶⁰ Co | | | None detected | |
| | ⁶⁵ Zn | | | None detected | |
| | ⁹⁵ Zr | | | None detected | |
| | ⁹⁵ Nb | | | None detected | |
| | ¹³¹ I | 2.9 (1/24) | | None detected | |
| | ¹³⁴ Cs | | | None detected | |
| | ¹³⁷ Cs | | | None detected | |
| | ¹⁴⁰ Ba-La | | | None detected | |

Table Notation:

- (a) Unless specified, all required LLDs were met in accordance with Table 3.
- (b) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

Table A-4

Environmental Radiological Monitoring Program Summary

| | | | |
|----------------------|---|---------------|--------------------------|
| Name of Facility | <u>Diablo Canyon Power Plant</u> | Docket No. | <u>50-275 and 50-323</u> |
| Location of Facility | <u>San Luis Obispo, California</u> (County, State) | Report Period | <u>1/1/03 - 12/31/03</u> |

| Medium or Pathway Sampled (Unit of Measurement) | Type and Total Number of Analyses Performed | Lower Limit Of Detection ^(a) (LLD) | Indicator Location ^(c) Name, Distance and Direction | Indicator Locations Mean ^(b) Range ^(b) | All Control Locations Mean ^(b) Range ^(b) | Number of Reportable Occurrences |
|--|---|--|---|--|--|----------------------------------|
| Mussels (pCi/kg original) | Gamma Isotopic (8) | | Sta. DCM 0.2 mi., 270° | Sta. DCM | Sta. 7C2 | 0 |
| | ⁵⁴ Mn | | | None detected | None detected | |
| | ⁵⁹ Fe | | | None detected | None detected | |
| | ⁵⁸ Co | | | None detected | None detected | |
| | ⁶⁰ Co | | | None detected | None detected | |
| | ⁹⁵ Nb | | | None detected | None detected | |
| | ¹³⁴ Cs | | | None detected | None detected | |
| | ¹³⁷ Cs | | | None detected | None detected | |
| | ¹³¹ I | | | None detected | None detected | |

Table Notation:

- (a) Unless specified, all required LLDs were met in accordance with Table 3.
 (b) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.
 (c) Only one station location for this sample type.

Table A-5
Environmental Radiological Monitoring Program Summary

| | | | |
|----------------------|--|---------------|-------------------|
| Name of Facility | Diablo Canyon Power Plant | Docket No. | 50-275 and 50-323 |
| Location of Facility | San Luis Obispo, California (County, State) | Report Period | 1/1/03- 12/31/03 |

| Medium or Pathway Sampled (Unit of Measurement) | Type and Total Number of Analyses Performed | Lower Limit of Detection ^(a) (LLD) | Indicator Location ^(c) Name, Distance and Direction | Indicator Locations Mean ^(b) Range ^(b) | All Control Locations Mean ^(b) Range ^(b) | Number of Reportable Occurrences |
|---|--|--|---|---|---|--|
| Fish (pCi/kg original) | Gamma Isotopic (16) | | Sta. DCM 0.2 mi., 270° | Sta. DCM | Sta. 7C2 | 0 |
| | ⁵⁴ Mn | | | None detected | None detected | |
| | ⁵⁹ Fe | | | None detected | None detected | |
| | ⁵⁸ Co | | | None detected | None detected | |
| | ⁶⁰ Co | | | None detected | None detected | |
| | ⁶⁵ Zn | | | None detected | None detected | |
| | ¹³⁴ Cs | | | None detected | None detected | |
| | ¹³⁷ Cs | | | None detected | None detected | |
| | ¹³¹ I | | | None detected | None detected | |

Table Notation:

- (a) Unless specified, all required LLDs were met in accordance with Table 3.
- (b) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.
- (c) Only one station location for this sample type.

Table A-6
Environmental Radiological Monitoring Program Summary

| | | | |
|----------------------|--|---------------|-------------------|
| Name of Facility | Diablo Canyon Power Plant | Docket No. | 50-275 and 50-323 |
| Location of Facility | San Luis Obispo, California (County, State) | Report Period | 1/1/03- 12/31/03 |

| Medium or Pathway Sampled (Unit of Measurement) | Type and Total Number of Analyses Performed | Lower Limit of Detection ^(a) (LLD) | Indicator Location ^(c) Name, Distance and Direction | Indicator Locations Mean ^(b) Range ^(b) | All Control Locations Mean ^(b) Range ^(b) | Number of Reportable Occurrences |
|--|---|--|---|--|--|----------------------------------|
| Algae* (pCi/kg original) | Gamma Isotopic (24) | | Sta. DCM 0.2 mi., 270° | Sta. DCM | Sta. 7C2 | 0 |
| | ⁵⁴ Mn | | | None detected | None detected | |
| | ⁵⁹ Fe | | | None detected | None detected | |
| | ⁵⁷ Co | | | None detected | None detected | |
| | ⁵⁸ Co | | | 16.9(2/24) 6.3-27.5 | None detected | |
| | ⁶⁰ Co | | | None detected | None detected | |
| | ¹³¹ I | | | None detected | None detected | |
| | ^{110m} Ag | | | None detected | None detected | |
| | ¹³⁷ Cs | | | None detected | None detected | |

Table Notation:

(a) Unless specified, all required LLDs were met in accordance with Table 3.

(b) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

(c) Only one station location for this sample type.

* These samples are supplemental samples.

**Table A-7
Environmental Radiological Monitoring Program Summary**

| | | | |
|----------------------|---|---------------|--------------------------|
| Name of Facility | <u>Diablo Canyon Power Plant</u> | Docket No. | <u>50-275 and 50-323</u> |
| Location of Facility | <u>San Luis Obispo, California</u> (County, State) | Report Period | <u>1/1/03- 12/31/03</u> |

| Medium or Pathway Sampled (Unit of Measurement) | Type and Total Number of Analyses Performed | Lower Limit Of Detection ^(a) (LLD) | Indicator Location ^(c) Name, Distance and Direction | Indicator Locations Mean ^(b) Range ^(b) | All Control Locations Mean ^(b) Range ^(b) | Number of Reportable Occurrences |
|--|---|--|---|--|--|----------------------------------|
| Sediment (pCi/kg dry) | Gamma Isotopic (2) | | Sta. DCM 0.2 mi., 270° | Sta. DCM | Sta. 7C2 | 0 |
| | ⁵⁴ Mn | | | None detected | None detected | |
| | ⁵⁹ Fe | | | None detected | None detected | |
| | ⁵⁸ Co | | | None detected | None detected | |
| | ⁶⁰ Co | | | None detected | None detected | |
| | ⁶⁵ Zn | | | None detected | None detected | |
| | ¹³⁴ Cs | | | None detected | None detected | |
| | ¹³⁷ Cs | | | None detected | None detected | |

Table Notation:

- (a) Unless specified, all required LLDs were met in accordance with Table 3.
- (b) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.
- (c) Only one station location for this sample type.

Table A-8
Environmental Radiological Monitoring Program Summary

| | | | |
|----------------------|--|---------------|-------------------|
| Name of Facility | Diablo Canyon Power Plant | Docket No. | 50-275 and 50-323 |
| Location of Facility | San Luis Obispo, California (County, State) | Report Period | 1/1/03- 12/31/03 |

| Medium or Pathway Sampled (Unit of Measurement) | Type and Total Number of Analyses Performed | Lower Limit of Detection ^(a) (LLD) | Location with Highest Annual Mean | | Locations Mean ^(b) Range ^(b) | Number of Reportable Occurrences |
|---|--|--|--------------------------------------|---|--|--|
| | | | Name, Distance and Direction | Mean ^(b) Range ^(b) | | |
| Food crops* (pCi/kg original) | Gamma | | | | Sta. 7C1, 7G1, 5F2, | 0 |
| | Isotopic (38) | | | | 6C1 | |
| | ¹³¹ I | | | | None detected | |
| | ¹³⁴ Cs | | | | None detected | |
| | ¹³⁷ Cs | | | | None detected | |

Table Notation:

- (a) Unless specified, all required LLDs were met in accordance with Table 3.
- (b) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.
- * These samples are supplemental samples.

Table A-9
Environmental Radiological Monitoring Program Summary

| | | | |
|----------------------|--|---------------|-------------------|
| Name of Facility | Diablo Canyon Power Plant | Docket No. | 50-275 and 50-323 |
| Location of Facility | San Luis Obispo, California (County, State) | Report Period | 1/1/03- 12/31/03 |

| Medium or Pathway Sampled (Unit of Measurement) | Type and Total Number of Analyses Performed | Lower Limit of Detection ^(a) (LLD) | Location ^(c) Name, Distance And Direction | Mean ^(b) Range ^(b) | Number of Reportable Occurrences |
|---|--|--|--|---|--|
| Milk* (pCi/L) | ¹³¹ I (12) | | Sta 5F2, 12.6 mi, 60° | None detected | 0 |
| | Gamma Isotopic (12) | | | | 0 |
| | ¹³⁴ Cs | | | None detected | |
| | ¹³⁷ Cs | | | None detected | |
| | ¹⁴⁰ Ba-La | | | None detected | |

Table Notation:

(a) Unless specified, all required LLDs were met in accordance with Table 3.

(b) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

(c) Only one station location for this sample type.

ND: Radionuclides of interest other than naturally occurring were not detected.

* These samples are supplemental samples.

Table A-10

Analytics Performance Evaluation Program^(a)

| Sample/Analysis | Radionuclide | Month | TES | Analytics | Ratio | Evaluation |
|-----------------|--------------|----------|-------|-----------|-------|-----------------------------|
| Milk/Gamma | I-131 | December | 85 | 90 | .94 | Agreement |
| | Ce-141 | December | 199 | 202 | .99 | Agreement |
| | Cr-51 | December | 289 | 280 | 1.03 | Agreement |
| | Cs-134 | December | 205 | 135 | 1.52 | No Agreement ^(c) |
| | Cs-137 | December | 124 | 129 | .96 | Agreement |
| | Co-58 | December | 75 | 111 | .68 | Agreement |
| | Mn-54 | December | 181 | 173 | 1.05 | Agreement |
| | Fe-59 | December | 109 | 102 | 1.07 | Agreement |
| | Zn-65 | December | 209 | 197 | 1.06 | Agreement |
| | Co-60 | December | 150 | 155 | .97 | Agreement |
| | Co-57 | December | 32 | - | - | - ^(c) |
| Water/Gamma | Cr-51 | June | 221 | 213 | 1.04 | Agreement |
| | Mn-54 | June | 185 | 166 | 1.11 | Agreement |
| | Co-58 | June | 86 | 83 | 1.04 | Agreement |
| | Fe-59 | June | 102 | 88 | 1.16 | Agreement |
| | Co-60 | June | 125 | 118 | 1.06 | Agreement |
| | Zn-65 | June | 169 | 162 | 1.04 | Agreement |
| | Cs-134 | June | 84 | 92 | .91 | Agreement |
| | Cs-137 | June | 217 | 206 | 1.05 | Agreement |
| | Ce-141 | June | 269 | 253 | 1.06 | Agreement |
| | I-131 | June | 100 | 81 | 1.23 | Agreement |
| Water/Gamma | I-131 | December | 59 | 61 | 0.97 | Agreement |
| | Ce-141 | December | 185 | 189 | 0.98 | Agreement |
| | Cr-51 | December | 245 | 262 | 0.94 | Agreement |
| | Cs-134 | December | 141 | 127 | 1.11 | Agreement |
| | Cs-137 | December | 124 | 121 | 1.02 | Agreement |
| | Co-58 | December | 113 | 104 | 1.09 | Agreement |
| | Mn-54 | December | 169 | 162 | 1.04 | Agreement |
| | Fe-59 | December | 115 | 96 | 1.20 | Agreement |
| | Zn-65 | December | 187 | 184 | 1.02 | Agreement |
| | Co-60 | December | 149 | 145 | 1.03 | Agreement |
| | Co-57 | December | 38 | - | - | - ^(c) |
| Soil/Gamma | Mn-54 | June | .213 | .204 | 1.04 | Agreement |
| | Co-60 | June | .152 | .145 | 1.05 | Agreement |
| | Zn-65 | June | .212 | .199 | 1.07 | Agreement |
| | Cs-134 | June | .132 | .113 | 1.17 | Agreement |
| | Cs-137 | June | .388 | .359 | 1.08 | Agreement |
| | Ce-141 | June | .334 | .310 | 1.08 | Agreement |
| | Cr-51 | June | .232 | .262 | .89 | Agreement |
| | Co-58 | June | .094 | .102 | .92 | Agreement |
| | Fe-59 | June | .109 | .108 | 1.01 | Agreement |
| | Cd-109 | June | 1.140 | - | - | - ^(d) |

Table A-10 (Continued)
Analytics Performance Evaluation Program^(a)

| Sample/Analysis | Radionuclide | Month | TES | Analytics | Ratio | Evaluation |
|------------------------|---------------------|--------------|------------|------------------|--------------|-------------------|
| Vegetation/Gamma | Ce-141 | December | .219 | .188 | 1.16 | Agreement |
| | Cr-51 | December | .341 | .261 | 1.31 | Agreement |
| | Cs-134 | December | .128 | .126 | 1.02 | Agreement |
| | Cs-137 | December | .133 | .121 | 1.10 | Agreement |
| | Co-58 | December | .105 | .103 | 1.02 | Agreement |
| | Mn-54 | December | .179 | .161 | 1.11 | Agreement |
| | Fe-59 | December | .106 | .095 | 1.12 | Agreement |
| | Zn-65 | December | .189 | .184 | 1.03 | Agreement |
| | Co-60 | December | .147 | .144 | 1.02 | Agreement |
| Sample/Analysis | Radionuclide | Month | TES | Analytics | Ratio | Evaluation |
| Cartridge/Gamma | I-131 | June | 66 | 62 | 1.06 | Agreement |
| Water/Alpha | Gross Alpha | June | 57 | 49 | 1.16 | Agreement |
| Water/Beta | Gross Beta | June | 267 | 268 | 1.00 | Agreement |
| Water/Tritium | Tritium | June | 11600 | 11953 | .97 | Agreement |
| Particulate Filter | Alpha | December | 13 | 19 | .68 | Agreement |
| Particulate Filter | Beta | December | 48 | 51 | .94 | Agreement |

Table Notation:

- (a) All of the values shown are relative; therefore, the units for total activity or concentration levels are not shown.
- (b) Agreement criteria from NRC Inspection Manual, Procedure 84750.
- (c) Sample believed to be contaminated with another cross-check sample. See text, page 4-1
- (d) False positive due to interference from Lead and Bismuth x-rays from natural radioactivity in soil sample. See text page 4-2.

Appendix B

ANALYTICAL RESULTS

Table B-1
Diablo Canyon Power Plant 2003 Annual Report
State Cross-Check Results^(a)

| Sample | Station | Sample No. | Collection Date | Gamma Activity pCi/L Original | K-40 Activity pCi/L Original | H-3 Activity pCi/L | I-131 Activity pCi/L |
|----------------|---------|------------|-----------------|-------------------------------------|------------------------------------|--------------------------|-------------------------|
| Drinking Water | DW1 | 03A32 | 01/23/03 | ND | 24 ± 34 | ND | ND |
| | | 03B07 | 02/25/03 | ND | ND | ND | ND |
| | | 03B77 | 03/19/03 | ND | ND | ND | ND |
| | | 03C76 | 04/22/03 | ND | ND | ND | ND |
| | | 03D37 | 05/20/03 | ND | 17 ± 30 | ND | ND |
| | | 03E60 | 06/25/03 | ND | ND | ND | ND |
| | | 03F43 | 07/14/03 | ND | 15 ± 35 | ND | ND |
| | | 03G43 | 08/19/03 | ND | 17 ± 27 | ND | ND |
| | | 03G99 | 09/11/03 | ND | ND | ND | ND |
| | | 03I55 | 10/31/03 | ND | ND | ND | ND |
| | | 03J31 | 11/24/03 | ND | ND | ND | ND |
| | | 03J93 | 12/16/03 | ND | ND | ND | ND |
| Milk | 5F2 | 03A33 | 01/23/03 | ND | 1351 ± 138 | --- | ND |
| | | 03B08 | 02/25/03 | ND | 1479 ± 137 | --- | ND |
| | | 03B73 | 03/18/03 | ND | 1417 ± 131 | --- | ND |
| | | 03C77 | 04/22/03 | ND | 1379 ± 135 | --- | ND |
| | | 03D38 | 05/20/03 | ND | 1398 ± 97 | --- | ND |
| | | 03E61 | 06/25/03 | ND | 1433 ± 98 | --- | ND |
| | | 03F44 | 07/14/03 | ND | 1295 ± 112 | --- | ND |
| | | 03G44 | 08/19/03 | ND | 1386 ± 107 | --- | ND |
| | | 03H00 | 09/11/03 | ND | 1406 ± 98 | --- | ND |
| | | 03I56 | 10/31/03 | ND | 1470 ± 116 | --- | ND |
| | | 03J32 | 11/24/03 | ND | 1370 ± 105 | --- | ND |
| | | 03J94 | 12/16/03 | ND | 1427 ± 99 | --- | ND |

Table Notation:

(a) Airborne radioisotope analyses for stations 5F1 and 7D1 are located in Table B-3. Direct Radiation measurements for stations MT1, 4D1, 5F3, 7D1, and 7C1 are located in Table B-4.

Table B-1 (Continued)
Diablo Canyon Power Plant 2003 Annual Report
State Cross-Check Results

| Sample | Station | Sample No. | Collection Date | Gamma Activity pCi/L Original | K-40 Activity pCi/L Original | H-3 Activity pCi/L | I-131 Activity pCi/L |
|----------------|---------|------------|-----------------|-------------------------------------|------------------------------------|-----------------------|-------------------------|
| Outfall Water | OUT | 03A30 | 01/23/03 | ND | 318 ± 57 | ND | --- |
| | | 03B05 | 02/25/03 | ND | 347 ± 42 | ND | --- |
| | | 03B75 | 03/19/03 | ND | 331 ± 67 | ND | --- |
| | | 03C74 | 04/22/03 | ND | 338 ± 52 | ND | --- |
| | | 03D35 | 05/20/03 | ND | 346 ± 46 | ND | --- |
| | | 03E62 | 06/25/03 | ND | 346 ± 47 | ND | --- |
| | | 03F41 | 07/14/03 | ND | 313 ± 32 | ND | --- |
| | | 03G45 | 08/19/03 | ND | 358 ± 27 | ND | --- |
| | | 03G97 | 09/11/03 | ND | 354 ± 47 | ND | --- |
| | | 03I53 | 10/31/03 | ND | 378 ± 61 | ND | --- |
| | | 03J29 | 11/24/03 | ND | 326 ± 60 | ND | --- |
| | | 03J91 | 12/16/03 | ND | 323 ± 37 | ND | --- |
| Drinking Water | 5S2 | 03A31 | 01/23/03 | ND | ND | ND | ND |
| | | 03B06 | 02/25/03 | ND | ND | ND | ND |
| | | 03B76 | 03/19/03 | ND | ND | ND | ND |
| | | 03C75 | 04/22/03 | ND | ND | ND | ND |
| | | 03D36 | 05/20/03 | ND | ND | ND | ND |
| | | 03E59 | 06/25/03 | ND | ND | ND | ND |
| | | 03F42 | 07/14/03 | ND | ND | ND | ND |
| | | 03G42 | 08/19/03 | ND | ND | ND | ND |
| | | 03G98 | 09/11/03 | ND | ND | ND | ND |
| | | 03I54 | 10/31/03 | ND | ND | ND | ND |
| | | 03J30 | 11/24/03 | ND | ND | ND | ND |
| | | 03J92 | 12/16/03 | ND | ND | ND | ND |

Table B-1 (Continued)
Diablo Canyon Power Plant 2003 Annual Report
State Cross-Check Results

| Sample | Station | Sample No. | Collection Date | Gamma Activity pCi/L Original | K-40 Activity pCi/L Original | H-3 Activity pCi/L | I-131 Activity pCi/L |
|---------------------------------|---------|------------|-----------------|-------------------------------------|------------------------------------|--------------------------|-------------------------|
| Giant Kelp ^(b) | DCM | 03C29 | 03/31/03 | ND | 7919 ± 787 | --- | --- |
| | | 03E16 | 06/16/03 | ND | 7258 ± 466 | --- | --- |
| | | 03G73 | 08/25/03 | ND | 16200 ± 1160 | --- | --- |
| | | 03J59 | 12/03/03 | ND | 12030 ± 790 | --- | --- |
| Vegetable Greens ^(b) | 7G1 | 03A58 | 02/04/03 | ND | 3275 ± 340 | --- | --- |
| | | 03D32 | 05/19/03 | ND | 4595 ± 359 | --- | --- |
| | | 03G20 | 08/18/03 | ND | 5287 ± 381 | --- | --- |
| | | 03I68 | 11/05/03 | ND | 2658 ± 222 | --- | --- |
| Fish ^(b) | DCM | 03A92 | 02/06/03 | ND | 4383 ± 465 | --- | --- |
| | | 03F07 | 06/25/03 | ND | 3605 ± 288 | --- | --- |
| | | --- | --- | --- | --- | --- | --- |
| | | 03K33 | 01/05/04 | ND | 3016 ± 223 | --- | --- |
| Sediment ^(c) | DCM | 03K39 | 01/05/04 | ND | 14160 ± 980 | --- | --- |

Table Notation:

- (b) Results reported in pCi/kg original sample.
(c) Results reported in pCi/kg dry sample.

Table B-2

**Diablo Canyon Power Plant 2003 Annual Report
Marine and Terrestrial Sample Data
Detected Nuclides (Nonnaturally Occurring) – pCi/m³ Air
pCi/kg Algae**

| Description | Sta. No. | Collection Date | Sam. No. | ⁵⁸Co | ⁶⁰Co | ¹³¹I | ¹³⁷Cs | 3H |
|-------------------------------------|---------------------|----------------------------|---------------------|------------------------|------------------------|------------------------|-------------------------|-----------|
| Iridaea | DCM | 3/13/03 | 03B71 | 2.75E+1±8.6E+0 | | | | |
| Iridaea | DCM | 6/3/03 | 03E01 | 6.3E+0±6.7E+0 | | | | |
| Air Particulate/Iodine Cartridge | MT1 | 2/5/03 – 2/12/03 | 03A76 | | | 1.8E-2±4.0E-3 | | |
| Air Particulate/Iodine Cartridge | 8S1 | 2/5/03 – 2/12/03 | 03A79 | | | 9.0E-3±5.0E-3 | | |

Table B-3

Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station 0S2 (pCi/m³)

| Collection Period | Volume (m ³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|-------------------|--------------------------|---------------|---------------------|--------|------------|
| 12/31/02-01/08/03 | 498.8 | 01/23/03 | .016 | .002 | |
| 01/08/03-01/15/03 | 460.6 | 01/24/03 | .018 | .002 | |
| 01/15/03-01/22/03 | 450.0 | 02/03/03 | .036 | .004 | |
| 01/22/03-01/29/03 | 449.5 | 02/04/03 | .014 | .002 | |
| 01/29/03-02/05/03 | 485.4 | 02/28/03 | .014 | .002 | |
| 02/05/03-02/12/03 | 436.3 | 03/11/03 | .029 | .003 | |
| 02/12/03-02/19/03 | 480.7 | 03/01/03 | .006 | .001 | |
| 02/19/03-02/26/03 | 502.0 | 03/10/03 | .015 | .002 | |
| 02/26/03-03/05/03 | 491.0 | 03/12/03 | .010 | .001 | |
| 03/05/03-03/12/03 | 508.6 | 03/21/03 | .016 | .002 | |
| 03/12/03-03/19/03 | 482.2 | 03/25/03 | .006 | .001 | |
| 03/19/03-03/26/03 | 517.5 | 04/09/03 | .007 | .001 | |
| 03/26/03-04/02/03 | 482.8 | 04/09/03 | .011 | .001 | |
| 04/02/03-04/09/03 | 415.3 | 04/23/03 | .006 | .001 | |
| 04/09/03-04/16/03 | 413.3 | 05/03/03 | .007 | .001 | |
| 04/16/03-04/23/03 | 409.9 | 05/03/03 | .011 | .001 | |
| 04/23/03-04/30/03 | 414.9 | 05/11/03 | .006 | .001 | |
| 04/30/03-05/07/03 | 441.6 | 06/07/03 | .012 | .001 | |
| 05/07/03-05/14/03 | 430.3 | 06/07/03 | .011 | .001 | |
| 05/14/03-05/21/03 | 420.3 | 06/10/03 | .012 | .001 | |
| 05/21/03-05/28/03 | 458.5 | 06/10/03 | .006 | .001 | |
| 05/28/03-06/04/03 | 426.6 | 06/23/03 | .008 | .001 | |
| 06/04/03-06/11/03 | 445.3 | 06/26/03 | .009 | .001 | |
| 06/11/03-06/18/03 | 429.4 | 06/27/03 | .010 | .001 | |
| 06/18/03-06/25/03 | 448.8 | 07/02/03 | .004 | .001 | |
| 06/25/03-07/02/03 | 444.1 | 07/11/03 | .009 | .001 | |
| 07/02/03-07/09/03 | 433.2 | 07/15/03 | .005 | .001 | |
| 07/09/03-07/16/03 | 443.5 | 08/07/03 | .005 | .001 | |
| 07/16/03-07/23/03 | 442.0 | 08/08/03 | .006 | .001 | |
| 07/23/03-07/30/03 | 441.0 | 08/15/03 | .006 | .001 | |
| 07/30/03-08/06/03 | 461.9 | 08/15/03 | .007 | .001 | |
| 08/06/03-08/13/03 | 433.7 | 08/22/03 | .007 | .001 | |
| 08/13/03-08/20/03 | 443.9 | 08/27/03 | .006 | .001 | |
| 08/20/03-08/27/03 | 442.6 | 09/06/03 | .008 | .001 | |
| 08/27/03-09/03/03 | 444.2 | 09/10/03 | .008 | .001 | |
| 09/03/03-09/10/03 | 436.0 | 09/16/03 | .011 | .001 | |
| 09/10/03-09/17/03 | 292.3 | 10/03/03 | .011 | .002 | |

Table B-3 (Continued)

**Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station 0S2 (pCi/m³)**

| Collection Period | Volume (m³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|--------------------------|-------------------------------|----------------------|----------------------------|---------------|-------------------|
| 09/17/03-09/24/03 | 498.0 | 10/03/03 | .014 | .002 | |
| 09/24/03-10/01/03 | 452.1 | 10/10/03 | .020 | .002 | |
| 10/01/03-10/08/03 | 413.7 | 10/16/03 | .014 | .002 | |
| 10/08/03-10/15/03 | 275.0 | 11/05/03 | .017 | .002 | |
| 10/15/03-10/22/03 | 434.8 | 11/05/03 | .013 | .002 | |
| 10/22/03-10/29/03 | 445.3 | 11/10/03 | .034 | .003 | |
| 10/29/03-11/05/03 | 463.6 | 11/11/03 | .010 | .001 | |
| 11/05/03-11/12/03 | 458.0 | 11/18/03 | .011 | .001 | |
| 11/12/03-11/19/03 | 425.1 ¹ | 12/10/03 | .011 | .001 | |
| 11/19/03-11/26/03 | 427.4 ¹ | 12/15/03 | .015 | .002 | |
| 11/26/03-12/03/03 | 435.3 ¹ | 12/16/03 | .021 | .002 | |
| 12/03/03-12/10/03 | 420.5 ¹ | 12/19/03 | .010 | .001 | |
| 12/10/03-12/17/03 | 427.9 ¹ | 12/23/03 | .007 | .001 | |
| 12/17/03-12/24/03 | 423.6 ¹ | 12/31/03 | .015 | .002 | |
| 12/24/03-12/31/03 | 434.5 ¹ | 01/07/04 | .008 | .001 | |

Gamma Activity on Filter Composites

| Collection Period | Counting Date | Concentration (pCi/m³) |
|--------------------------|----------------------|--|
| 12/31/02-04/02/03 | 5/6/2003 | ND |
| 04/02/03-07/02/03 | 7/16/2003 | ND |
| 07/02/03-10/01/03 | 10/28/2003 | ND |
| 10/01/03-12/31/03 | 2/20/2004 | ND |

Table Notation:

ND: Radionuclides of interest other than naturally occurring were not detected.

¹ Volume determined using flow rate and timer value.

Table B-3 (Continued)

Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station 1S1 (pCi/m³)

| Collection Period | Volume (m ³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|-------------------|--------------------------|---------------|---------------------|--------|------------|
| 12/31/02-01/08/03 | 531.6 | 01/24/03 | .017 | .002 | |
| 01/08/03-01/15/03 | 473.3 | 01/24/03 | .022 | .002 | |
| 01/15/03-01/22/03 | 468.9 | 02/03/03 | .035 | .003 | |
| 01/22/03-01/29/03 | 477.9 | 02/04/03 | .015 | .002 | |
| 01/29/03-02/05/03 | 471.4 | 02/28/03 | .015 | .002 | |
| 02/05/03-02/12/03 | 475.5 | 03/01/03 | .025 | .003 | |
| 02/12/03-02/19/03 | 458.9 | 03/02/03 | .007 | .001 | |
| 02/19/03-02/26/03 | 458.8 | 03/10/03 | .014 | .002 | |
| 02/26/03-03/05/03 | 478.9 | 03/12/03 | .012 | .001 | |
| 03/05/03-03/12/03 | 481.7 | 03/21/03 | .018 | .002 | |
| 03/12/03-03/19/03 | 457.1 | 03/25/03 | .006 | .001 | |
| 03/19/03-03/26/03 | 483.6 | 04/09/03 | .007 | .001 | |
| 03/26/03-04/02/03 | 487.1 | 04/09/03 | .012 | .001 | |
| 04/02/03-04/09/03 | 488.5 | 04/28/03 | .008 | .001 | |
| 04/09/03-04/16/03 | 479.5 | 05/03/03 | .008 | .001 | |
| 04/16/03-04/23/03 | 490.2 | 05/03/03 | .009 | .001 | |
| 04/23/03-04/30/03 | 477.8 | 05/11/03 | .005 | .001 | |
| 04/30/03-05/07/03 | 474.6 | 06/07/03 | .008 | .001 | |
| 05/07/03-05/14/03 | 497.4 | 06/08/03 | .011 | .001 | |
| 05/14/03-05/21/03 | 466.8 | 06/10/03 | .013 | .001 | |
| 05/21/03-05/28/03 | 495.9 | 06/11/03 | .007 | .001 | |
| 05/28/03-06/04/03 | 462.6 | 06/23/03 | .007 | .001 | |
| 06/04/03-06/11/03 | 481.2 | 06/26/03 | .009 | .001 | |
| 06/11/03-06/18/03 | 469.2 | 06/27/03 | .006 | .001 | |
| 06/18/03-06/25/03 | 489.2 | 07/02/03 | .004 | .001 | |
| 06/25/03-07/02/03 | 468.1 | 07/11/03 | .008 | .001 | |
| 07/02/03-07/09/03 | 473.5 | 07/15/03 | .007 | .001 | |
| 07/09/03-07/16/03 | 468.5 | 08/07/03 | .005 | .001 | |
| 07/16/03-07/23/03 | 454.6 | 08/08/03 | .006 | .001 | |
| 07/23/03-07/30/03 | 455.4 | 08/15/03 | .008 | .001 | |
| 07/30/03-08/06/03 | 451.2 | 08/15/03 | .006 | .001 | |
| 08/06/03-08/13/03 | 454.0 | 08/21/03 | .009 | .001 | |
| 08/13/03-08/20/03 | 461.3 | 08/27/03 | .006 | .001 | |
| 08/20/03-08/27/03 | 446.6 | 09/06/03 | .012 | .001 | |
| 08/27/03-09/03/03 | 460.2 | 09/10/03 | .008 | .001 | |
| 09/03/03-09/10/03 | 447.0 | 09/16/03 | .015 | .002 | |
| 09/10/03-09/17/03 | 459.0 | 10/03/03 | .009 | .001 | |

Table B-3 (Continued)

**Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station 1S1 (pCi/m³)**

| Collection Period | Volume (m³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|--------------------------|-------------------------------|----------------------|----------------------------|---------------|-------------------|
| 09/17/03-09/24/03 | 452.9 | 10/03/03 | .014 | .002 | |
| 09/24/03-10/01/03 | 465.1 | 10/10/03 | .017 | .002 | |
| 10/01/03-10/08/03 | 442.0 | 10/16/03 | .015 | .002 | |
| 10/08/03-10/15/03 | 461.8 | 11/05/03 | .014 | .002 | |
| 10/15/03-10/22/03 | 468.2 | 11/05/03 | .013 | .002 | |
| 10/22/03-10/29/03 | 451.9 | 11/10/03 | .037 | .004 | |
| 10/29/03-11/05/03 | 469.7 | 11/11/03 | .012 | .002 | |
| 11/05/03-11/12/03 | 459.3 | 11/19/03 | .010 | .001 | |
| 11/12/03-11/19/03 | 424.8 ¹ | 12/10/03 | .011 | .001 | |
| 11/19/03-11/26/03 | 426.1 ¹ | 12/16/03 | .014 | .002 | |
| 11/26/03-12/03/03 | 435.3 ¹ | 12/16/03 | .022 | .002 | |
| 12/03/03-12/10/03 | 420.5 ¹ | 12/19/03 | .012 | .002 | |
| 12/10/03-12/17/03 | 427.9 ¹ | 12/23/03 | .008 | .001 | |
| 12/17/03-12/24/03 | 424.6 ¹ | 12/31/03 | .015 | .002 | |
| 12/24/03-12/31/03 | 433.5 ¹ | 01/07/04 | .007 | .001 | |

Gamma Activity on Filter Composites

| Collection Period | Counting Date | Nuclide | Concentration (pCi/m³) |
|--------------------------|----------------------|----------------|--|
| 12/31/02-04/02/03 | 5/6/2003 | ND | |
| 04/02/03-07/02/03 | 7/16/2003 | ND | |
| 07/02/03-10/01/03 | 10/28/2003 | ND | |
| 10/01/03-12/31/03 | 2/20/2004 | ND | |

Table Notation:

ND: Radionuclides of interest other than naturally occurring were not detected.

¹ Volume determined using flow rate and timer value.

Table B-3 (Continued)

Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station 5F1 (pCi/m³)

| Collection Period | Volume (m ³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|---------------------|--------------------------|---------------|---------------------|--------|------------|
| 12/31/02-01/08/03 | 572.4 | 01/23/03 | .017 | .002 | |
| 01/08/03-01/15/03 | 510.5 | 01/24/03 | .035 | .003 | |
| 01/15/03-01/22/03 | 505.8 | 02/03/03 | .034 | .003 | |
| 01/22/03-01/29/03 | 479.4 | 02/03/03 | .014 | .002 | |
| 01/29/03-02/05/03 | 489.1 | 02/28/03 | .015 | .002 | |
| 02/05/03-02/12/03 | 493.9 | 03/01/03 | .028 | .003 | |
| 02/12/03-02/19/03 | 476.3 | 03/01/03 | .008 | .001 | |
| 02/19/03-02/26/03 | 486.5 | 03/10/03 | .013 | .001 | |
| 02/26/03-03/05/03 | 513.2 | 03/12/03 | .010 | .001 | |
| 03/05/03-03/12/03 | 445.0 | 03/21/03 | .016 | .002 | |
| 03/12/03-03/19/03 | 454.4 | 03/24/03 | .004 | .001 | |
| 03/19/03-03/26/03 | 468.2 | 04/08/03 | .007 | .001 | |
| 03/26/03-04/02/03 | 454.8 | 04/09/03 | .011 | .001 | |
| 04/02/03-04/09/03 | 399.5 | 04/22/03 | .006 | .001 | |
| 04/09/03-04/16/03 | 420.4 | 05/03/03 | .007 | .001 | |
| 04/16/03-04/23/03 | 427.6 | 05/03/03 | .009 | .001 | |
| 04/23/03-04/30/03 | 438.7 | 05/10/03 | .005 | .001 | |
| 04/30/03-05/07/03 | 456.9 | 06/07/03 | .009 | .001 | |
| 05/07/03-05/14/03 | 483.5 | 06/07/03 | .010 | .001 | |
| 05/14/03-05/21/03 | 462.9 | 06/09/03 | .011 | .001 | |
| 05/21/03-05/28/03 | 503.3 | 06/10/03 | .007 | .001 | |
| 05/28/03-06/04/03 | 489.9 | 06/23/03 | .008 | .001 | |
| 06/04/03-06/11/03 | 451.8 | 06/26/03 | .008 | .001 | |
| 06/11/03-06/18/03 | 475.0 | 06/27/03 | .007 | .001 | |
| 06/18/03-06/25/03 | 484.0 | 07/02/03 | .005 | .001 | |
| 06/25/03-07/02/03 | 485.8 | 07/10/03 | .010 | .001 | |
| 07/02/03-07/09/03 | 469.4 | 07/15/03 | .005 | .001 | |
| 07/09/03-07/16/03 | 483.3 | 08/06/03 | .005 | .001 | |
| 07/16/03-07/23/03 | 473.4 | 08/07/03 | .008 | .001 | |
| 07/23/03-07/30/03 | 478.3 | 08/14/03 | .007 | .001 | |
| 07/30/03-08/06/03 | 518.4 | 08/15/03 | .007 | .001 | |
| 08/06/03-08/13/03 | 465.7 | 08/21/03 | .008 | .001 | |
| 08/13/03-08/20/03 | 473.4 | 08/27/03 | .006 | .001 | |
| *08/20/03-08/27/03 | 231.1 | 09/06/03 | .009 | .002 | |
| **08/27/03-09/03/03 | 194.6 | 09/09/03 | .010 | .002 | |
| 09/03/03-09/10/03 | 421.0 | 09/16/03 | .011 | .001 | |
| 09/10/03-09/17/03 | 450.2 | 10/02/03 | .011 | .001 | |

Table B-3 (Continued)

**Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station 5F1 (pCi/m³)**

| Collection Period | Volume (m³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|--------------------------|-------------------------------|----------------------|----------------------------|---------------|-------------------|
| *09/17/03-09/24/03 | 193.2 | 10/03/03 | .015 | .002 | |
| 09/24/03-10/01/03 | 448.7 | 10/10/03 | .018 | .002 | |
| 10/01/03-10/08/03 | 485.3 | 10/15/03 | .014 | .002 | |
| 10/08/03-10/15/03 | 510.9 | 11/04/03 | .016 | .002 | |
| 10/15/03-10/22/03 | 513.7 | 11/05/03 | .013 | .002 | |
| 10/22/03-10/29/03 | 488.5 | 11/10/03 | .042 | .004 | |
| 10/29/03-11/05/03 | 486.6 | 11/11/03 | .012 | .002 | |
| 11/05/03-11/12/03 | 485.5 | 11/18/03 | .011 | .001 | |
| 11/12/03-11/19/03 | 428.9 ¹ | 12/10/03 | .015 | .002 | |
| 11/19/03-11/26/03 | 426.9 ¹ | 12/15/03 | .017 | .002 | |
| 11/26/03-12/03/03 | 427.6 ¹ | 12/16/03 | .025 | .003 | |
| 12/03/03-12/10/03 | 426.6 ¹ | 12/18/03 | .011 | .002 | |
| 12/10/03-12/17/03 | 429.4 ¹ | 12/23/03 | .008 | .001 | |
| 12/17/03-12/24/03 | 416.1 ¹ | 12/30/03 | .017 | .002 | |
| 12/24/03-12/31/03 | 412.2 ¹ | 01/07/04 | .010 | .001 | |

Gamma Activity on Filter Composites

| Collection Period | Counting Date | Concentration (pCi/m³) |
|--------------------------|----------------------|--|
| 12/31/02-04/02/03 | 5/5/2003 | ND |
| 04/02/03-07/02/03 | 7/15/2003 | ND |
| 07/02/03-10/01/03 | 10/27/2003 | ND |
| 10/01/03-12/31/03 | 2/2/2004 | ND |

*Sampler stopped running

**Sampler malfunction

Table Notation:

ND: Radionuclides of interest other than naturally occurring were not detected.

¹ Volume determined using flow rate and timer value.

Table B-3 (Continued)

**Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station 7D1 (pCi/m³)**

| Collection Period | Volume (m ³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|-------------------|--------------------------|---------------|---------------------|--------|------------|
| 12/31/02-01/08/03 | 559.7 | 01/23/03 | .018 | .002 | |
| 01/08/03-01/15/03 | 488.9 | 01/24/03 | .020 | .002 | |
| 01/15/03-01/22/03 | 511.6 | 02/03/03 | .034 | .003 | |
| 01/22/03-01/29/03 | 476.4 | 02/04/03 | .015 | .002 | |
| 01/29/03-02/05/03 | 487.9 | 02/28/03 | .025 | .002 | |
| 02/05/03-02/12/03 | 498.5 | 03/01/03 | .025 | .003 | |
| 02/12/03-02/19/03 | 473.2 | 03/01/03 | .006 | .001 | |
| 02/19/03-02/26/03 | 519.5 | 03/10/03 | .013 | .001 | |
| 02/26/03-03/05/03 | 518.9 | 03/12/03 | .010 | .001 | |
| 03/05/03-03/12/03 | 481.8 | 03/21/03 | .018 | .002 | |
| 03/12/03-03/19/03 | 505.8 | 03/25/03 | .005 | .001 | |
| 03/19/03-03/26/03 | 331.5 | 04/08/03 | .008 | .001 | |
| 03/26/03-04/02/03 | 353.9 | 04/09/03 | .013 | .002 | |
| 04/02/03-04/09/03 | 466.8 | 04/23/03 | .007 | .001 | |
| 04/09/03-04/16/03 | 487.6 | 05/03/03 | .007 | .001 | |
| 04/16/03-04/23/03 | 379.6 | 05/03/03 | .009 | .001 | |
| 04/23/03-04/30/03 | 393.2 | 05/10/03 | .006 | .001 | |
| 04/30/03-05/07/03 | 419.9 | 06/07/03 | .007 | .001 | |
| 05/07/03-05/14/03 | 442.2 | 06/07/03 | .010 | .001 | |
| 05/14/03-05/21/03 | 439.7 | 06/09/03 | .013 | .002 | |
| 05/21/03-05/28/03 | 486.7 | 06/10/03 | .007 | .001 | |
| 05/28/03-06/04/03 | 472.4 | 06/23/03 | .007 | .001 | |
| 06/04/03-06/11/03 | 492.1 | 06/26/03 | .009 | .001 | |
| 06/11/03-06/18/03 | 457.7 | 06/27/03 | .006 | .001 | |
| 06/18/03-06/25/03 | 488.3 | 07/02/03 | .004 | .001 | |
| 06/25/03-07/02/03 | 469.3 | 07/10/03 | .010 | .001 | |
| 07/02/03-07/09/03 | 494.0 | 07/15/03 | .006 | .001 | |
| 07/09/03-07/16/03 | 503.5 | 08/06/03 | .006 | .001 | |
| 07/16/03-07/23/03 | 423.8 | 08/07/03 | .008 | .001 | |
| 07/23/03-07/30/03 | 468.9 | 08/14/03 | .009 | .001 | |
| 07/30/03-08/06/03 | 494.3 | 08/15/03 | .008 | .001 | |
| 08/06/03-08/13/03 | 489.7 | 08/21/03 | .007 | .001 | |
| 08/13/03-08/20/03 | 513.7 | 08/27/03 | .010 | .001 | |
| 08/20/03-08/27/03 | 501.4 | 09/06/03 | .008 | .001 | |
| 08/27/03-09/03/03 | 477.0 | 09/09/03 | .009 | .001 | |
| 09/03/03-09/10/03 | 451.4 | 09/16/03 | .014 | .002 | |
| 09/10/03-09/17/03 | 466.9 | 10/02/03 | .012 | .001 | |

Table B-3 (Continued)

**Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station 7D1 (pCi/m³)**

| Collection Period | Volume (m³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|--------------------------|-------------------------------|----------------------|----------------------------|---------------|-------------------|
| 09/17/03-09/24/03 | 462.4 | 10/03/03 | .014 | .002 | |
| 09/24/03-10/01/03 | 467.2 | 10/10/03 | .017 | .002 | |
| 10/01/03-10/08/03 | 466.4 | 10/15/03 | .013 | .002 | |
| 10/08/03-10/15/03 | 461.8 | 11/04/03 | .014 | .002 | |
| 10/15/03-10/22/03 | 475.4 | 11/05/03 | .017 | .002 | |
| 10/22/03-10/29/03 | 451.9 | 11/10/03 | .040 | .004 | |
| 10/29/03-11/05/03 | 465.3 | 11/11/03 | .011 | .001 | |
| 11/05/03-11/12/03 | 463.1 | 11/18/03 | .010 | .001 | |
| 11/12/03-11/19/03 | 428.4 ¹ | 12/10/03 | .011 | .001 | |
| 11/19/03-11/26/03 | 427.1 ¹ | 12/15/03 | .018 | .002 | |
| 11/26/03-12/03/03 | 426.4 ¹ | 12/16/03 | .020 | .002 | |
| 12/03/03-12/10/03 | 428.1 ¹ | 12/18/03 | .010 | .001 | |
| 12/10/03-12/17/03 | 429.2 ¹ | 12/23/03 | .009 | .001 | |
| 12/17/03-12/24/03 | 424.1 ¹ | 12/31/03 | .015 | .002 | |
| 12/24/03-12/31/03 | 433.0 ¹ | 01/07/04 | .009 | .001 | |

Gamma Activity on Filter Composites

| Collection Period | Counting Date | Nuclide | Concentration (pCi/m³) |
|--------------------------|----------------------|----------------|--|
| 12/31/02-04/02/03 | 5/5/2003 | ND | |
| 04/02/03-07/02/03 | 7/16/2003 | ND | |
| 07/02/03-10/01/03 | 10/27/2003 | ND | |
| 10/01/03-12/31/03 | 2/2/2004 | ND | |

Table Notation:

ND: Radionuclides of interest other than naturally occurring were not detected.

¹ Volume determined using flow rate and timer value.

Table B-3 (Continued)

Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station 8S1 (pCi/m³)

| Collection Period | Volume (m ³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|-------------------|--------------------------|---------------|---------------------|--------|---------------|
| 12/31/02-01/08/03 | 537.8 | 01/23/03 | .016 | .002 | |
| 01/08/03-01/15/03 | 462.4 | 01/24/03 | .017 | .002 | |
| 01/15/03-01/22/03 | 470.5 | 02/03/03 | .035 | .003 | |
| 01/22/03-01/29/03 | 501.7 | 02/04/03 | .014 | .002 | |
| 01/29/03-02/05/03 | 486.9 | 02/28/03 | .016 | .002 | |
| 02/05/03-02/12/03 | 497.1 | 03/11/03 | .025 | .003 | I-131: 9.0E-3 |
| 02/12/03-02/19/03 | 491.8 | 03/01/03 | .006 | .001 | |
| 02/19/03-02/26/03 | 497.4 | 03/10/03 | .015 | .002 | |
| 02/26/03-03/05/03 | 497.6 | 03/12/03 | .012 | .001 | |
| 03/05/03-03/12/03 | 512.3 | 03/21/03 | .019 | .002 | |
| 03/12/03-03/19/03 | 496.8 | 03/25/03 | .005 | .001 | |
| 03/19/03-03/26/03 | 506.3 | 04/09/03 | .009 | .001 | |
| 03/26/03-04/02/03 | 511.4 | 04/09/03 | .013 | .001 | |
| 04/02/03-04/09/03 | 499.2 | 04/23/03 | .006 | .001 | |
| 04/09/03-04/16/03 | 499.5 | 05/03/03 | .007 | .001 | |
| 04/16/03-04/23/03 | 470.5 | 05/03/03 | .009 | .001 | |
| 04/23/03-04/30/03 | 464.8 | 05/10/03 | .006 | .001 | |
| 04/30/03-05/07/03 | 468.3 | 06/07/03 | .009 | .001 | |
| 05/07/03-05/14/03 | 482.2 | 06/07/03 | .012 | .001 | |
| 05/14/03-05/21/03 | 458.3 | 06/09/03 | .012 | .001 | |
| 05/21/03-05/28/03 | 479.3 | 06/10/03 | .007 | .001 | |
| 05/28/03-06/04/03 | 452.7 | 06/23/03 | .009 | .001 | |
| 06/04/03-06/11/03 | 474.8 | 06/26/03 | .010 | .001 | |
| 06/11/03-06/18/03 | 457.9 | 06/27/03 | .009 | .001 | |
| 06/18/03-06/25/03 | 450.3 | 07/02/03 | .006 | .001 | |
| 06/25/03-07/02/03 | 430.2 | 07/10/03 | .008 | .001 | |
| 07/02/03-07/09/03 | 423.3 | 07/15/03 | .006 | .001 | |
| 07/09/03-07/16/03 | 430.7 | 08/06/03 | .004 | .001 | |
| 07/16/03-07/23/03 | 480.5 | 08/07/03 | .007 | .001 | |
| 07/23/03-07/30/03 | 467.0 | 08/15/03 | .007 | .001 | |
| 07/30/03-08/06/03 | 475.8 | 08/15/03 | .009 | .001 | |
| 08/06/03-08/13/03 | 476.6 | 08/21/03 | .006 | .001 | |
| 08/13/03-08/20/03 | 484.3 | 08/27/03 | .007 | .001 | |
| 08/20/03-08/27/03 | 482.5 | 09/06/03 | .007 | .001 | |
| 08/27/03-09/03/03 | 478.5 | 09/10/03 | .008 | .001 | |
| 09/03/03-09/10/03 | 464.7 | 09/16/03 | .011 | .001 | |
| 09/10/03-09/17/03 | 471.4 | 10/02/03 | .009 | .001 | |

Table B-3 (Continued)

**Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station 8S1 (pCi/m³)**

| Collection Period | Volume (m³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|--------------------------|-------------------------------|----------------------|----------------------------|---------------|-------------------|
| 09/17/03-09/24/03 | 477.8 | 10/03/03 | .013 | .002 | |
| 09/24/03-10/01/03 | 465.0 | 10/10/03 | .018 | .002 | |
| 10/01/03-10/08/03 | 473.8 | 10/15/03 | .013 | .002 | |
| 10/08/03-10/15/03 | 469.0 | 11/04/03 | .014 | .002 | |
| 10/15/03-10/22/03 | 498.2 | 11/05/03 | .014 | .002 | |
| 10/22/03-10/29/03 | 459.7 | 11/10/03 | .039 | .004 | |
| 10/29/03-11/05/03 | 472.6 | 11/11/03 | .010 | .001 | |
| 11/05/03-11/12/03 | 465.6 | 11/18/03 | .013 | .002 | |
| 11/12/03-11/19/03 | 422.8 ¹ | 12/10/03 | .013 | .002 | |
| 11/19/03-11/26/03 | 426.1 ¹ | 12/15/03 | .016 | .002 | |
| 11/26/03-12/03/03 | 435.3 ¹ | 12/16/03 | .021 | .002 | |
| 12/03/03-12/10/03 | 420.5 ¹ | 12/18/03 | .011 | .002 | |
| 12/10/03-12/17/03 | 429.2 ¹ | 12/23/03 | .008 | .001 | |
| 12/17/03-12/24/03 | 423.6 ¹ | 12/31/03 | .016 | .002 | |
| 12/24/03-12/31/03 | 435.3 ¹ | 01/07/04 | .008 | .001 | |

Gamma Activity on Filter Composites

| Collection Period | Counting Date | Concentration (pCi/m³) |
|--------------------------|----------------------|--|
| 12/31/02-04/02/03 | 5/5/2003 | ND |
| 04/02/03-07/02/03 | 7/16/2003 | ND |
| 07/02/03-10/01/03 | 10/27/2003 | ND |
| 10/01/03-12/31/03 | 2/2/2004 | ND |

Table Notation:

ND: Radionuclides of interest other than naturally occurring were not detected.

¹ Volume determined using flow rate and timer value.

Table B-3 (Continued)

**Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station 8S2 (pCi/m³)**

| Collection Period | Volume (m³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|--------------------------|-------------------------------|----------------------|--------------------------------|---------------|-------------------|
| 12/31/02-01/08/03 | 587.7 | 01/23/03 | .021 | .002 | |
| 01/08/03-01/15/03 | 511.0 | 01/24/03 | .018 | .002 | |
| 01/15/03-01/22/03 | 514.5 | 02/03/03 | .037 | .004 | |
| 01/22/03-01/29/03 | 514.0 | 02/04/03 | .014 | .002 | |
| 01/29/03-02/05/03 | 439.9 | 02/28/03 | .017 | .002 | |
| 02/05/03-02/12/03 | 431.2 | 03/01/03 | .025 | .003 | |
| 02/12/03-02/19/03 | 424.5 | 03/01/03 | .007 | .001 | |
| 02/19/03-02/26/03 | 439.9 | 03/10/03 | .016 | .002 | |
| 02/26/03-03/05/03 | 432.5 | 03/12/03 | .011 | .001 | |
| 03/05/03-03/12/03 | 440.9 | 03/21/03 | .015 | .002 | |
| 03/12/03-03/19/03 | 422.4 | 03/25/03 | .005 | .001 | |
| 03/19/03-03/26/03 | 443.7 | 04/09/03 | .009 | .001 | |
| 03/26/03-04/02/03 | 438.2 | 04/09/03 | .011 | .001 | |
| 04/02/03-04/09/03 | 443.3 | 04/23/03 | .007 | .001 | |
| 04/09/03-04/16/03 | 412.1 | 05/03/03 | .008 | .001 | |
| 04/16/03-04/23/03 | 356.5 | 05/03/03 | .014 | .002 | |
| 04/23/03-04/30/03 | 372.7 | 05/10/03 | .007 | .001 | |
| 04/30/03-05/07/03 | 386.1 | 06/07/03 | .008 | .001 | |
| 05/07/03-05/14/03 | 390.5 | 06/07/03 | .012 | .001 | |
| 05/14/03-05/21/03 | 396.5 | 06/09/03 | .017 | .002 | |
| 05/21/03-05/28/03 | 397.9 | 06/10/03 | .006 | .001 | |
| 05/28/03-06/04/03 | 378.1 | 06/23/03 | .007 | .001 | |
| 06/04/03-06/11/03 | 399.7 | 06/26/03 | .013 | .002 | |
| 06/11/03-06/18/03 | 337.5 | 06/27/03 | .008 | .001 | |
| 06/18/03-06/25/03 | 430.2 | 07/02/03 | .005 | .001 | |
| 06/25/03-07/02/03 | 451.8 | 07/11/03 | .009 | .001 | |
| 07/02/03-07/09/03 | 452.8 | 07/15/03 | .006 | .001 | |
| 07/09/03-07/16/03 | 473.8 | 08/07/03 | .005 | .001 | |
| 07/16/03-07/23/03 | 369.3 | 08/08/03 | .004 | .001 | |
| 07/23/03-07/30/03 | 386.9 | 08/15/03 | .008 | .001 | |
| 07/30/03-08/06/03 | 339.0 | 08/15/03 | .011 | .002 | |
| 08/06/03-08/13/03 | 398.0 | 08/21/03 | .007 | .001 | |
| 08/13/03-08/20/03 | 396.9 | 08/27/03 | .007 | .001 | |
| 08/20/03-08/27/03 | 369.8 | 09/06/03 | .009 | .001 | |
| 08/27/03-09/03/03 | 456.6 | 09/10/03 | .008 | .001 | |
| 09/03/03-09/10/03 | 439.4 | 09/16/03 | .014 | .002 | |
| 09/10/03-09/17/03 | 498.5 | 10/02/03 | .012 | .001 | |

Table B-3 (Continued)

**Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station 8S2 (pCi/m³)**

| Collection Period | Volume (m³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|--------------------------|-------------------------------|----------------------|----------------------------|---------------|-------------------|
| 09/17/03-09/24/03 | 447.1 | 10/03/03 | .013 | .002 | |
| 09/24/03-10/01/03 | 439.7 | 10/10/03 | .016 | .002 | |
| 10/01/03-10/08/03 | 444.5 | 10/15/03 | .013 | .002 | |
| 10/08/03-10/15/03 | 456.8 | 11/04/03 | .014 | .002 | |
| 10/15/03-10/22/03 | 468.3 | 11/05/03 | .014 | .002 | |
| 10/22/03-10/29/03 | 425.5 | 11/10/03 | .047 | .005 | |
| 10/29/03-11/05/03 | 443.8 | 11/11/03 | .011 | .001 | |
| 11/05/03-11/12/03 | 434.4 | 11/18/03 | .012 | .002 | |
| 11/12/03-11/19/03 | 428.4 ¹ | 12/10/03 | .013 | .002 | |
| 11/19/03-11/26/03 | 427.1 ¹ | 12/15/03 | .017 | .002 | |
| 11/26/03-12/03/03 | 426.1 ¹ | 12/16/03 | .020 | .002 | |
| 12/03/03-12/10/03 | 429.2 ¹ | 12/19/03 | .010 | .001 | |
| 12/10/03-12/17/03 | 428.1 ¹ | 12/23/03 | .007 | .001 | |
| 12/17/03-12/24/03 | 425.6 ¹ | 12/31/03 | .017 | .002 | |
| 12/24/03-12/31/03 | 432.2 ¹ | 01/07/04 | .009 | .001 | |

Gamma Activity on Filter Composites

| Collection Period | Counting Date | Concentration (pCi/m³) |
|--------------------------|----------------------|--|
| 12/31/02-04/02/03 | 5/5/2003 | ND |
| 04/02/03-07/02/03 | 7/16/2003 | ND |
| 07/02/03-10/01/03 | 10/28/2003 | ND |
| 10/01/03-12/31/03 | 2/20/2004 | ND |

Table Notation:

ND: Radionuclides of interest other than naturally occurring were not detected.

¹ Volume determined using flow rate and timer value.

Table B-3 (Continued)

Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station MT1 (pCi/m³)

| Collection Period | Volume (m ³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|-------------------|--------------------------|---------------|---------------------|--------|---------------|
| 12/31/02-01/08/03 | 502.3 | 01/23/03 | .018 | .002 | |
| 01/08/03-01/15/03 | 447.6 | 01/24/03 | .018 | .002 | |
| 01/15/03-01/22/03 | 443.9 | 02/03/03 | .036 | .004 | |
| 01/22/03-01/29/03 | 457.5 | 02/03/03 | .015 | .002 | |
| 01/29/03-02/05/03 | 446.1 | 02/28/03 | .014 | .002 | |
| 02/05/03-02/12/03 | 475.5 | 03/01/03 | .024 | .002 | I-131: 1.8E-2 |
| 02/12/03-02/19/03 | 470.0 | 03/01/03 | .008 | .001 | |
| 02/19/03-02/26/03 | 475.3 | 03/10/03 | .016 | .002 | |
| 02/26/03-03/05/03 | 470.9 | 03/12/03 | .011 | .001 | |
| 03/05/03-03/12/03 | 486.8 | 03/21/03 | .017 | .002 | |
| 03/12/03-03/19/03 | 466.7 | 03/24/03 | .006 | .001 | |
| 03/19/03-03/26/03 | 479.0 | 04/08/03 | .008 | .001 | |
| 03/26/03-04/02/03 | 493.0 | 04/09/03 | .011 | .001 | |
| 04/02/03-04/09/03 | 479.3 | 04/22/03 | .007 | .001 | |
| 04/09/03-04/16/03 | 469.3 | 05/03/03 | .010 | .001 | |
| 04/16/03-04/23/03 | 481.0 | 05/03/03 | .010 | .001 | |
| 04/23/03-04/30/03 | 469.0 | 05/10/03 | .005 | .001 | |
| 04/30/03-05/07/03 | 496.0 | 06/07/03 | .015 | .002 | |
| 05/07/03-05/14/03 | 506.1 | 06/07/03 | .013 | .001 | |
| 05/14/03-05/21/03 | 469.6 | 06/09/03 | .011 | .001 | |
| 05/21/03-05/28/03 | 490.6 | 06/10/03 | .006 | .001 | |
| 05/28/03-06/04/03 | 450.9 | 06/23/03 | .011 | .001 | |
| 06/04/03-06/11/03 | 464.0 | 06/26/03 | .010 | .001 | |
| 06/11/03-06/18/03 | 459.7 | 06/27/03 | .007 | .001 | |
| 06/18/03-06/25/03 | 456.7 | 07/02/03 | .004 | .001 | |
| 06/25/03-07/02/03 | 454.6 | 07/10/03 | .009 | .001 | |
| 07/02/03-07/09/03 | 452.7 | 07/14/03 | .006 | .001 | |
| 07/09/03-07/16/03 | 458.2 | 08/06/03 | .008 | .001 | |
| 07/16/03-07/23/03 | 456.8 | 08/07/03 | .007 | .001 | |
| 07/23/03-07/30/03 | 465.1 | 08/14/03 | .008 | .001 | |
| 07/30/03-08/06/03 | 455.2 | 08/15/03 | .006 | .001 | |
| 08/06/03-08/13/03 | 462.6 | 08/21/03 | .010 | .001 | |
| 08/13/03-08/20/03 | 475.6 | 08/26/03 | .007 | .001 | |
| 08/20/03-08/27/03 | 463.8 | 09/06/03 | .008 | .001 | |
| 08/27/03-09/03/03 | 463.1 | 09/09/03 | .009 | .001 | |
| 09/03/03-09/10/03 | 458.9 | 09/15/03 | .012 | .001 | |
| 09/10/03-09/17/03 | 456.7 | 10/02/03 | .010 | .001 | |

Table B-3 (Continued)

**Diablo Canyon Power Plant 2003 Annual Report
Airborne Radioactivity
Station MT1 (pCi/m³)**

| Collection Period | Volume (m ³) | Counting Date | Gross Beta Activity | 2Sigma | Gamma Scan |
|-------------------|--------------------------|---------------|---------------------|--------|------------|
| 09/17/03-09/24/03 | 459.3 | 10/03/03 | .012 | .001 | |
| 09/24/03-10/01/03 | 466.1 | 10/10/03 | .015 | .002 | |
| 10/01/03-10/08/03 | 461.4 | 10/15/03 | .014 | .002 | |
| 10/08/03-10/15/03 | 461.2 | 11/04/03 | .014 | .002 | |
| 10/15/03-10/22/03 | 468.4 | 11/05/03 | .012 | .002 | |
| 10/22/03-10/29/03 | 448.1 | 11/10/03 | .041 | .004 | |
| 10/29/03-11/05/03 | 472.1 | 11/11/03 | .011 | .001 | |
| 11/05/03-11/12/03 | 462.6 | 11/18/03 | .012 | .001 | |
| 11/12/03-11/19/03 | 430.4 ¹ | 12/10/03 | .015 | .002 | |
| 11/19/03-11/26/03 | 427.1 ¹ | 12/15/03 | .016 | .002 | |
| 11/26/03-12/03/03 | 433.0 ¹ | 12/16/03 | .021 | .002 | |
| 12/03/03-12/10/03 | 421.8 ¹ | 12/18/03 | .010 | .001 | |
| 12/10/03-12/17/03 | 428.9 ¹ | 12/22/03 | .008 | .001 | |
| 12/17/03-12/24/03 | 423.8 ¹ | 12/30/03 | .014 | .002 | |
| 12/24/03-12/31/03 | 433.2 ¹ | 01/07/04 | .009 | .001 | |

Gamma Activity on Filter Composites

| Collection Period | Counting | | Concentration (pCi/m ³) |
|-------------------|------------|---------|--|
| | Date | Nuclide | |
| 12/31/02-04/02/03 | 5/5/2003 | ND | |
| 04/02/03-07/02/03 | 7/15/2003 | ND | |
| 07/02/03-10/01/03 | 10/27/2003 | ND | |
| 10/01/03-12/31/03 | 2/2/2004 | ND | |

Table Notation:

ND: Radionuclides of interest other than naturally occurring were not detected.

¹ Volume determined using flow rate and timer value.

Table B-4
Diablo Canyon Power Plan 2003 Annual Report
Environmental Doismetry

| Station | Quarterly Total (mR) ^(a) $\pm 1\sigma$ | | | | Annual Total | Quarterly Avg | $\pm 2\sigma$ |
|---------|---|----------------|----------------|----------------|--------------|---------------|---------------|
| | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | | | |
| MT1 | 21.5 \pm 0.7 | 21.0 \pm 0.6 | 20.8 \pm 0.6 | 21.9 \pm 0.9 | 85.2 | 21.3 | 1.0 |
| WN1 | 12.4 \pm 0.3 | 12.4 \pm 0.5 | 12.1 \pm 0.3 | 12.6 \pm 0.3 | 49.5 | 12.4 | 0.4 |
| OS1 | 20.3 \pm 0.9 | 19.5 \pm 0.5 | 19.3 \pm 0.5 | 20.0 \pm 0.3 | 79.1 | 19.8 | 0.9 |
| 5S1 | 23.2 \pm 0.7 | 23.6 \pm 0.5 | 23.5 \pm 0.7 | 23.5 \pm 0.9 | 93.8 | 23.5 | 0.3 |
| 6S1 | 13.9 \pm 0.5 | 13.4 \pm 0.2 | 14.0 \pm 0.3 | 14.1 \pm 0.5 | 55.4 | 13.9 | 0.6 |
| 8S1 | 16.5 \pm 0.3 | 16.7 \pm 0.4 | 16.3 \pm 0.4 | 16.7 \pm 0.4 | 66.2 | 16.6 | 0.4 |
| 8S2 | 21.2 \pm 0.5 | 20.4 \pm 0.5 | 20.5 \pm 0.3 | 20.9 \pm 0.5 | 83.0 | 20.8 | 0.7 |
| 5S3 | 18.3 \pm 0.5 | 18.3 \pm 0.6 | 19.1 \pm 0.4 | 19.0 \pm 0.6 | 74.7 | 18.7 | 0.9 |
| 2D1 | 12.7 \pm 0.2 | 11.8 \pm 0.6 | 11.7 \pm 0.4 | 12.2 \pm 0.3 | 48.4 | 12.1 | 0.9 |
| 4D1 | 12.1 \pm 0.4 | 11.7 \pm 0.3 | 12.1 \pm 1.1 | 12.1 \pm 0.4 | 48.0 | 12.0 | 0.4 |
| 5F1 | 19.8 \pm 1.8 | 16.8 \pm 0.4 | 17.1 \pm 0.5 | 17.9 \pm 0.6 | 71.6 | 17.9 | 2.7 |
| 1A1 | 12.1 \pm 0.4 | 11.7 \pm 0.3 | 11.8 \pm 0.2 | 12.0 \pm 0.3 | 47.6 | 11.9 | 0.4 |
| 7D2 | 15.8 \pm 0.3 | 16.6 \pm 0.4 | 16.8 \pm 0.4 | 16.8 \pm 0.6 | 66.0 | 16.5 | 1.0 |
| 7G2 | 17.1 \pm 0.8 | 16.8 \pm 0.6 | 16.9 \pm 0.5 | 17.4 \pm 0.3 | 68.2 | 17.1 | 0.5 |
| 7C1 | 17.6 \pm 0.3 | 18.1 \pm 0.6 | 17.8 \pm 0.3 | 17.9 \pm 0.6 | 71.4 | 17.9 | 0.4 |
| 7F1 | 17.2 \pm 0.5 | 16.7 \pm 0.5 | 16.7 \pm 0.6 | 17.5 \pm 0.6 | 68.1 | 17.0 | 0.8 |
| OB1 | 10.1 \pm 0.3 | 9.6 \pm 0.3 | 9.8 \pm 0.3 | 10.5 \pm 0.3 | 40.0 | 10.0 | 0.8 |
| 7D1 | 11.7 \pm 0.2 | 11.2 \pm 0.4 | 11.6 \pm 0.4 | 11.7 \pm 0.4 | 46.2 | 11.6 | 0.5 |
| 4C1 | 10.7 \pm 0.4 | 10.6 \pm 0.5 | 11.0 \pm 0.3 | 11.0 \pm 0.5 | 43.3 | 10.8 | 0.4 |
| OS2 | 17.6 \pm 0.5 | 16.4 \pm 0.5 | 17.3 \pm 0.6 | 17.7 \pm 0.5 | 69.0 | 17.3 | 1.2 |
| 1S1 | 16.4 \pm 0.6 | 16.2 \pm 0.4 | 16.1 \pm 0.5 | 16.3 \pm 0.4 | 65.0 | 16.3 | 0.3 |
| 2S1 | 16.8 \pm 0.6 | 16.7 \pm 0.6 | 16.8 \pm 0.5 | 17.0 \pm 0.5 | 67.3 | 16.8 | 0.3 |
| 3S1 | 20.6 \pm 0.4 | 20.9 \pm 0.7 | 21.7 \pm 0.6 | 21.2 \pm 0.5 | 84.4 | 21.1 | 0.9 |
| 4S1 | 18.6 \pm 0.4 | 18.1 \pm 0.7 | 19.5 \pm 0.4 | 19.3 \pm 0.6 | 75.5 | 18.9 | 1.3 |
| 7S1 | 18.3 \pm 0.4 | 17.8 \pm 0.6 | 18.4 \pm 0.5 | 18.6 \pm 0.5 | 73.1 | 18.3 | 0.7 |
| 9S1 | 22.3 \pm 0.7 | 21.8 \pm 1.0 | 22.9 \pm 0.7 | 22.5 \pm 0.4 | 89.5 | 22.4 | 0.9 |
| 1C1 | 13.4 \pm 0.3 | 13.1 \pm 0.4 | 13.2 \pm 0.6 | 13.6 \pm 0.4 | 53.3 | 13.3 | 0.4 |
| 5C1 | 16.0 \pm 0.5 | 15.4 \pm 0.4 | 16.4 \pm 0.3 | 15.7 \pm 0.5 | 63.5 | 15.9 | 0.9 |
| 3D1 | 12.8 \pm 0.3 | 12.5 \pm 0.3 | 12.5 \pm 0.3 | 13.2 \pm 0.5 | 51.0 | 12.8 | 0.7 |
| 6D1 | 15.3 \pm 0.5 | 13.2 \pm 0.4 | 14.2 \pm 0.5 | 14.6 \pm 1.5 | 57.3 | 14.3 | 1.8 |
| 5F3 | 21.6 \pm 0.5 | 16.7 \pm 0.5 | 16.4 \pm 0.5 | 17.2 \pm 0.4 | 71.9 | 18.0 | 4.9 |

Table Notation:

^(a) The exposure (mR) has been normalized for a standard quarter (i.e., for a 90-day period).

Table B-5
Land Use Census 2003

**Distance in Kilometers (and Miles) from the Unit 1 Center Line to the
Nearest Milk Animal, Residence, and Vegetable Garden**

| 22½ Degree ^(a) Radial Sector | Nearest Milk Animal | Nearest Residence km (mi) | Residence Azimuth Degree | Nearest Vegetable Garden km (mi) |
|--|--------------------------------|--|---|---|
| NW | None | 1.93 (1.2) | 319.5 | None |
| NNW | None | 2.41 (1.5) ^(b) | 331 | None |
| N | None | None | — | None |
| NNE | None | 5.21 (3.2) | 019.8 | None |
| NE | None | 7.89 (4.9) | 036 | None |
| ENE | None | 7.08 (4.4) | 063.5 | None |
| E | None | 5.95 (3.7) | 097.5 | 7.24 (4.5) ^(c) |
| ESE | None | None | — | 5.31 (3.3) ^(d) |
| SE | None | None | — | None |

Table Notation:

- ^(a) Sectors not shown contain no land (other than islets not used for the purposes indicated in this table) beyond the site boundary.
- ^(b) This residence will remain as full-time residence for critical receptor calculations even though actual occupation is part-time. Reason is for conservative approach.
- ^(c) The vegetable garden located in the East sector is located at the 098 azimuth degree. There is also a full time residence at this location.
- ^(d) The vegetable garden indicated is the commercial farm along the westward side of the site access road; however, it does not produce broadleaf vegetation.

Table B-6

**Diablo Canyon Power Plant 2003 Annual Report
Lower Limits of Detection (LLD) Exceeded***

| Sample | Station No. | Date Collected | ¹³¹I** |
|----------------|--------------------|-----------------------|--------------------------|
| Drinking Water | DW1 | 02/25/03 | 2.9E0 |

Table Notation:

* Table lists all samples for which the lower limits of detection did not meet the values on Table 3.

** Results are reported in pCi/L for liquids; in pCi/m³, for iodine cartridges; and pCi/kg, for fish and food crops.

Table B-7

**Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed**

| Sample No. | Description | Station No. | Collection Date |
|-------------------|-----------------------------------|--------------------|------------------------|
| 03A00 | Vegetative Greens (Cabbage) | 7G1 | 1/2/2003 |
| 03A01 | Vegetative Greens (Peppers) | 5F2 | 1/2/2003 |
| 03A12 | Air Particulate, Iodine Cartridge | MT1 | 1/8/2003 |
| 03A13 | Air Particulate, Iodine Cartridge | 5F1 | 1/8/2003 |
| 03A14 | Air Particulate, Iodine Cartridge | 7D1 | 1/8/2003 |
| 03A15 | Air Particulate, Iodine Cartridge | 8S1 | 1/8/2003 |
| 03A16 | Air Particulate, Iodine Cartridge | 8S2 | 1/8/2003 |
| 03A17 | Air Particulate, Iodine Cartridge | 0S2 | 1/8/2003 |
| 03A18 | Air Particulate, Iodine Cartridge | 1S1 | 1/8/2003 |
| 03A21 | Air Particulate, Iodine Cartridge | MT1 | 1/15/2003 |
| 03A22 | Air Particulate, Iodine Cartridge | 5F1 | 1/15/2003 |
| 03A23 | Air Particulate, Iodine Cartridge | 7D1 | 1/15/2003 |
| 03A24 | Air Particulate, Iodine Cartridge | 8S1 | 1/15/2003 |
| 03A25 | Air Particulate, Iodine Cartridge | 8S2 | 1/15/2003 |
| 03A26 | Air Particulate, Iodine Cartridge | 0S2 | 1/15/2003 |
| 03A27 | Air Particulate, Iodine Cartridge | 1S1 | 1/15/2003 |
| 03A30 | Surface Water (Outfall) | OUT | 1/23/2003 |
| 03A31 | Drinking Water | 5S2 | 1/23/2003 |
| 03A32 | Drinking Water | DW1 | 1/23/2003 |
| 03A33 | Milk | 5F2 | 1/23/2003 |
| 03A36 | Air Particulate, Iodine Cartridge | MT1 | 1/22/2003 |
| 03A37 | Air Particulate, Iodine Cartridge | 5F1 | 1/22/2003 |
| 03A38 | Air Particulate, Iodine Cartridge | 7D1 | 1/22/2003 |
| 03A39 | Air Particulate, Iodine Cartridge | 8S1 | 1/22/2003 |
| 03A40 | Air Particulate, Iodine Cartridge | 8S2 | 1/22/2003 |
| 03A41 | Air Particulate, Iodine Cartridge | 0S2 | 1/22/2003 |
| 03A42 | Air Particulate, Iodine Cartridge | 1S1 | 1/22/2003 |
| 03A45 | Air Particulate, Iodine Cartridge | MT1 | 1/29/2003 |
| 03A46 | Air Particulate, Iodine Cartridge | 5F1 | 1/29/2003 |
| 03A47 | Air Particulate, Iodine Cartridge | 7D1 | 1/29/2003 |
| 03A48 | Air Particulate, Iodine Cartridge | 8S1 | 1/29/2003 |
| 03A49 | Air Particulate, Iodine Cartridge | 8S2 | 1/29/2003 |
| 03A50 | Air Particulate, Iodine Cartridge | 0S2 | 1/29/2003 |
| 03A51 | Air Particulate, Iodine Cartridge | 1S1 | 1/29/2003 |
| 03A52 | Surface Water (Seawater) | DCM | 1/29/2003 |
| 03A53 | Surface Water (Seawater) | 7C2 | 1/29/2003 |
| 03A54 | Vegetative Greens (Snow Peas) | 7C1 | 1/30/2003 |
| 03A57 | California Mussel | PON | 1/30/2003 |
| 03A58 | Vegetative Greens (Cabbage) | 7G1 | 2/4/2003 |
| 03A59 | Air Particulate, Iodine Cartridge | MT1 | 2/5/2003 |

Table B-7 (Continued)
Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

| Sample No. | Description | Station No. | Collection Date |
|------------|-----------------------------------|-------------|-----------------|
| 03A60 | Air Particulate, Iodine Cartridge | 5F1 | 2/5/2003 |
| 03A61 | Air Particulate, Iodine Cartridge | 7D1 | 2/5/2003 |
| 03A62 | Air Particulate, Iodine Cartridge | 8S1 | 2/5/2003 |
| 03A63 | Air Particulate, Iodine Cartridge | 8S2 | 2/5/2003 |
| 03A64 | Air Particulate, Iodine Cartridge | 0S2 | 2/5/2003 |
| 03A65 | Air Particulate, Iodine Cartridge | 1S1 | 2/5/2003 |
| 03A71 | Sand (Cayucos Beach) | | 2/20/2003 |
| 03A72 | Sand (Moonstone Beach Cambria) | | 2/20/2003 |
| 03A73 | Sand (San Simeon Beach) | | 2/20/2003 |
| 03A74 | Sand (Avila Beach) | | 2/20/2003 |
| 03A76 | Air Particulate, Iodine Cartridge | MT1 | 2/12/2003 |
| 03A77 | Air Particulate, Iodine Cartridge | 5F1 | 2/12/2003 |
| 03A78 | Air Particulate, Iodine Cartridge | 7D1 | 2/12/2003 |
| 03A79 | Air Particulate, Iodine Cartridge | 8S1 | 2/12/2003 |
| 03A80 | Air Particulate, Iodine Cartridge | 8S2 | 2/12/2003 |
| 03A81 | Air Particulate, Iodine Cartridge | 0S2 | 2/12/2003 |
| 03A82 | Air Particulate, Iodine Cartridge | 1S1 | 2/12/2003 |
| 03A83 | Air Particulate, Iodine Cartridge | MT1 | 2/19/2003 |
| 03A84 | Air Particulate, Iodine Cartridge | 5F1 | 2/19/2003 |
| 03A85 | Air Particulate, Iodine Cartridge | 7D1 | 2/19/2003 |
| 03A86 | Air Particulate, Iodine Cartridge | 8S1 | 2/19/2003 |
| 03A87 | Air Particulate, Iodine Cartridge | 8S2 | 2/19/2003 |
| 03A88 | Air Particulate, Iodine Cartridge | 0S2 | 2/19/2003 |
| 03A89 | Air Particulate, Iodine Cartridge | 1S1 | 2/19/2003 |
| 03A90 | Perch | PON | 2/4/2003 |
| 03A91 | Rockfish | PON | 2/4/2003 |
| 03A92 | Perch | DCM | 2/6/2003 |
| 03A93 | Rockfish | DCM | 2/6/2003 |
| 03A94 | Perch | POS | 2/20/2003 |
| 03A95 | Rockfish | POS | 2/20/2003 |
| 03A96 | Perch | 7C2 | 2/6/2003 |
| 03A97 | Rockfish | 7C2 | 2/6/2003 |
| 03B04 | Vegetative Greens (Snow Peas) | 7C1 | 2/25/2003 |
| 03B05 | Surface Water (Outfall) | OUT | 2/25/2003 |
| 03B06 | Drinking Water | 5S2 | 2/25/2003 |
| 03B07 | Drinking Water | DW1 | 2/25/2003 |
| 03B08 | Milk | 5F2 | 2/25/2003 |
| 03B11 | Air Particulate, Iodine Cartridge | MT1 | 2/26/2003 |
| 03B12 | Air Particulate, Iodine Cartridge | 5F1 | 2/26/2003 |
| 03B13 | Air Particulate, Iodine Cartridge | 7D1 | 2/26/2003 |

Table B-7 (Continued)
Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

| Sample No. | Description | Station No. | Collection Date |
|-------------------|-----------------------------------|--------------------|------------------------|
| 03B14 | Air Particulate, Iodine Cartridge | 8S1 | 2/26/2003 |
| 03B15 | Air Particulate, Iodine Cartridge | 8S2 | 2/26/2003 |
| 03B16 | Air Particulate, Iodine Cartridge | 0S2 | 2/26/2003 |
| 03B17 | Air Particulate, Iodine Cartridge | 1S1 | 2/26/2003 |
| 03B27 | Market Fish (Cod) | 7D3 | 2/26/2003 |
| 03B28 | California Mussel | 7C2 | 2/26/2003 |
| 03B29 | Intertidal Algae (Iridaea) | 7C2 | 2/26/2003 |
| 03B30 | Surface Water (Seawater) | DCM | 3/3/2003 |
| 03B31 | Surface Water (Seawater) | 7C2 | 3/3/2003 |
| 03B51 | Air Particulate, Iodine Cartridge | MT1 | 3/5/2003 |
| 03B52 | Air Particulate, Iodine Cartridge | 5F1 | 3/5/2003 |
| 03B53 | Air Particulate, Iodine Cartridge | 7D1 | 3/5/2003 |
| 03B54 | Air Particulate, Iodine Cartridge | 8S1 | 3/5/2003 |
| 03B55 | Air Particulate, Iodine Cartridge | 8S2 | 3/5/2003 |
| 03B56 | Air Particulate, Iodine Cartridge | 0S2 | 3/5/2003 |
| 03B57 | Air Particulate, Iodine Cartridge | 1S1 | 3/5/2003 |
| 03B60 | Air Particulate, Iodine Cartridge | MT1 | 3/12/2003 |
| 03B61 | Air Particulate, Iodine Cartridge | 5F1 | 3/12/2003 |
| 03B62 | Air Particulate, Iodine Cartridge | 7D1 | 3/12/2003 |
| 03B63 | Air Particulate, Iodine Cartridge | 8S1 | 3/12/2003 |
| 03B64 | Air Particulate, Iodine Cartridge | 8S2 | 3/12/2003 |
| 03B65 | Air Particulate, Iodine Cartridge | 0S2 | 3/12/2003 |
| 03B66 | Air Particulate, Iodine Cartridge | 1S1 | 3/12/2003 |
| 03B67 | Vegetative Greens (Bok Choy) | 7G1 | 3/11/2003 |
| 03B68 | Vegetative Greens (Snow Peas) | 7C1 | 3/12/2003 |
| 03B70 | California Mussel | DCM | 3/13/2003 |
| 03B71 | Intertidal Algae (Iridaea) | DCM | 3/13/2003 |
| 03B72 | California Mussel | POS | 3/13/2003 |
| 03B73 | Milk | 5F2 | 3/18/2003 |
| 03B75 | Surface Water (Outfall) | OUT | 3/19/2003 |
| 03B76 | Drinking Water | 5S2 | 3/19/2003 |
| 03B77 | Drinking Water | DW1 | 3/19/2003 |
| 03B78 | Air Particulate, Iodine Cartridge | MT1 | 3/19/2003 |
| 03B79 | Air Particulate, Iodine Cartridge | 5F1 | 3/19/2003 |
| 03B80 | Air Particulate, Iodine Cartridge | 7D1 | 3/19/2003 |
| 03B81 | Air Particulate, Iodine Cartridge | 8S1 | 3/19/2003 |
| 03B82 | Air Particulate, Iodine Cartridge | 8S2 | 3/19/2003 |
| 03B83 | Air Particulate, Iodine Cartridge | 0S2 | 3/19/2003 |
| 03B84 | Air Particulate, Iodine Cartridge | 1S1 | 3/19/2003 |
| 03C16 | Surface Water (Seawater) | DCM | 3/27/2003 |

Table B-7 (Continued)

**Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed**

| Sample No. | Description | Station No. | Collection Date |
|-------------------|-----------------------------------|--------------------|------------------------|
| 03C17 | Surface Water (Seawater) | 7C2 | 3/27/2003 |
| 03C19 | Vegetative Greens (Cabbage) | 5F2 | 3/28/2003 |
| 03C20 | Vegetative Greens (Rosemary) | 6C1 | 3/28/2003 |
| 03C21 | Air Particulate, Iodine Cartridge | MT1 | 3/26/2003 |
| 03C22 | Air Particulate, Iodine Cartridge | 5F1 | 3/26/2003 |
| 03C23 | Air Particulate, Iodine Cartridge | 7D1 | 3/26/2003 |
| 03C24 | Air Particulate, Iodine Cartridge | 8S1 | 3/26/2003 |
| 03C25 | Air Particulate, Iodine Cartridge | 8S2 | 3/26/2003 |
| 03C26 | Air Particulate, Iodine Cartridge | 0S2 | 3/26/2003 |
| 03C27 | Air Particulate, Iodine Cartridge | 1S1 | 3/26/2003 |
| 03C28 | Giant Kelp Blade | DCM | 3/31/2003 |
| 03C29 | Giant Kelp Pneumatocyst | DCM | 3/31/2003 |
| 03C30 | Bull Kelp Blade | POS | 3/31/2003 |
| 03C31 | Bull Kelp Pneumatocyst | POS | 3/31/2003 |
| 03C32 | Bull Kelp Blade | 7C2 | 3/27/2003 |
| 03C33 | Bull Kelp Pneumatocyst | 7C2 | 3/27/2003 |
| 03C34 | Bull Kelp Blade | PON | 3/31/2003 |
| 03C35 | Bull Kelp Pneumatocyst | PON | 3/31/2003 |
| 03C38 | Air Particulate, Iodine Cartridge | MT1 | 4/2/2003 |
| 03C39 | Air Particulate, Iodine Cartridge | 5F1 | 4/2/2003 |
| 03C40 | Air Particulate, Iodine Cartridge | 7D1 | 4/2/2003 |
| 03C41 | Air Particulate, Iodine Cartridge | 8S1 | 4/2/2003 |
| 03C42 | Air Particulate, Iodine Cartridge | 8S2 | 4/2/2003 |
| 03C43 | Air Particulate, Iodine Cartridge | 0S2 | 4/2/2003 |
| 03C44 | Air Particulate, Iodine Cartridge | 1S1 | 4/2/2003 |
| 03C52 | Air Particulate, Iodine Cartridge | MT1 | 4/9/2003 |
| 03C53 | Air Particulate, Iodine Cartridge | 5F1 | 4/9/2003 |
| 03C54 | Air Particulate, Iodine Cartridge | 7D1 | 4/9/2003 |
| 03C55 | Air Particulate, Iodine Cartridge | 8S1 | 4/9/2003 |
| 03C56 | Air Particulate, Iodine Cartridge | 8S2 | 4/9/2003 |
| 03C57 | Air Particulate, Iodine Cartridge | 0S2 | 4/9/2003 |
| 03C58 | Air Particulate, Iodine Cartridge | 1S1 | 4/9/2003 |
| 03C64 | Vegetative Greens (Peas) | 7C1 | 4/17/2003 |
| 03C65 | Air Particulate, Iodine Cartridge | MT1 | 4/16/2003 |
| 03C66 | Air Particulate, Iodine Cartridge | 5F1 | 4/16/2003 |
| 03C67 | Air Particulate, Iodine Cartridge | 7D1 | 4/16/2003 |
| 03C68 | Air Particulate, Iodine Cartridge | 8S1 | 4/16/2003 |
| 03C69 | Air Particulate, Iodine Cartridge | 8S2 | 4/16/2003 |
| 03C70 | Air Particulate, Iodine Cartridge | 0S2 | 4/16/2003 |
| 03C71 | Air Particulate, Iodine Cartridge | 1S1 | 4/16/2003 |

Table B-7 (Continued)
Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

| Sample No. | Description | Station No. | Collection Date |
|------------|-----------------------------------|-------------|-----------------|
| 03C72 | Vegetative Greens (Cabbage) | 7G1 | 4/21/2003 |
| 03C73 | Vegetative Greens (Cauliflower) | 5F2 | 4/21/2003 |
| 03C74 | Surface Water (Outfall) | OUT | 4/22/2003 |
| 03C75 | Drinking Water | 5S2 | 4/22/2003 |
| 03C76 | Drinking Water | DW1 | 4/22/2003 |
| 03C77 | Milk | 5F2 | 4/22/2003 |
| 03C80 | Air Particulate, Iodine Cartridge | MT1 | 4/23/2003 |
| 03C81 | Air Particulate, Iodine Cartridge | 5F1 | 4/23/2003 |
| 03C82 | Air Particulate, Iodine Cartridge | 7D1 | 4/23/2003 |
| 03C83 | Air Particulate, Iodine Cartridge | 8S1 | 4/23/2003 |
| 03C84 | Air Particulate, Iodine Cartridge | 8S2 | 4/23/2003 |
| 03C85 | Air Particulate, Iodine Cartridge | 0S2 | 4/23/2003 |
| 03C86 | Air Particulate, Iodine Cartridge | 1S1 | 4/23/2003 |
| 03C88 | Surface Water (Seawater) | DCM | 4/28/2003 |
| 03C89 | Surface Water (Seawater) | 7C2 | 4/28/2003 |
| 03C92 | Air Particulate, Iodine Cartridge | MT1 | 4/30/2003 |
| 03C93 | Air Particulate, Iodine Cartridge | 5F1 | 4/30/2003 |
| 03C94 | Air Particulate, Iodine Cartridge | 7D1 | 4/30/2003 |
| 03C95 | Air Particulate, Iodine Cartridge | 8S1 | 4/30/2003 |
| 03C96 | Air Particulate, Iodine Cartridge | 8S2 | 4/30/2003 |
| 03C97 | Air Particulate, Iodine Cartridge | 0S2 | 4/30/2003 |
| 03C98 | Air Particulate, Iodine Cartridge | 1S1 | 4/30/2003 |
| 03D04 | Air Particulate, Iodine Cartridge | MT1 | 5/7/2003 |
| 03D05 | Air Particulate, Iodine Cartridge | 5F1 | 5/7/2003 |
| 03D06 | Air Particulate, Iodine Cartridge | 7D1 | 5/7/2003 |
| 03D07 | Air Particulate, Iodine Cartridge | 8S1 | 5/7/2003 |
| 03D08 | Air Particulate, Iodine Cartridge | 8S2 | 5/7/2003 |
| 03D09 | Air Particulate, Iodine Cartridge | 0S2 | 5/7/2003 |
| 03D10 | Air Particulate, Iodine Cartridge | 1S1 | 5/7/2003 |
| 03D53 | Perch | POS | 5/9/2003 |
| 03D54 | Rockfish | POS | 5/9/2003 |
| 03D55 | Perch | 7C2 | 5/9/2003 |
| 03D56 | Rockfish | 7C2 | 5/9/2003 |
| 03D58 | Air Particulate, Iodine Cartridge | MT1 | 5/28/2003 |
| 03D59 | Air Particulate, Iodine Cartridge | 5F1 | 5/28/2003 |
| 03D60 | Air Particulate, Iodine Cartridge | 7D1 | 5/28/2003 |
| 03D61 | Air Particulate, Iodine Cartridge | 8S1 | 5/28/2003 |
| 03D62 | Air Particulate, Iodine Cartridge | 8S2 | 5/28/2003 |
| 03D63 | Air Particulate, Iodine Cartridge | 0S2 | 5/28/2003 |
| 03D64 | Air Particulate, Iodine Cartridge | 1S1 | 5/28/2003 |

Table B-7 (Continued)
Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

| Sample No. | Description | Station No. | Collection Date |
|------------|-----------------------------------|-------------|-----------------|
| 03D90 | Air Particulate, Iodine Cartridge | MT1 | 6/4/2003 |
| 03D91 | Air Particulate, Iodine Cartridge | 5F1 | 6/4/2003 |
| 03D92 | Air Particulate, Iodine Cartridge | 7D1 | 6/4/2003 |
| 03D93 | Air Particulate, Iodine Cartridge | 8S1 | 6/4/2003 |
| 03D94 | Air Particulate, Iodine Cartridge | 8S2 | 6/4/2003 |
| 03D95 | Air Particulate, Iodine Cartridge | 0S2 | 6/4/2003 |
| 03D96 | Air Particulate, Iodine Cartridge | 1S1 | 6/4/2003 |
| 03D97 | Vegetative Greens (Swiss Chard)) | 5F2 | 6/10/2003 |
| 03D98 | Market Fish (Rex Sole) | 7D3 | 6/10/2003 |
| 03D99 | Market Meat (Beef) | 1A1 | 6/10/2003 |
| 03E00 | California Mussel | DCM | 6/3/2003 |
| 03E01 | Intertidal Algae (Iridaea) | DCM | 6/3/2003 |
| 03E03 | Surface Water (Seawater) | DCM | 6/16/2003 |
| 03E04 | Surface Water (Seawater) | 7C2 | 6/16/2003 |
| 03E05 | Air Particulate, Iodine Cartridge | MT1 | 6/11/2003 |
| 03E06 | Air Particulate, Iodine Cartridge | 5F1 | 6/11/2003 |
| 03E07 | Air Particulate, Iodine Cartridge | 7D1 | 6/11/2003 |
| 03E08 | Air Particulate, Iodine Cartridge | 8S1 | 6/11/2003 |
| 03E09 | Air Particulate, Iodine Cartridge | 8S2 | 6/11/2003 |
| 03E10 | Air Particulate, Iodine Cartridge | 0S2 | 6/11/2003 |
| 03E11 | Air Particulate, Iodine Cartridge | 1S1 | 6/11/2003 |
| 03E12 | Vegetative Greens (Peas) | 7C1 | 6/17/2003 |
| 03E13 | California Mussel | 7C2 | 6/17/2003 |
| 03E14 | Intertidal Algae (Iridaea) | 7C2 | 6/17/2003 |
| 03E15 | California Mussel | POS | 6/16/2003 |
| 03E16 | Giant Kelp Blade | DCM | 6/16/2003 |
| 03E17 | Giant Kelp Pneumatocyst | DCM | 6/16/2003 |
| 03E18 | Bull Kelp Blade | POS | 6/16/2003 |
| 03E19 | Bull Kelp Pneumatocyst | POS | 6/16/2003 |
| 03E20 | Bull Kelp Blade | 7C2 | 6/16/2003 |
| 03E21 | Bull Kelp Pneumatocyst | 7C2 | 6/16/2003 |
| 03E22 | Bull Kelp Blade | PON | 6/16/2003 |
| 03E23 | Bull Kelp Pneumatocyst | PON | 6/16/2003 |
| 03E24 | Iodine Cartridge Blank | | 6/11/2003 |
| 03E36 | Air Particulate, Iodine Cartridge | blk | 6/18/2003 |
| 03E37 | Air Particulate, Iodine Cartridge | MT1 | 6/18/2003 |
| 03E38 | Air Particulate, Iodine Cartridge | 5F1 | 6/18/2003 |
| 03E39 | Air Particulate, Iodine Cartridge | 7D1 | 6/18/2003 |
| 03E40 | Air Particulate, Iodine Cartridge | 8S1 | 6/18/2003 |
| 03E41 | Air Particulate, Iodine Cartridge | 8S2 | 6/18/2003 |

Table B-7 (Continued)
Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

| Sample No. | Description | Station No. | Collection Date |
|------------|---|-------------|-----------------|
| 03E42 | Air Particulate, Iodine Cartridge | 0S2 | 6/18/2003 |
| 03E43 | Air Particulate, Iodine Cartridge | 1S1 | 6/18/2003 |
| 03E59 | Drinking Water | 5S2 | 6/25/2003 |
| 03E60 | Drinking Water | DW1 | 6/25/2003 |
| 03E61 | Milk | 5F2 | 6/25/2003 |
| 03E62 | Surface Water (Outfall) | OUT | 6/25/2003 |
| 03E88 | Air Particulate, Iodine Cartridge | MT1 | 6/25/2003 |
| 03E89 | Air Particulate, Iodine Cartridge | 5F1 | 6/25/2003 |
| 03E90 | Air Particulate, Iodine Cartridge | 7D1 | 6/25/2003 |
| 03E91 | Air Particulate, Iodine Cartridge | 8S1 | 6/25/2003 |
| 03E92 | Air Particulate, Iodine Cartridge | 8S2 | 6/25/2003 |
| 03E93 | Air Particulate, Iodine Cartridge | 0S2 | 6/25/2003 |
| 03E94 | Air Particulate, Iodine Cartridge | 1S1 | 6/25/2003 |
| 03F03 | Vegetative Greens (Lettuce) | 7G1 | 6/27/2003 |
| 03F04 | Perch | PON | 6/25/2003 |
| 03F05 | Rockfish | PON | 6/25/2003 |
| 03F06 | Perch | DCM | 6/25/2003 |
| 03F07 | Rockfish | DCM | 6/25/2003 |
| 03F12 | Air Particulate, Iodine Cartridge Blank | msc | 7/2/2003 |
| 03F13 | Air Particulate, Iodine Cartridge | MT1 | 7/2/2003 |
| 03F14 | Air Particulate, Iodine Cartridge | 5F1 | 7/2/2003 |
| 03F15 | Air Particulate, Iodine Cartridge | 7D1 | 7/2/2003 |
| 03F16 | Air Particulate, Iodine Cartridge | 8S1 | 7/2/2003 |
| 03F17 | Air Particulate, Iodine Cartridge | 8S2 | 7/2/2003 |
| 03F18 | Air Particulate, Iodine Cartridge | 0S2 | 7/2/2003 |
| 03F19 | Air Particulate, Iodine Cartridge | 1S1 | 7/2/2003 |
| 03F20 | Vegetative Greens (Peas) | 7C1 | 7/8/2003 |
| 03F21 | Vegetative Greens (Lettuce) | 7G1 | 7/8/2003 |
| 03F22 | Vegetative Greens (Swiss Chard) | 5F2 | 7/8/2003 |
| 03F23 | Air Particulate, Iodine Cartridge Blank | msc | 7/9/2003 |
| 03F24 | Air Particulate, Iodine Cartridge | MT1 | 7/9/2003 |
| 03F25 | Air Particulate, Iodine Cartridge | 5F1 | 7/9/2003 |
| 03F26 | Air Particulate, Iodine Cartridge | 7D1 | 7/9/2003 |
| 03F27 | Air Particulate, Iodine Cartridge | 8S1 | 7/9/2003 |
| 03F28 | Air Particulate, Iodine Cartridge | 8S2 | 7/9/2003 |
| 03F29 | Air Particulate, Iodine Cartridge | 0S2 | 7/9/2003 |
| 03F30 | Air Particulate, Iodine Cartridge | 1S1 | 7/9/2003 |
| 03F41 | Surface Water (Outfall) | OUT | 7/14/2003 |
| 03F42 | Drinking Water | 5S2 | 7/14/2003 |
| 03F43 | Drinking Water | DW1 | 7/14/2003 |

Table B-7 (Continued)
Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

| Sample No. | Description | Station No. | Collection Date |
|------------|---|-------------|-----------------|
| 03F44 | Milk | 5F2 | 7/14/2003 |
| 03F46 | Air Particulate, Iodine Cartridge Blank | msc | 7/16/2003 |
| 03F47 | Air Particulate, Iodine Cartridge | MT1 | 7/16/2003 |
| 03F48 | Air Particulate, Iodine Cartridge | 5F1 | 7/16/2003 |
| 03F49 | Air Particulate, Iodine Cartridge | 7D1 | 7/16/2003 |
| 03F50 | Air Particulate, Iodine Cartridge | 8S1 | 7/16/2003 |
| 03F51 | Air Particulate, Iodine Cartridge | 8S2 | 7/16/2003 |
| 03F52 | Air Particulate, Iodine Cartridge | 0S2 | 7/16/2003 |
| 03F53 | Air Particulate, Iodine Cartridge | 1S1 | 7/16/2003 |
| 03F69 | Air Particulate, Iodine Cartridge Blank | msc | 7/23/2003 |
| 03F70 | Air Particulate, Iodine Cartridge | MT1 | 7/23/2003 |
| 03F71 | Air Particulate, Iodine Cartridge | 5F1 | 7/23/2003 |
| 03F72 | Air Particulate, Iodine Cartridge | 7D1 | 7/23/2003 |
| 03F73 | Air Particulate, Iodine Cartridge | 8S1 | 7/23/2003 |
| 03F74 | Air Particulate, Iodine Cartridge | 8S2 | 7/23/2003 |
| 03F75 | Air Particulate, Iodine Cartridge | 0S2 | 7/23/2003 |
| 03F76 | Air Particulate, Iodine Cartridge | 1S1 | 7/23/2003 |
| 03F79 | Surface Water (Seawater) | DCM | 7/31/2003 |
| 03F80 | Surface Water (Seawater) | 7C2 | 7/31/2003 |
| 03F81 | Air Particulate, Iodine Cartridge Blank | msc | 7/30/2003 |
| 03F82 | Air Particulate, Iodine Cartridge | MT1 | 7/30/2003 |
| 03F83 | Air Particulate, Iodine Cartridge | 5F1 | 7/30/2003 |
| 03F84 | Air Particulate, Iodine Cartridge | 7D1 | 7/30/2003 |
| 03F85 | Air Particulate, Iodine Cartridge | 8S1 | 7/30/2003 |
| 03F86 | Air Particulate, Iodine Cartridge | 8S2 | 7/30/2003 |
| 03F87 | Air Particulate, Iodine Cartridge | 0S2 | 7/30/2003 |
| 03F88 | Air Particulate, Iodine Cartridge | 1S1 | 7/30/2003 |
| 03F89 | Vegetative Greens (Swiss Chard) | 5F2 | 8/5/2003 |
| 03F90 | Perch | PON | 8/4/2003 |
| 03F91 | Rockfish | PON | 8/4/2003 |
| 03F92 | Perch | POS | 7/24/2003 |
| 03F93 | Rockfish | POS | 7/24/2003 |
| 03F94 | Perch | 7C2 | 7/24/2003 |
| 03F95 | Rockfish | 7C2 | 7/24/2003 |
| 03F97 | Air Particulate, Iodine Cartridge | MT1 | 8/6/2003 |
| 03F98 | Air Particulate, Iodine Cartridge | 5F1 | 8/6/2003 |
| 03F99 | Air Particulate, Iodine Cartridge | 7D1 | 8/6/2003 |
| 03G00 | Air Particulate, Iodine Cartridge | 8S1 | 8/6/2003 |
| 03G01 | Air Particulate, Iodine Cartridge | 8S2 | 8/6/2003 |
| 03G02 | Air Particulate, Iodine Cartridge | 0S2 | 8/6/2003 |

Table B-7 (Continued)

**Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed**

| Sample No. | Description | Station No. | Collection Date |
|-------------------|---|--------------------|------------------------|
| 03G03 | Air Particulate, Iodine Cartridge | 1S1 | 8/6/2003 |
| 03G04 | Air Particulate, Iodine Cartridge Blank | msc | 8/6/2003 |
| 03G05 | Market Fish (Rock Cod) | 7D3 | 8/11/2003 |
| 03G06 | Perch | DCM | 8/5/2003 |
| 03G07 | Rockfish | DCM | 8/5/2003 |
| 03G08 | Air Particulate, Iodine Cartridge Blank | msc | 8/13/2003 |
| 03G09 | Air Particulate, Iodine Cartridge | MT1 | 8/13/2003 |
| 03G10 | Air Particulate, Iodine Cartridge | 5F1 | 8/13/2003 |
| 03G11 | Air Particulate, Iodine Cartridge | 7D1 | 8/13/2003 |
| 03G12 | Air Particulate, Iodine Cartridge | 8S1 | 8/13/2003 |
| 03G13 | Air Particulate, Iodine Cartridge | 8S2 | 8/13/2003 |
| 03G14 | Air Particulate, Iodine Cartridge | 0S2 | 8/13/2003 |
| 03G15 | Air Particulate, Iodine Cartridge | 1S1 | 8/13/2003 |
| 03G20 | Vegetative Greens (Lettuce) | 7G1 | 8/18/2003 |
| 03G21 | California Mussel | DCM | 8/14/2003 |
| 03G22 | Intertidal Algae (Iridaea) | DCM | 8/14/2003 |
| 03G23 | California Mussel | 7C2 | 8/14/2003 |
| 03G24 | Intertidal Algae (Iridaea) | 7C2 | 8/14/2003 |
| 03G25 | California Mussel | POS | 8/14/2003 |
| 03G42 | Drinking Water | 5S2 | 8/19/2003 |
| 03G43 | Drinking Water | DW1 | 8/19/2003 |
| 03G44 | Milk | 5F2 | 8/19/2003 |
| 03G45 | Surface Water (Outfall) | OUT | 8/19/2003 |
| 03G46 | Drinking Water Well #1 | msc | 8/19/2003 |
| 03G47 | Drinking Water Well #2 | msc | 8/19/2003 |
| 03G51 | Air Particulate, Iodine Cartridge Blank | msc | 8/20/2003 |
| 03G52 | Air Particulate, Iodine Cartridge | MT1 | 8/20/2003 |
| 03G53 | Air Particulate, Iodine Cartridge | 5F1 | 8/20/2003 |
| 03G54 | Air Particulate, Iodine Cartridge | 7D1 | 8/20/2003 |
| 03G55 | Air Particulate, Iodine Cartridge | 8S1 | 8/20/2003 |
| 03G56 | Air Particulate, Iodine Cartridge | 8S2 | 8/20/2003 |
| 03G57 | Air Particulate, Iodine Cartridge | 0S2 | 8/20/2003 |
| 03G58 | Air Particulate, Iodine Cartridge | 1S1 | 8/20/2003 |
| 03G60 | Vegetative Greens (Mixed Greens) | 6C1 | 8/22/2003 |
| 03G61 | Surface Water (Seawater) | DCM | 8/25/2003 |
| 03G62 | Surface Water (Seawater) | 7C2 | 8/25/2003 |
| 03G64 | Air Particulate, Iodine Cartridge Blank | msc | 8/27/2003 |
| 03G65 | Air Particulate, Iodine Cartridge | MT1 | 8/27/2003 |
| 03G66 | Air Particulate, Iodine Cartridge | 5F1 | 8/27/2003 |
| 03G67 | Air Particulate, Iodine Cartridge | 7D1 | 8/27/2003 |

Table B-7 (Continued)

**Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed**

| Sample No. | Description | Station No. | Collection Date |
|------------|---|-------------|-----------------|
| 03G68 | Air Particulate, Iodine Cartridge | 8S1 | 8/27/2003 |
| 03G69 | Air Particulate, Iodine Cartridge | 8S2 | 8/27/2003 |
| 03G70 | Air Particulate, Iodine Cartridge | 0S2 | 8/27/2003 |
| 03G71 | Air Particulate, Iodine Cartridge | 1S1 | 8/27/2003 |
| 03G72 | Giant Kelp Blade | DCM | 8/25/2003 |
| 03G73 | Giant Kelp Pneumatocyst | DCM | 8/25/2003 |
| 03G74 | Bull Kelp Blade | POS | 8/25/2003 |
| 03G75 | Bull Kelp Pneumatocyst | POS | 8/25/2003 |
| 03G76 | Bull Kelp Blade | 7C2 | 8/25/2003 |
| 03G77 | Bull Kelp Pneumatocyst | 7C2 | 8/25/2003 |
| 03G78 | Bull Kelp Blade | PON | 8/25/2003 |
| 03G79 | Bull Kelp Pneumatocyst | PON | 8/25/2003 |
| 03G86 | Air Particulate, Iodine Cartridge Blank | msc | 9/3/2003 |
| 03G87 | Air Particulate, Iodine Cartridge | MT1 | 9/3/2003 |
| 03G88 | Air Particulate, Iodine Cartridge | 5F1 | 9/3/2003 |
| 03G89 | Air Particulate, Iodine Cartridge | 7D1 | 9/3/2003 |
| 03G90 | Air Particulate, Iodine Cartridge | 8S1 | 9/3/2003 |
| 03G91 | Air Particulate, Iodine Cartridge | 8S2 | 9/3/2003 |
| 03G92 | Air Particulate, Iodine Cartridge | 0S2 | 9/3/2003 |
| 03G93 | Air Particulate, Iodine Cartridge | 1S1 | 9/3/2003 |
| 03G97 | Surface Water (Outfall) | OUT | 9/11/2003 |
| 03G98 | Drinking Water | 5S2 | 9/11/2003 |
| 03G99 | Drinking Water | DW1 | 9/11/2003 |
| 03H00 | Milk | 5F2 | 9/11/2003 |
| 03H01 | Vegetative Greens (Squash) | 5F2 | 9/11/2003 |
| 03H02 | Air Particulate, Iodine Cartridge Blank | msc | 9/10/2003 |
| 03H03 | Air Particulate, Iodine Cartridge | MT1 | 9/10/2003 |
| 03H04 | Air Particulate, Iodine Cartridge | 5F1 | 9/10/2003 |
| 03H05 | Air Particulate, Iodine Cartridge | 7D1 | 9/10/2003 |
| 03H06 | Air Particulate, Iodine Cartridge | 8S1 | 9/10/2003 |
| 03H07 | Air Particulate, Iodine Cartridge | 8S2 | 9/10/2003 |
| 03H08 | Air Particulate, Iodine Cartridge | 0S2 | 9/10/2003 |
| 03H09 | Air Particulate, Iodine Cartridge | 1S1 | 9/10/2003 |
| 03H11 | Vegetative Greens (Lettuce) | 7G1 | 9/16/2003 |
| 03H12 | Surface Water (Seawater) | DCM | 9/16/2003 |
| 03H13 | Surface Water (Seawater) | 7C2 | 9/16/2003 |
| 03H18 | Air Particulate, Iodine Cartridge Blank | msc | 9/17/2003 |
| 03H19 | Air Particulate, Iodine Cartridge | MT1 | 9/17/2003 |
| 03H20 | Air Particulate, Iodine Cartridge | 5F1 | 9/17/2003 |
| 03H21 | Air Particulate, Iodine Cartridge | 7D1 | 9/17/2003 |

Table B-7 (Continued)
Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

| Sample No. | Description | Station No. | Collection Date |
|------------|---|-------------|-----------------|
| 03H22 | Air Particulate, Iodine Cartridge | 8S1 | 9/17/2003 |
| 03H23 | Air Particulate, Iodine Cartridge | 8S2 | 9/17/2003 |
| 03H24 | Air Particulate, Iodine Cartridge | 0S2 | 9/17/2003 |
| 03H25 | Air Particulate, Iodine Cartridge | 1S1 | 9/17/2003 |
| 03H28 | Air Particulate, Iodine Cartridge Blank | msc | 9/24/2003 |
| 03H29 | Air Particulate, Iodine Cartridge | MT1 | 9/24/2003 |
| 03H30 | Air Particulate, Iodine Cartridge | 5F1 | 9/24/2003 |
| 03H31 | Air Particulate, Iodine Cartridge | 7D1 | 9/24/2003 |
| 03H32 | Air Particulate, Iodine Cartridge | 8S1 | 9/24/2003 |
| 03H33 | Air Particulate, Iodine Cartridge | 8S2 | 9/24/2003 |
| 03H34 | Air Particulate, Iodine Cartridge | 0S2 | 9/24/2003 |
| 03H35 | Air Particulate, Iodine Cartridge | 1S1 | 9/24/2003 |
| 03H36 | Vegetative Greens (Peas) | 7C1 | 9/30/2003 |
| 03H64 | Air Particulate, Iodine Cartridge Blank | msc | 10/1/2003 |
| 03H65 | Air Particulate, Iodine Cartridge | MT1 | 10/1/2003 |
| 03H66 | Air Particulate, Iodine Cartridge | 5F1 | 10/1/2003 |
| 03H67 | Air Particulate, Iodine Cartridge | 7D1 | 10/1/2003 |
| 03H68 | Air Particulate, Iodine Cartridge | 8S1 | 10/1/2003 |
| 03H69 | Air Particulate, Iodine Cartridge | 8S2 | 10/1/2003 |
| 03H70 | Air Particulate, Iodine Cartridge | 0S2 | 10/1/2003 |
| 03H71 | Air Particulate, Iodine Cartridge | 1S1 | 10/1/2003 |
| 03H79 | Air Particulate, Iodine Cartridge Blank | msc | 10/8/2003 |
| 03H80 | Air Particulate, Iodine Cartridge | MT1 | 10/8/2003 |
| 03H81 | Air Particulate, Iodine Cartridge | 5F1 | 10/8/2003 |
| 03H82 | Air Particulate, Iodine Cartridge | 7D1 | 10/8/2003 |
| 03H83 | Air Particulate, Iodine Cartridge | 8S1 | 10/8/2003 |
| 03H84 | Air Particulate, Iodine Cartridge | 8S2 | 10/8/2003 |
| 03H85 | Air Particulate, Iodine Cartridge | 0S2 | 10/8/2003 |
| 03H86 | Air Particulate, Iodine Cartridge | 1S1 | 10/8/2003 |
| 03H89 | Vegetative Greens (Garden Greens) | 6C1 | 10/13/2003 |
| 03H90 | Vegetative Greens (Peppers) | 5F2 | 10/14/2003 |
| 03H91 | Vegetative Greens (Cabbage) | 7G1 | 10/14/2003 |
| 03H92 | Air Particulate, Iodine Cartridge Blank | msc | 10/15/2003 |
| 03H93 | Air Particulate, Iodine Cartridge | MT1 | 10/15/2003 |
| 03H94 | Air Particulate, Iodine Cartridge | 5F1 | 10/15/2003 |
| 03H95 | Air Particulate, Iodine Cartridge | 7D1 | 10/15/2003 |
| 03H96 | Air Particulate, Iodine Cartridge | 8S1 | 10/15/2003 |
| 03H97 | Air Particulate, Iodine Cartridge | 8S2 | 10/15/2003 |
| 03H98 | Air Particulate, Iodine Cartridge | 0S2 | 10/15/2003 |
| 03H99 | Air Particulate, Iodine Cartridge | 1S1 | 10/15/2003 |

Table B-7 (Continued)
Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

| Sample No. | Description | Station No. | Collection Date |
|------------|---|-------------|-----------------|
| 03I21 | Vegetative Greens (Peas) | 7C1 | 10/21/2003 |
| 03I24 | Air Particulate, Iodine Cartridge Blank | msc | 10/22/2003 |
| 03I25 | Air Particulate, Iodine Cartridge | MT1 | 10/22/2003 |
| 03I26 | Air Particulate, Iodine Cartridge | 5F1 | 10/22/2003 |
| 03I27 | Air Particulate, Iodine Cartridge | 7D1 | 10/22/2003 |
| 03I28 | Air Particulate, Iodine Cartridge | 8S1 | 10/22/2003 |
| 03I29 | Air Particulate, Iodine Cartridge | 8S2 | 10/22/2003 |
| 03I30 | Air Particulate, Iodine Cartridge | 0S2 | 10/22/2003 |
| 03I31 | Air Particulate, Iodine Cartridge | 1S1 | 10/22/2003 |
| 03I41 | Surface Water (Seawater) | DCM | 10/28/2003 |
| 03I42 | Surface Water (Seawater) | 7C2 | 10/28/2003 |
| 03I45 | Air Particulate, Iodine Cartridge Blank | msc | 10/29/2003 |
| 03I46 | Air Particulate, Iodine Cartridge | MT1 | 10/29/2003 |
| 03I47 | Air Particulate, Iodine Cartridge | 5F1 | 10/29/2003 |
| 03I48 | Air Particulate, Iodine Cartridge | 7D1 | 10/29/2003 |
| 03I49 | Air Particulate, Iodine Cartridge | 8S1 | 10/29/2003 |
| 03I50 | Air Particulate, Iodine Cartridge | 8S2 | 10/29/2003 |
| 03I51 | Air Particulate, Iodine Cartridge | 0S2 | 10/29/2003 |
| 03I52 | Air Particulate, Iodine Cartridge | 1S1 | 10/29/2003 |
| 03I53 | Surface Water (Outfall) | OUT | 10/31/2003 |
| 03I54 | Drinking Water | 5S2 | 10/31/2003 |
| 03I55 | Drinking Water | DW1 | 10/31/2003 |
| 03I56 | Milk | 5F2 | 10/31/2003 |
| 03I59 | Air Particulate, Iodine Cartridge Blank | msc | 11/5/2003 |
| 03I60 | Air Particulate, Iodine Cartridge | MT1 | 11/5/2003 |
| 03I61 | Air Particulate, Iodine Cartridge | 5F1 | 11/5/2003 |
| 03I62 | Air Particulate, Iodine Cartridge | 7D1 | 11/5/2003 |
| 03I63 | Air Particulate, Iodine Cartridge | 8S1 | 11/5/2003 |
| 03I64 | Air Particulate, Iodine Cartridge | 8S2 | 11/5/2003 |
| 03I65 | Air Particulate, Iodine Cartridge | 0S2 | 11/5/2003 |
| 03I66 | Air Particulate, Iodine Cartridge | 1S1 | 11/5/2003 |
| 03I67 | Vegetative Greens (Bell Peppers) | 5F2 | 11/5/2003 |
| 03I68 | Vegetative Greens (Cabbage) | 7G1 | 11/5/2003 |
| 03I69 | Vegetative Greens (Snow Peas) | 7C1 | 11/5/2003 |
| 03I97 | Air Particulate, Iodine Cartridge Blank | msc | 11/12/2003 |
| 03I98 | Air Particulate, Iodine Cartridge | MT1 | 11/12/2003 |
| 03I99 | Air Particulate, Iodine Cartridge | 5F1 | 11/12/2003 |
| 03J00 | Air Particulate, Iodine Cartridge | 7D1 | 11/12/2003 |
| 03J01 | Air Particulate, Iodine Cartridge | 8S1 | 11/12/2003 |
| 03J02 | Air Particulate, Iodine Cartridge | 8S2 | 11/12/2003 |

Table B-7 (Continued)
Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

| Sample No. | Description | Station No. | Collection Date |
|-------------------|---|--------------------|------------------------|
| 03J03 | Air Particulate, Iodine Cartridge | 0S2 | 11/12/2003 |
| 03J04 | Air Particulate, Iodine Cartridge | 1S1 | 11/12/2003 |
| 03J05 | Market Fish | 7D3 | 11/12/2003 |
| 03J06 | Surface Water (Seawater) | DCM | 11/12/2003 |
| 03J07 | Surface Water (Seawater) | 7C2 | 11/12/2003 |
| 03J15 | Air Particulate, Iodine Cartridge Blank | msc | 11/19/2003 |
| 03J16 | Air Particulate, Iodine Cartridge | MT1 | 11/19/2003 |
| 03J17 | Air Particulate, Iodine Cartridge | 5F1 | 11/19/2003 |
| 03J18 | Air Particulate, Iodine Cartridge | 7D1 | 11/19/2003 |
| 03J19 | Air Particulate, Iodine Cartridge | 8S1 | 11/19/2003 |
| 03J20 | Air Particulate, Iodine Cartridge | 8S2 | 11/19/2003 |
| 03J21 | Air Particulate, Iodine Cartridge | 0S2 | 11/19/2003 |
| 03J22 | Air Particulate, Iodine Cartridge | 1S1 | 11/19/2003 |
| 03J29 | Surface Water (Outfall) | OUT | 11/24/2003 |
| 03J30 | Drinking Water | 5S2 | 11/24/2003 |
| 03J31 | Drinking Water | DW1 | 11/24/2003 |
| 03J32 | Milk | 5F2 | 11/24/2003 |
| 03J36 | Air Particulate, Iodine Cartridge Blank | msc | 11/26/2003 |
| 03J37 | Air Particulate, Iodine Cartridge | MT1 | 11/26/2003 |
| 03J38 | Air Particulate, Iodine Cartridge | 5F1 | 11/26/2003 |
| 03J39 | Air Particulate, Iodine Cartridge | 7D1 | 11/26/2003 |
| 03J40 | Air Particulate, Iodine Cartridge | 8S1 | 11/26/2003 |
| 03J41 | Air Particulate, Iodine Cartridge | 8S2 | 11/26/2003 |
| 03J42 | Air Particulate, Iodine Cartridge | 0S2 | 11/26/2003 |
| 03J43 | Air Particulate, Iodine Cartridge | 1S1 | 11/26/2003 |
| 03J44 | Vegetative Greens (Bell Peppers) | 5F2 | 12/2/2003 |
| 03J45 | Vegetative Greens (Cabbage) | 7G1 | 12/2/2003 |
| 03J46 | Vegetative Greens (Snow Peas) | 7C1 | 12/2/2003 |
| 03J48 | Surface Water (Seawater) | DCM | 12/3/2003 |
| 03J49 | Surface Water (Seawater) | 7C2 | 12/3/2003 |
| 03J50 | Air Particulate, Iodine Cartridge Blank | msc | 12/3/2003 |
| 03J51 | Air Particulate, Iodine Cartridge | MT1 | 12/3/2003 |
| 03J52 | Air Particulate, Iodine Cartridge | 5F1 | 12/3/2003 |
| 03J53 | Air Particulate, Iodine Cartridge | 7D1 | 12/3/2003 |
| 03J54 | Air Particulate, Iodine Cartridge | 8S1 | 12/3/2003 |
| 03J55 | Air Particulate, Iodine Cartridge | 8S2 | 12/3/2003 |
| 03J56 | Air Particulate, Iodine Cartridge | 0S2 | 12/3/2003 |
| 03J57 | Air Particulate, Iodine Cartridge | 1S1 | 12/3/2003 |
| 03J59 | Giant Kelp Blade | DCM | 12/3/2003 |
| 03J60 | Giant Kelp Pneumatocyst | DCM | 12/3/2003 |

Table B-7 (Continued)

Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

| Sample No. | Description | Station No. | Collection Date |
|------------|---|-------------|-----------------|
| 03J61 | Bull Kelp Blade | POS | 12/3/2003 |
| 03J62 | Bull Kelp Pneumatocyst | POS | 12/3/2003 |
| 03J63 | Bull Kelp Blade | 7C2 | 12/3/2003 |
| 03J64 | Bull Kelp Pneumatocyst | 7C2 | 12/3/2003 |
| 03J65 | Bull Kelp Blade | PON | 12/3/2003 |
| 03J66 | Bull Kelp Pneumatocyst | PON | 12/3/2003 |
| 03J67 | Sand (Cayucos Beach) | | 12/5/2003 |
| 03J68 | Sand (Avila Beach, collected by SH) | | 12/8/2003 |
| 03J69 | Sand (Avila Beach, collected by DN) | | 12/8/2003 |
| 03J77 | Air Particulate, Iodine Cartridge Blank | msc | 12/10/2003 |
| 03J78 | Air Particulate, Iodine Cartridge | MT1 | 12/10/2003 |
| 03J79 | Air Particulate, Iodine Cartridge | 5F1 | 12/10/2003 |
| 03J80 | Air Particulate, Iodine Cartridge | 7D1 | 12/10/2003 |
| 03J81 | Air Particulate, Iodine Cartridge | 8S1 | 12/10/2003 |
| 03J82 | Air Particulate, Iodine Cartridge | 8S2 | 12/10/2003 |
| 03J83 | Air Particulate, Iodine Cartridge | 0S2 | 12/10/2003 |
| 03J84 | Air Particulate, Iodine Cartridge | 1S1 | 12/10/2003 |
| 03J86 | California Mussel | DCM | 12/9/2003 |
| 03J87 | Intertidal Algae (Iridaea) | DCM | 12/9/2003 |
| 03J88 | California Mussel | 7C2 | 12/8/2003 |
| 03J89 | Intertidal Algae (Iridaea) | 7C2 | 12/8/2003 |
| 03J90 | California Mussel | POS | 12/8/2003 |
| 03J91 | Surface Water (Outfall) | OUT | 12/16/2003 |
| 03J92 | Drinking Water | 5S2 | 12/16/2003 |
| 03J93 | Drinking Water | DW1 | 12/16/2003 |
| 03J94 | Milk | 5F2 | 12/16/2003 |
| 03J96 | Air Particulate, Iodine Cartridge Blank | msc | 12/17/2003 |
| 03J97 | Air Particulate, Iodine Cartridge | MT1 | 12/17/2003 |
| 03J98 | Air Particulate, Iodine Cartridge | 5F1 | 12/17/2003 |
| 03J99 | Air Particulate, Iodine Cartridge | 7D1 | 12/17/2003 |
| 03K00 | Air Particulate, Iodine Cartridge | 8S1 | 12/17/2003 |
| 03K01 | Air Particulate, Iodine Cartridge | 8S2 | 12/17/2003 |
| 03K02 | Air Particulate, Iodine Cartridge | 0S2 | 12/17/2003 |
| 03K03 | Air Particulate, Iodine Cartridge | 1S1 | 12/17/2003 |
| 03K05 | Air Particulate, Iodine Cartridge Blank | msc | 12/24/2003 |
| 03K06 | Air Particulate, Iodine Cartridge | MT1 | 12/24/2003 |
| 03K07 | Air Particulate, Iodine Cartridge | 5F1 | 12/24/2003 |
| 03K08 | Air Particulate, Iodine Cartridge | 7D1 | 12/24/2003 |
| 03K09 | Air Particulate, Iodine Cartridge | 8S1 | 12/24/2003 |
| 03K10 | Air Particulate, Iodine Cartridge | 8S2 | 12/24/2003 |

Table B-7 (Continued)**Diablo Canyon Power Plant 2003 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed**

| Sample No. | Description | Station No. | Collection Date |
|-------------------|---|--------------------|------------------------|
| 03K11 | Air Particulate, Iodine Cartridge | 0S2 | 12/24/2003 |
| 03K12 | Air Particulate, Iodine Cartridge | 1S1 | 12/24/2003 |
| 03K15 | Air Particulate, Iodine Cartridge Blank | msc | 12/31/2003 |
| 03K16 | Air Particulate, Iodine Cartridge | MT1 | 12/31/2003 |
| 03K17 | Air Particulate, Iodine Cartridge | 5F1 | 12/31/2003 |
| 03K18 | Air Particulate, Iodine Cartridge | 7D1 | 12/31/2003 |
| 03K19 | Air Particulate, Iodine Cartridge | 8S1 | 12/31/2003 |
| 03K20 | Air Particulate, Iodine Cartridge | 8S2 | 12/31/2003 |
| 03K21 | Air Particulate, Iodine Cartridge | 0S2 | 12/31/2003 |
| 03K22 | Air Particulate, Iodine Cartridge | 1S1 | 12/31/2003 |
| 03K31 | Perch | PON | 12/19/2003 |
| 03K32 | Rockfish | PON | 12/19/2003 |
| 03K33 | Perch | DCM | 1/5/2004 |
| 03K34 | Rockfish | DCM | 1/5/2004 |
| 03K35 | Perch | POS | 1/5/2004 |
| 03K36 | Rockfish | POS | 1/5/2004 |