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Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2
2002 Annual Radiological Environmental Operating Report

Dear Commissioners and Staff:

Enclosed is the 2002 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 in 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,


for James R. Becker

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**2002 Annual Radiological
Environmental Operating Report
Diablo Canyon Power Plant**

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April 2003

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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, 2002, through December 31, 2002. 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 2002 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. One of 36 surface water samples contained tritium above the detection levels but the activity detected was well below the reporting level for tritium. No other 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. Three out of 91 marine samples contained other than naturally occurring radionuclides. Cobalt-58 was detected in three algae samples collected from Diablo Cove, and in one of these samples cobalt-60 was also detected. The cobalt radionuclides 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.

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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, 2002, through December 31, 2002. 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)	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 |

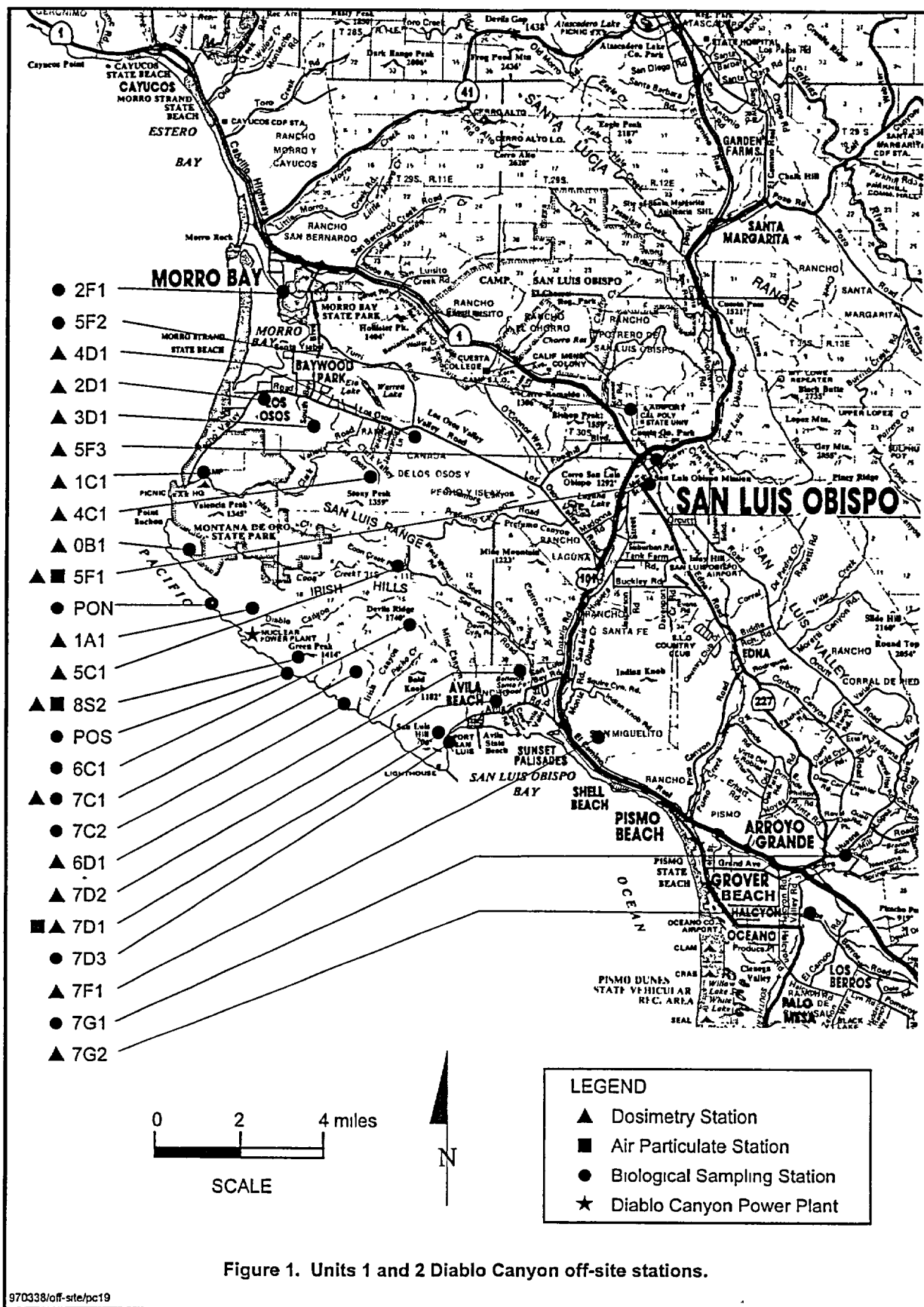
Y - Letter (S, A-H) represents the distance from the plant:

- 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).



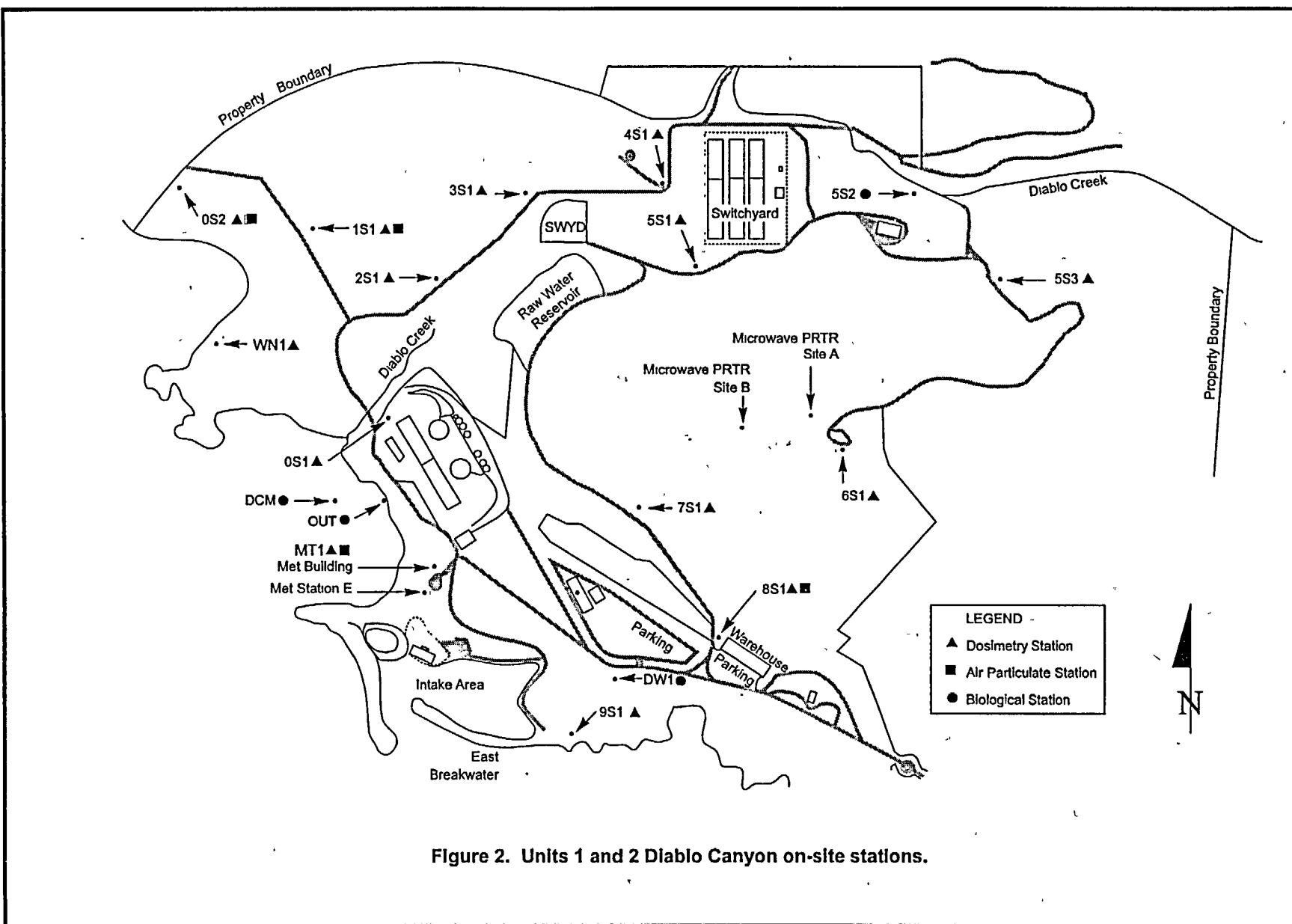


Figure 2. Units 1 and 2 Diablo Canyon on-site stations.

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.

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 done 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/m ³)	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, 2000, 2001, and 2002, 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 REMF.

The results of TES participation in Analytics Environmental Cross Check Program for this year are shown in Appendix A, Table A-10. 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

TES results of these blind samples were acceptable using the NRC criteria for determining agreement of confirmatory radiochemical measurements (See Table A-10).

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 2002 cross-check program can be found in Appendix B, Table B-1. The DHS has yet to issue a report for 1999, 2000, or 2001. 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 2001 (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.

Two samples (kelp collected from DCM and vegetation collected from 7G1 during the fourth quarter of 2001) were not forwarded to the SRL for split sampling after analyses were completed at TES. These samples, which are supplemental samples, are normally sent to the state laboratory for cross check analyses. These samples were inadvertently disposed of prior to forwarding to the state laboratory. This discrepancy was noted as a program variance in last years 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 2002. The land use census is based on Nuclear Regulatory Commission (NRC), Regulatory Guide 4.8, "Environmental Technical Specifications for Nuclear Power Plants", and required by DCPP Program Directive CY2, "Radiological Monitoring and Controls Program." The census is conducted at least once per year during the growing season for the Diablo Canyon environs.

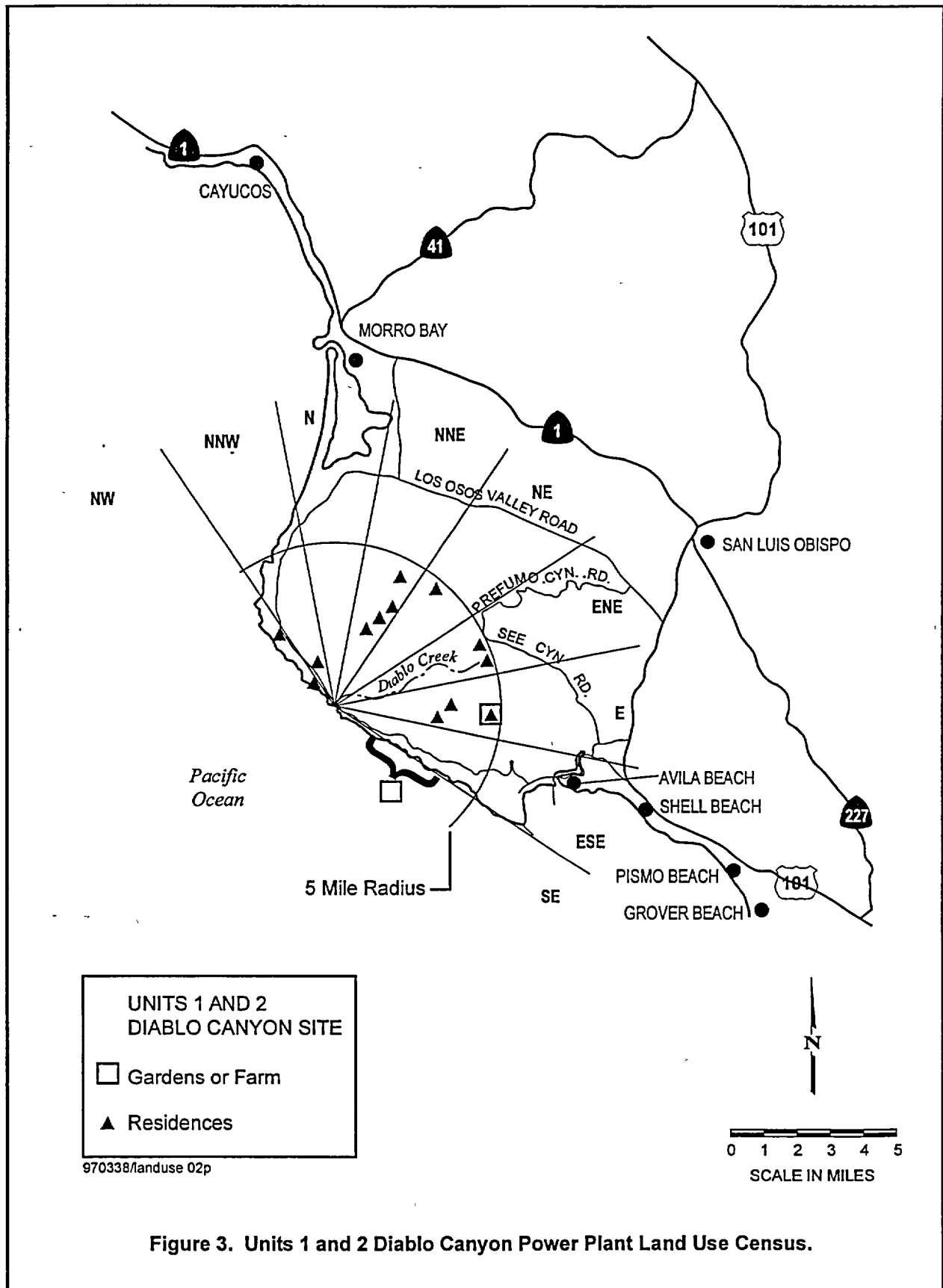
The land use census identifies the nearest milk animal and broadleaf producing garden greater than 50 square meters (500 square feet) in each of the landward meteorological sectors within a distance of 8 kilometers (5 miles) of the plant. DCPP IDAP RP1.ID11, "Environmental Radiological Monitoring Program", requires that the nearest residence be identified in each of the landward sectors within a distance of 5 miles.

The land use census was performed by directly contacting individual landowners / tenants and by aerial surveys. The landowners or tenants were contacted between September 26th and October 9th, 2002. The aerial survey was performed on September 30th, 2002.

The census identified one household garden greater than 50 square meters (500 square feet) that produces broadleaf vegetation in the East sector at 4.5 miles from DCPP Unit 1. No milk animals were identified within the first 5 miles of any sector. Much of the area surrounding the plant site is used for rotational cattle grazing by two separate cattle companies. Various numbers of cattle are sold to market at the end of each year. One cattle operation utilizes the land north of the plant site. A second cattle operation utilizes the land south of the plant site. The rancher for the northern cattle operation slaughters about 2 cattle per year for personal consumption. Goats were used for weed abatement for approximately 6 months within the area surrounding the plant site. The rancher from the northern operation owns these goats and also slaughters about 2 goats per year for personal consumption. During 2002, approximately 100 goats are to be sold in mass-market auction. A farm is located on the coastal plateau, along the site access road, in the east-southeast (ESE) sector. The farm starts at approximately 3.3 miles and extends to 4.5 miles from the plant. This commercial farm produces 75% legumes (sugar peas) and 25% cereal grass (oat hay).

A total of 13 residences were identified within the 5-mile radius of the plant that were confirmed or appear to be occupied during 2002. Two abandoned structures are located at 1.6 miles north-northwest

(NNW) of the plant. The nearest residence, relative to all sectors, is a small trailer 1.2 miles northwest (NW) of the plant (occupied approximately 1 month per year). Ranchers use this trailer during cattle round-ups. Table B-5 summarizes the results of the land use census and Figure 3 shows the locations of the farm, garden, and residences 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 those samples listed in Table B-6. The LLDs were not met for these three water samples due to abnormally long time between sample collection and analysis. This delay in analysis made the LLDs for short half life radionuclides (iodine-131 and barium/lanthanum-140) unachievable. A higher priority has been placed on water samples requiring detection of short half life radionuclides to prevent recurrence of not meeting LLDs for these short half life radionuclides. 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 - 0.043 pCi/m³ with a mean of 0.014 pCi/m³. The range for the control station was 0.004 - 0.059 pCi/m³ with a mean of 0.015 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.

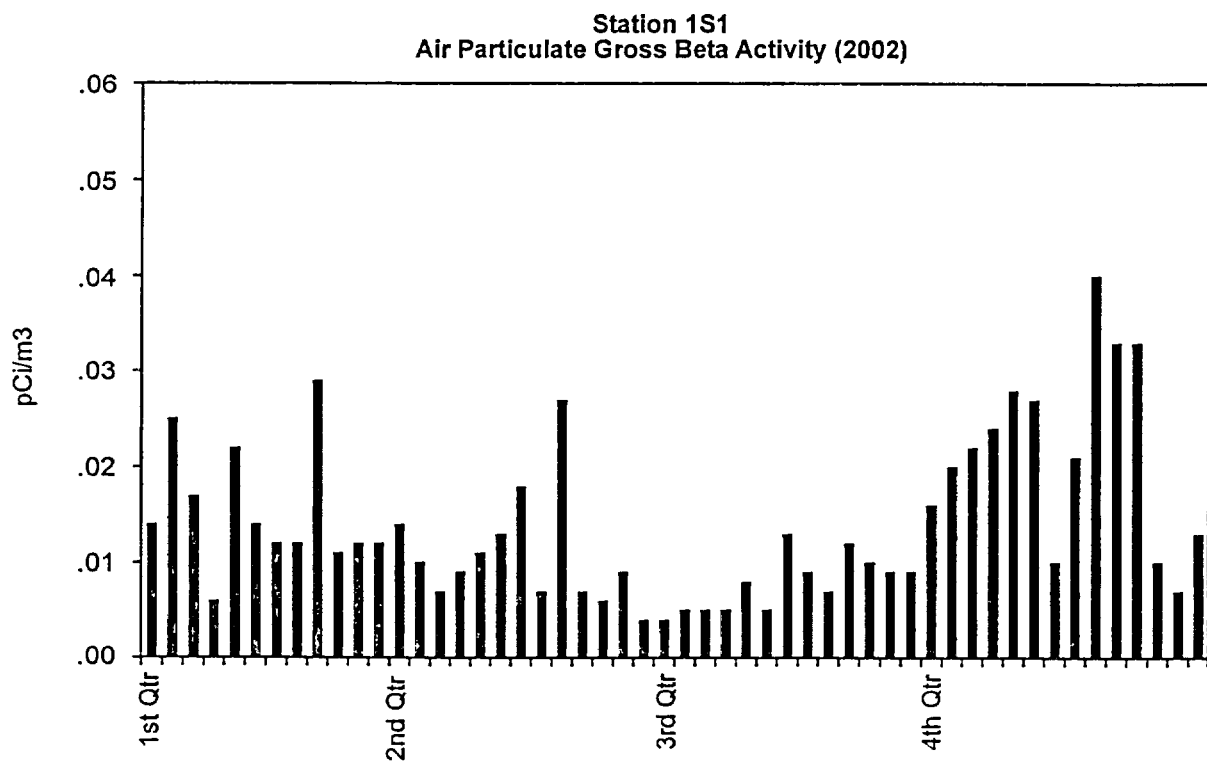
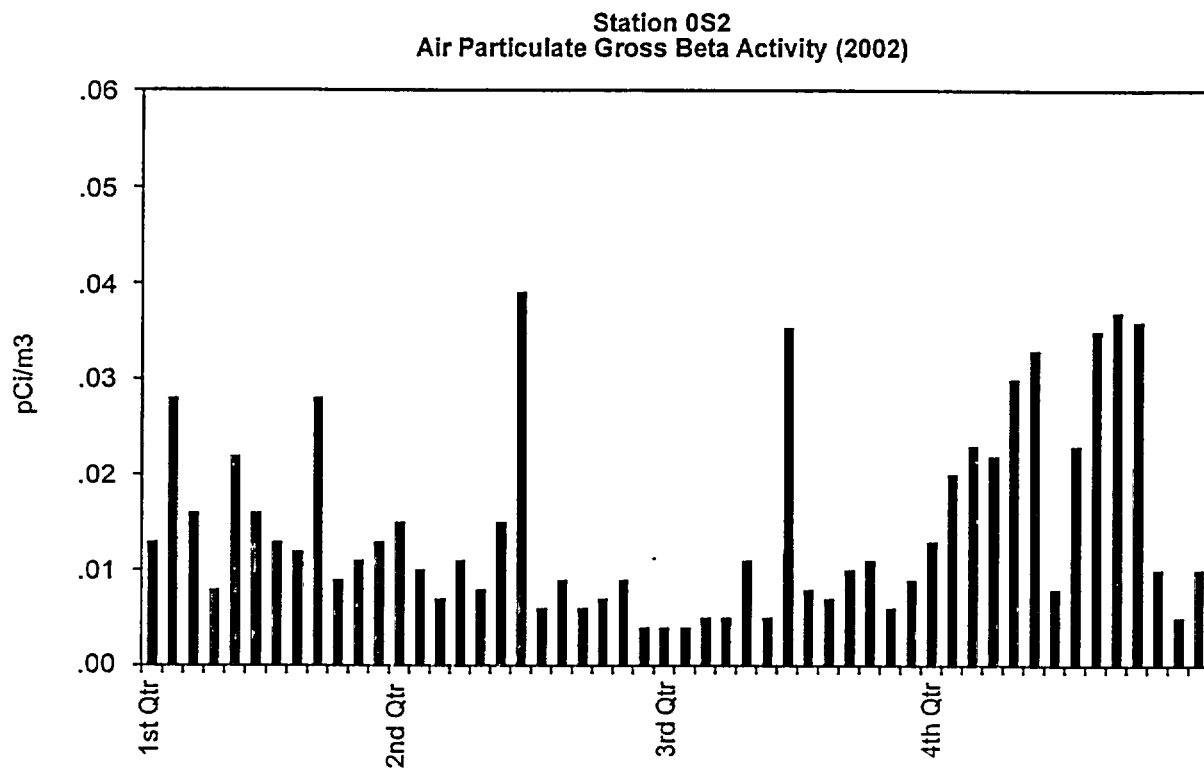
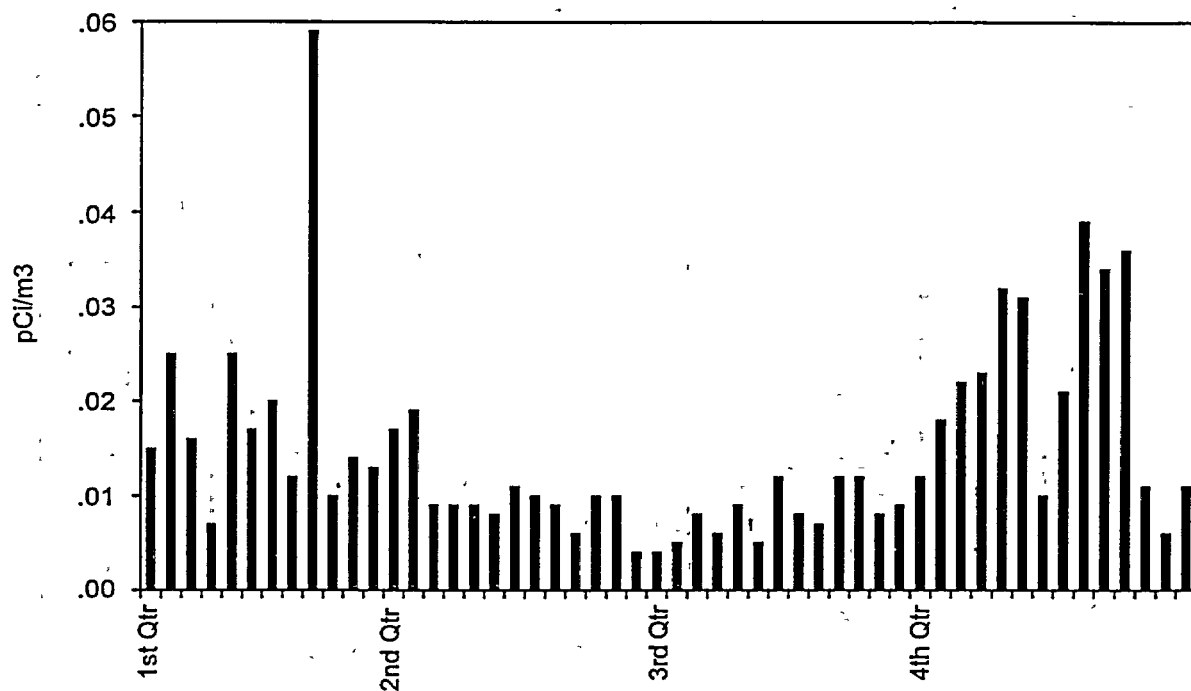


Figure 4. Air particulate gross beta activities.

990308/02-0S2 and 1S1

Station 5F1
Air Particulate Gross Beta Activity (2002)



Station 7D1
Air Particulate Gross Beta Activity (2002)

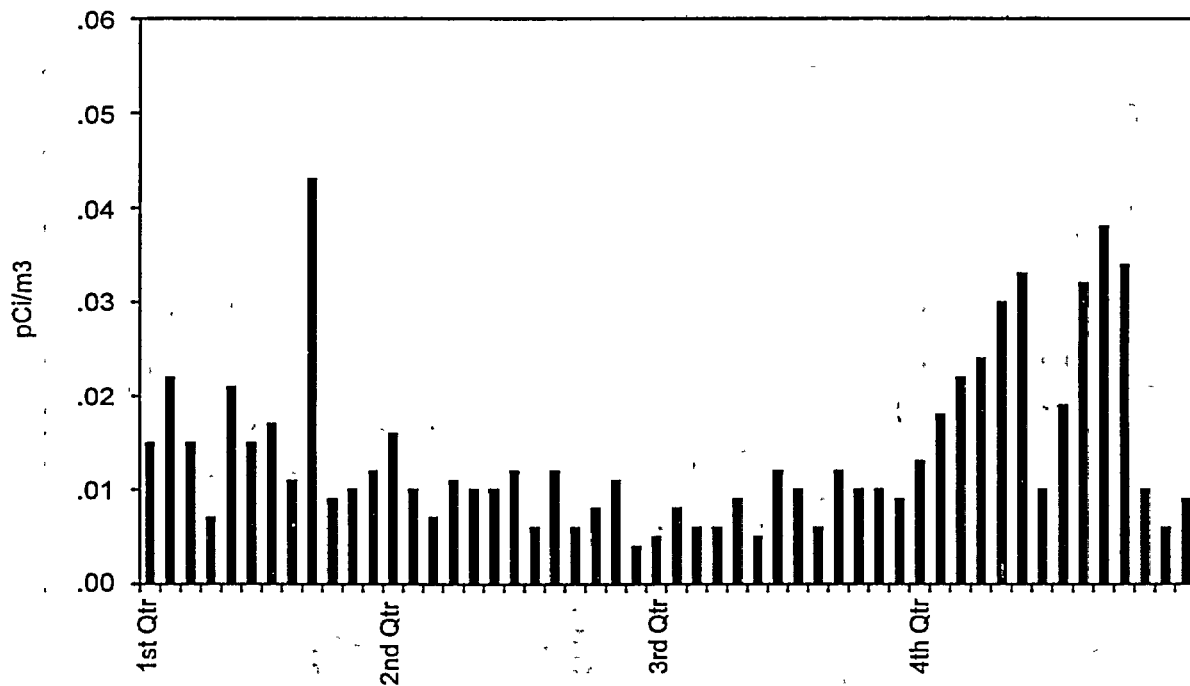
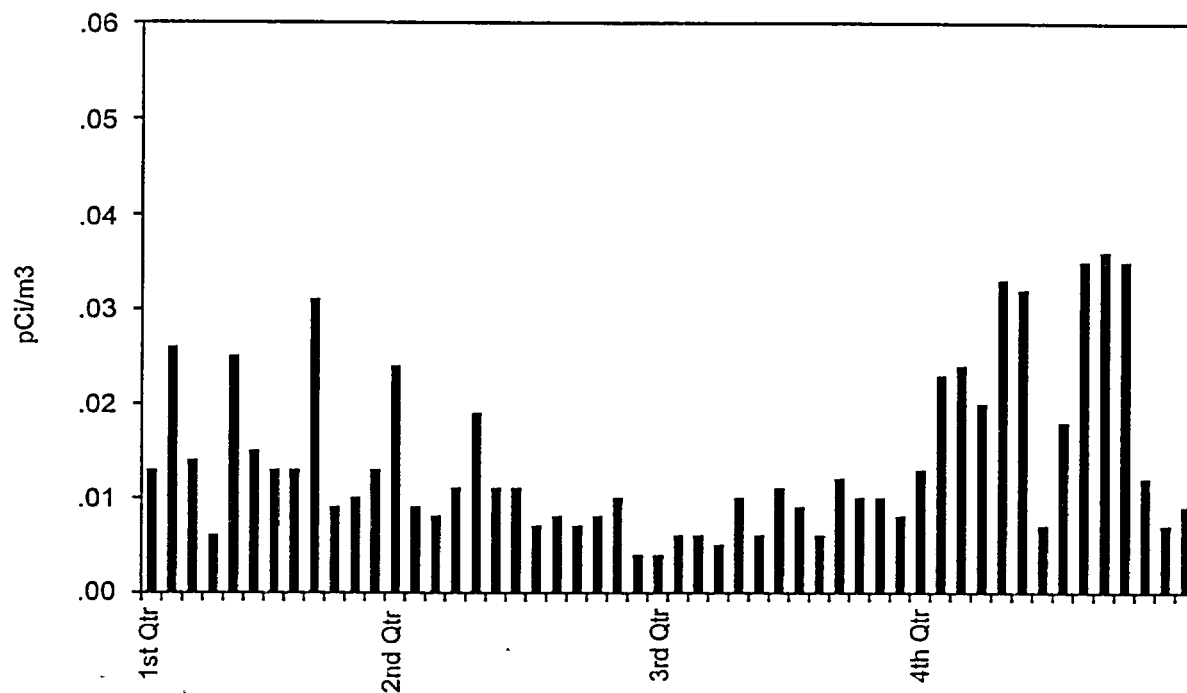


Figure 4. continued.

Station 8S1
Air Particulate Gross Beta Activity (2002)



Station 8S2
Air Particulate Gross Beta Activity (2002)

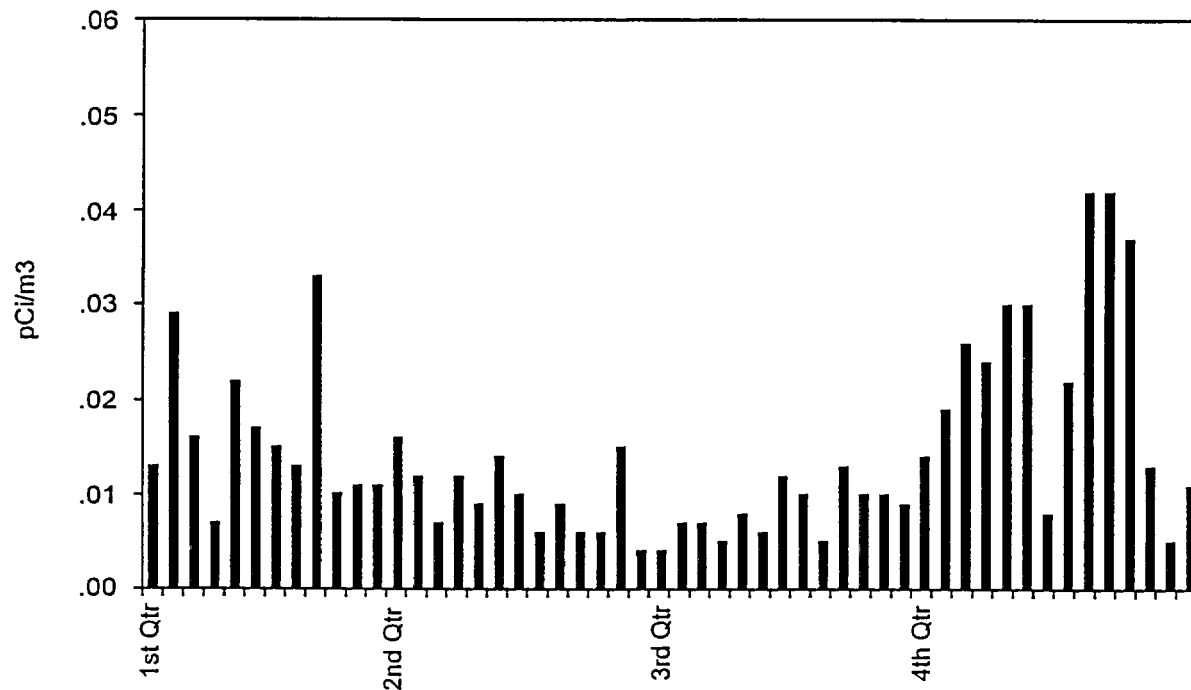
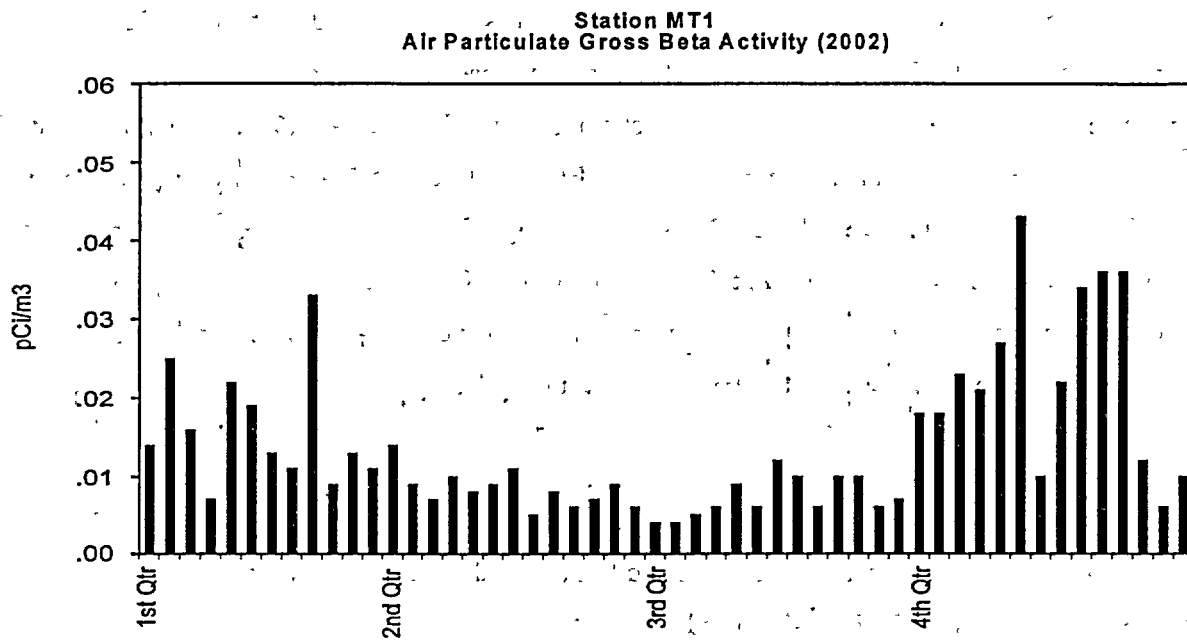


Figure 4. continued.



990308/02-MT1

Figure 4. continued.

Radioiodine

A total of 364 iodine cartridges were analyzed for iodine-131. No iodine-131 was detected in any iodine cartridge during the year.

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 9.1 – 23.6 mR/qtr with a mean of 16.0 mR/qtr. The exposure level at the control station 5F1 ranged from 15.2 – 18.0 mR/qtr with a mean of 16.7 mR/qtr. The exposure levels for 2002 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.

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. Tritium was detected in one surface water samples from DCM. The tritium activity level detected in this sample was below the reporting level. This sample was collected during a routine release from the plant and does not represent the average tritium level in Diablo Cove.

Iodine-131 analysis was also performed on drinking water. 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 2002. 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 2002. 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. Three samples collected from DCM contained a small, but detectable level of cobalt-58, and one of these samples also contained a small level of cobalt-60. 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 34 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 three sample media during 2002. Tritium was detected in a seawater sample collected from DCM. Co-58 was measured in two intertidal and one subtidal algae samples collected from DCM. The Shewart-CUSUM control charts for tritium in seawater, Co-58 in algae, Co-60 in algae, air particulate gross beta activity, and TLD measurements are shown and discussed below. All other CUSUM charts showed basically flat data since the last time that the radioactivity type and sampled media contained a detectable result. Detectable results noted in the past are described in the past annual report(s) in which the detectable result was initially noted.

AIRBORNE RADIOACTIVITY

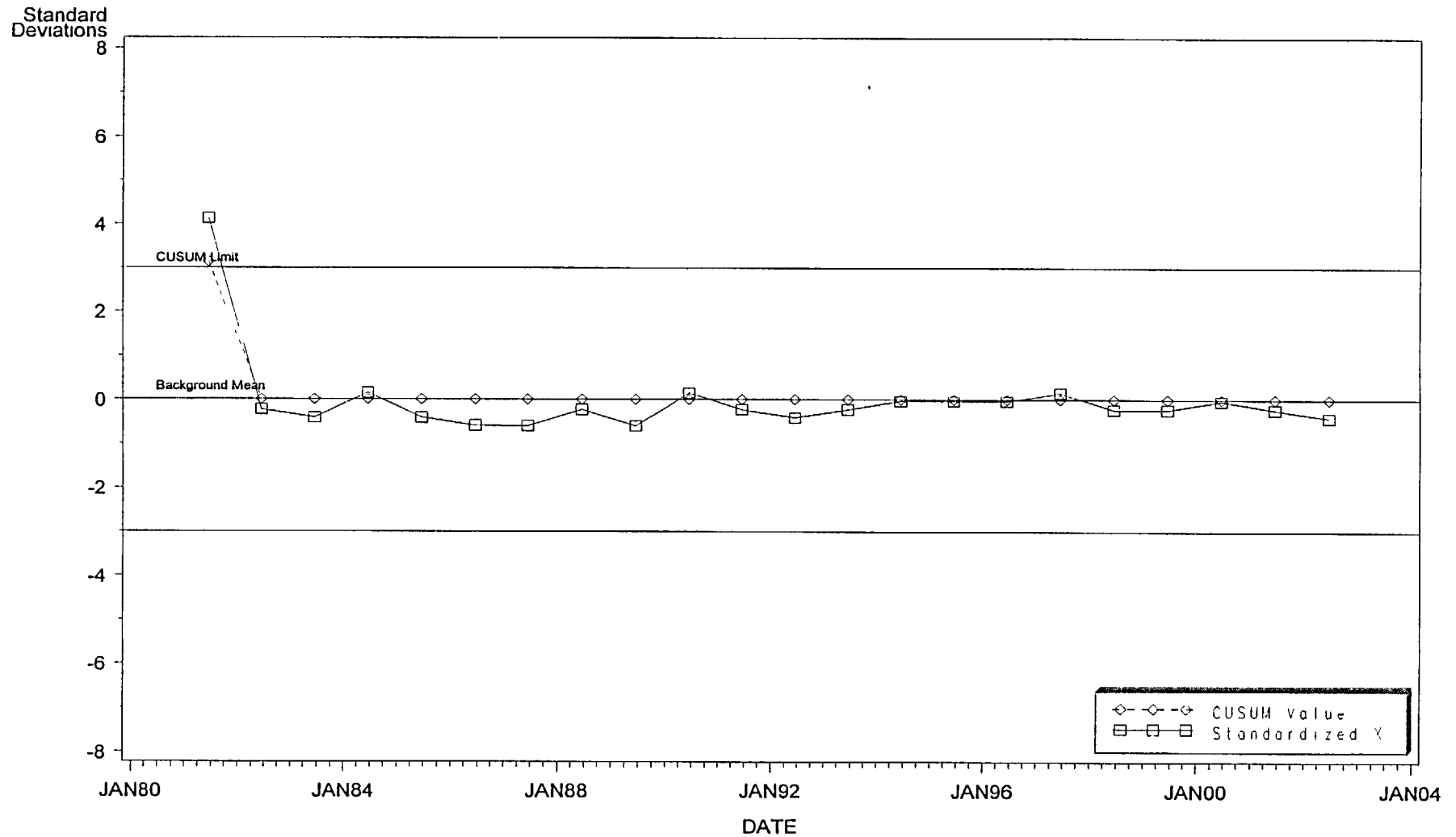
Air Particulates

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 (1985-2002), 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.

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



TECHNICAL AND ECOLOGICAL SERVICES
Health Physics Unit

In 2002, 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 detectible 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. The current control chart shows the effect of changing the control station from Morro Bay Power Plant to 5F1 in San Luis Obispo in 1996. The control station was changed at that time because the Morro Bay Power Plant ceased to be a PG&E property.

WATER SAMPLES

Surface Water (Seawater)

During the preoperational period, only naturally occurring radioactivity was detected in seawater samples. Several times during the operational period, tritium has been measured at station DCM. During 2002, tritium was detected in one water sample collected from DCM. The current control chart for tritium in seawater from DCM is shown as Figure 7. The event of detectible tritium activity during 2002 was below reportable level. The seawater sample which contained more than the detection level of tritium was collected from DCM. This sample was collected concurrent with a liquid release from the power plant. Consequently, the detected level of tritium does not represent the ambient level of tritium within Diablo Cove.

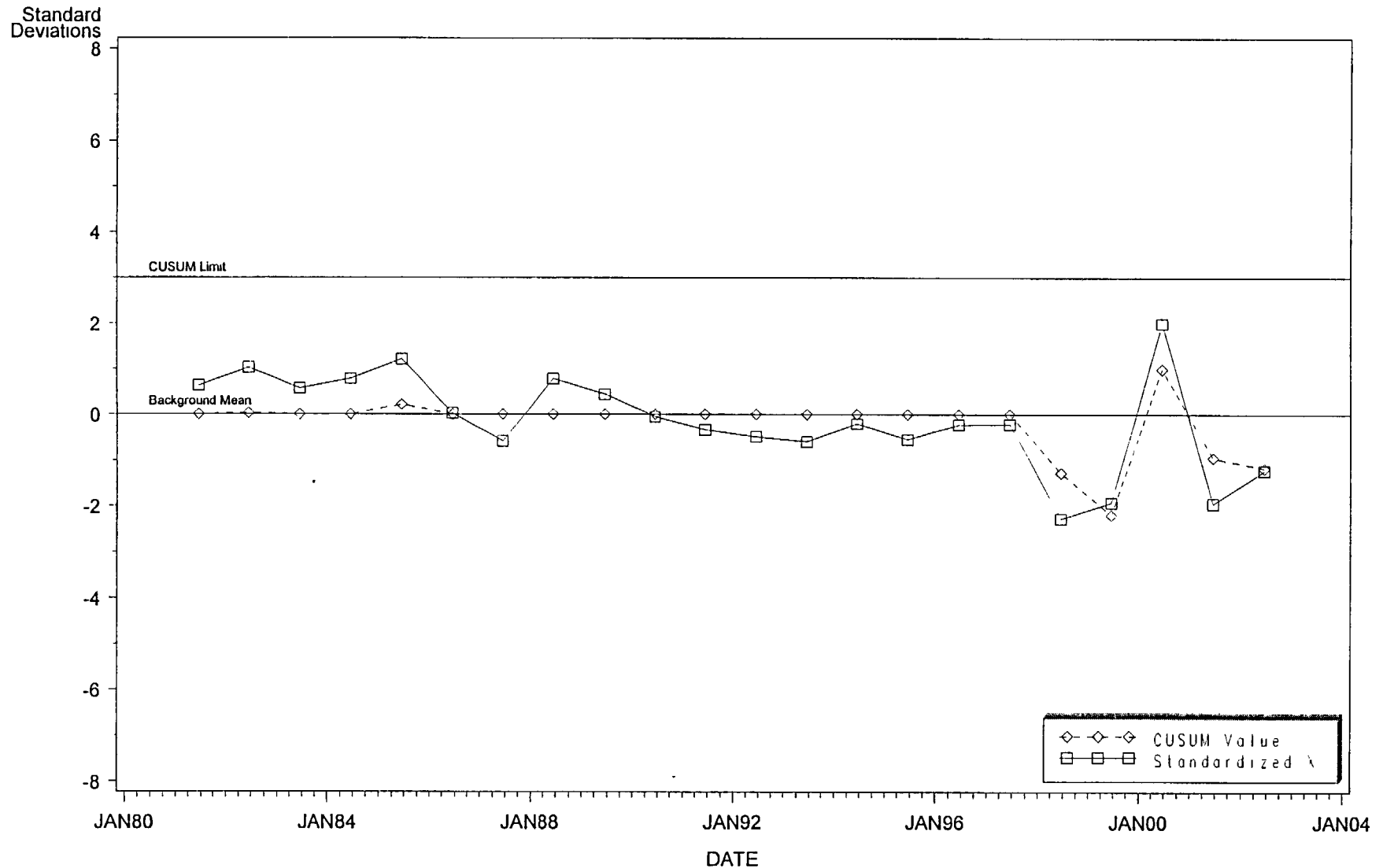
ALGAE SAMPLES

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 and one Giant Kelp sample from DCM during 2002. In addition, Co-60 was detected in one of the Iridaea samples. The control chart for Co-58 in algae (Iridaea) is shown as Figure 8. The control chart for Co-58 in kelp blades is shown as Figure 9a. The control chart for Co-60 in algae (Iridaea) is shown as Figure 9f.

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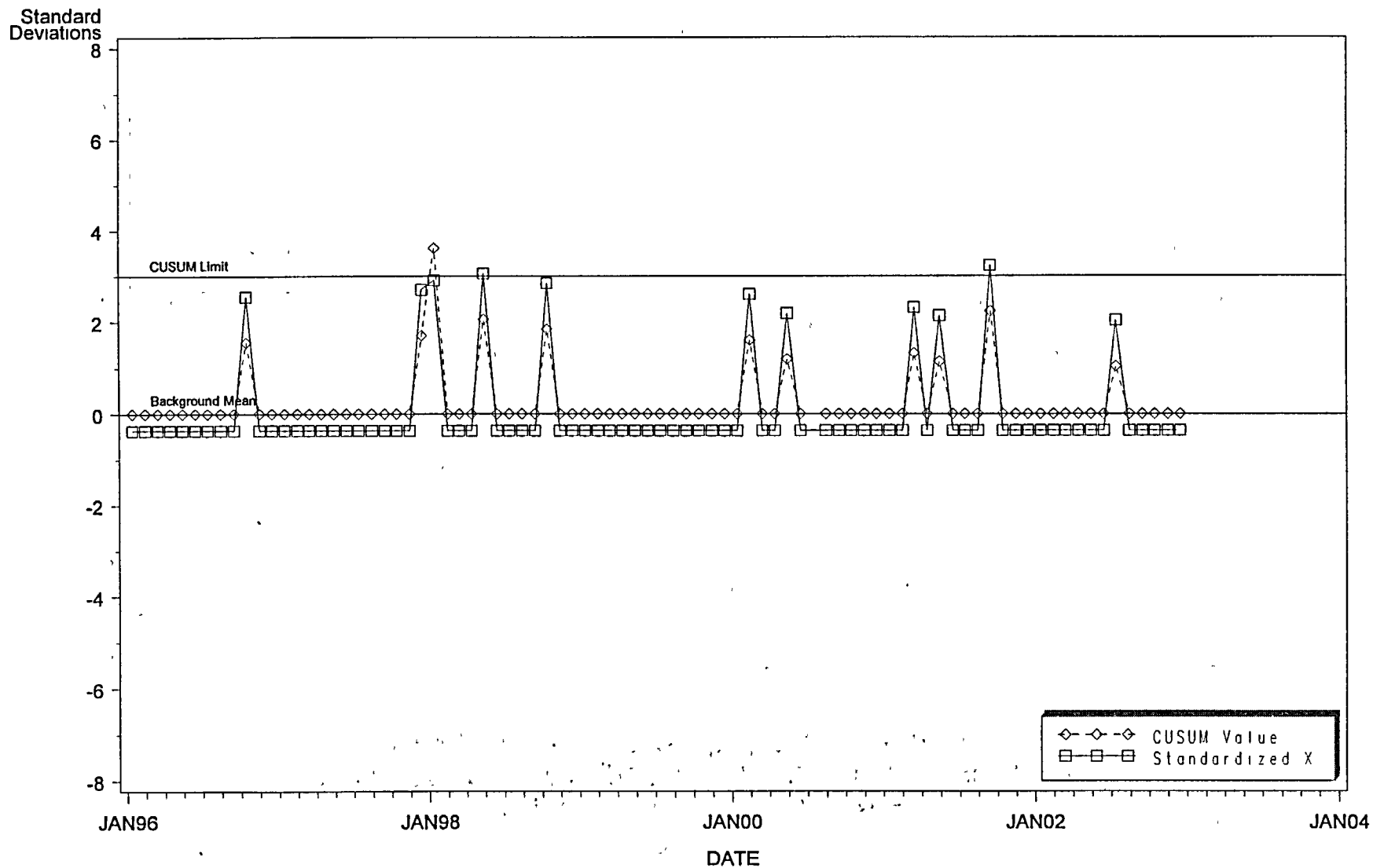
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Figure 6. Control Chart for TLD Data - Difference Between Indicator and Control Station Annual Means



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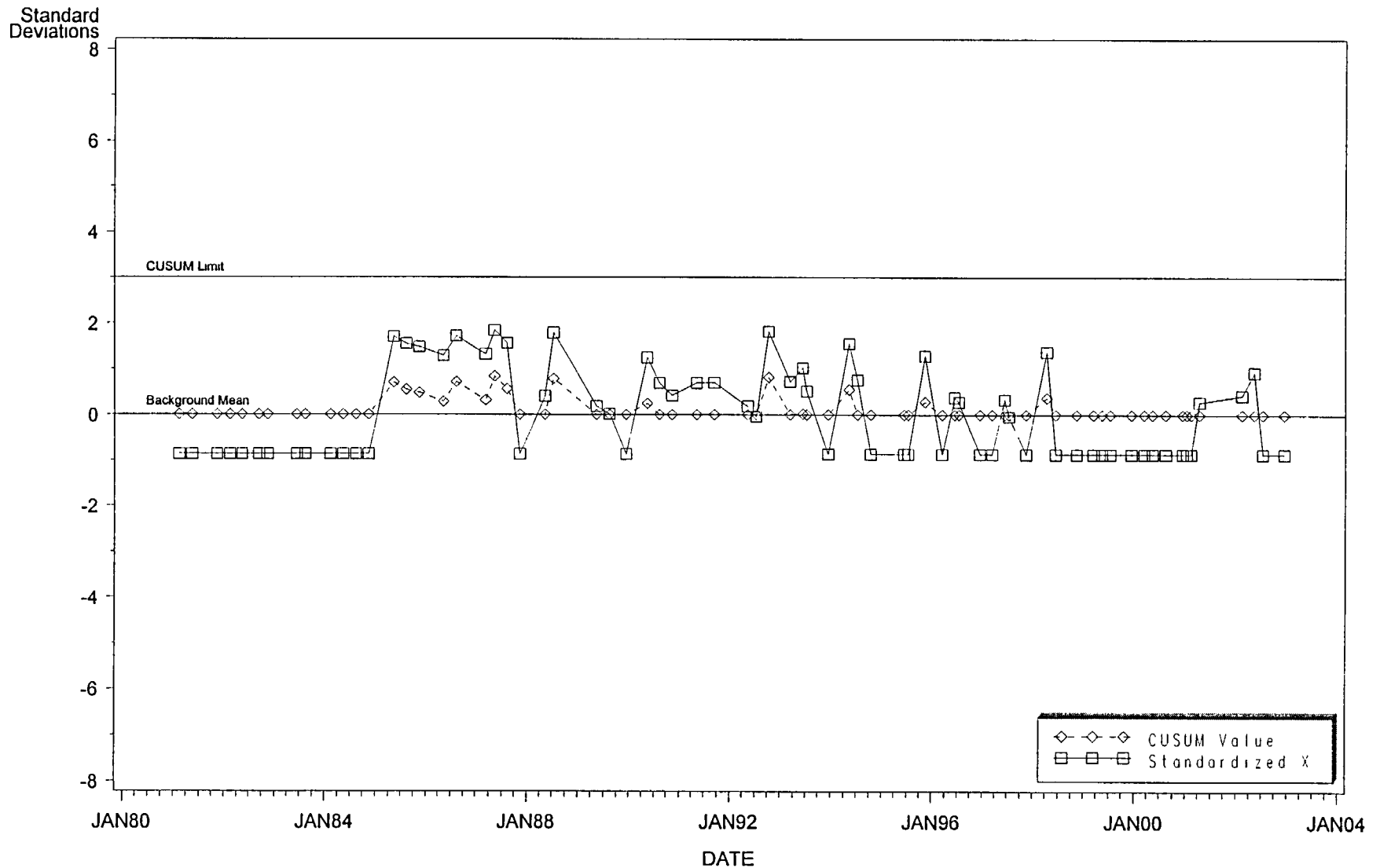
Figure 7. Control Chart for Tritium Levels in Seawater - Station DCM



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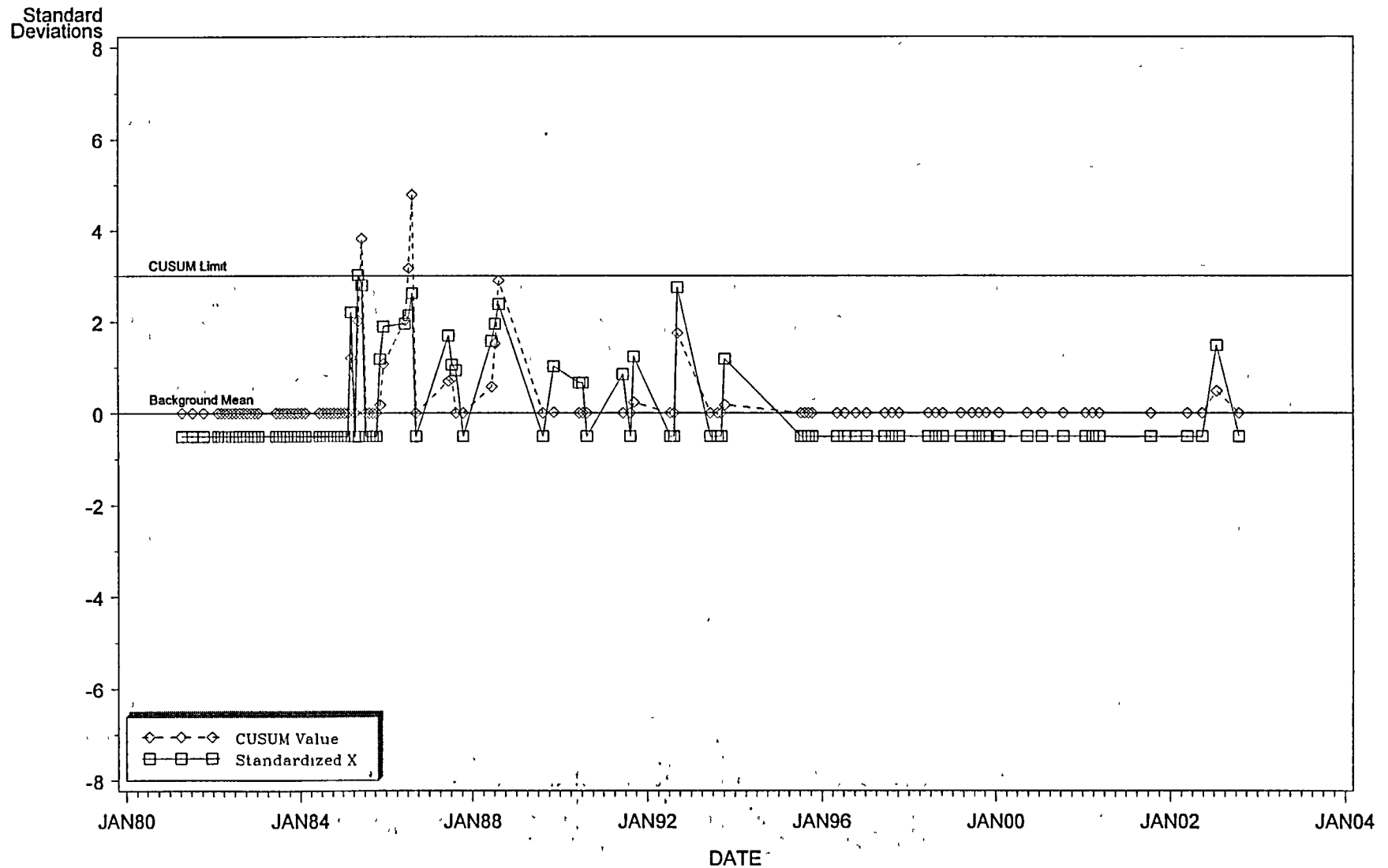
Figure 8 Control Chart for Co-58 Levels in Algae- Station DCM



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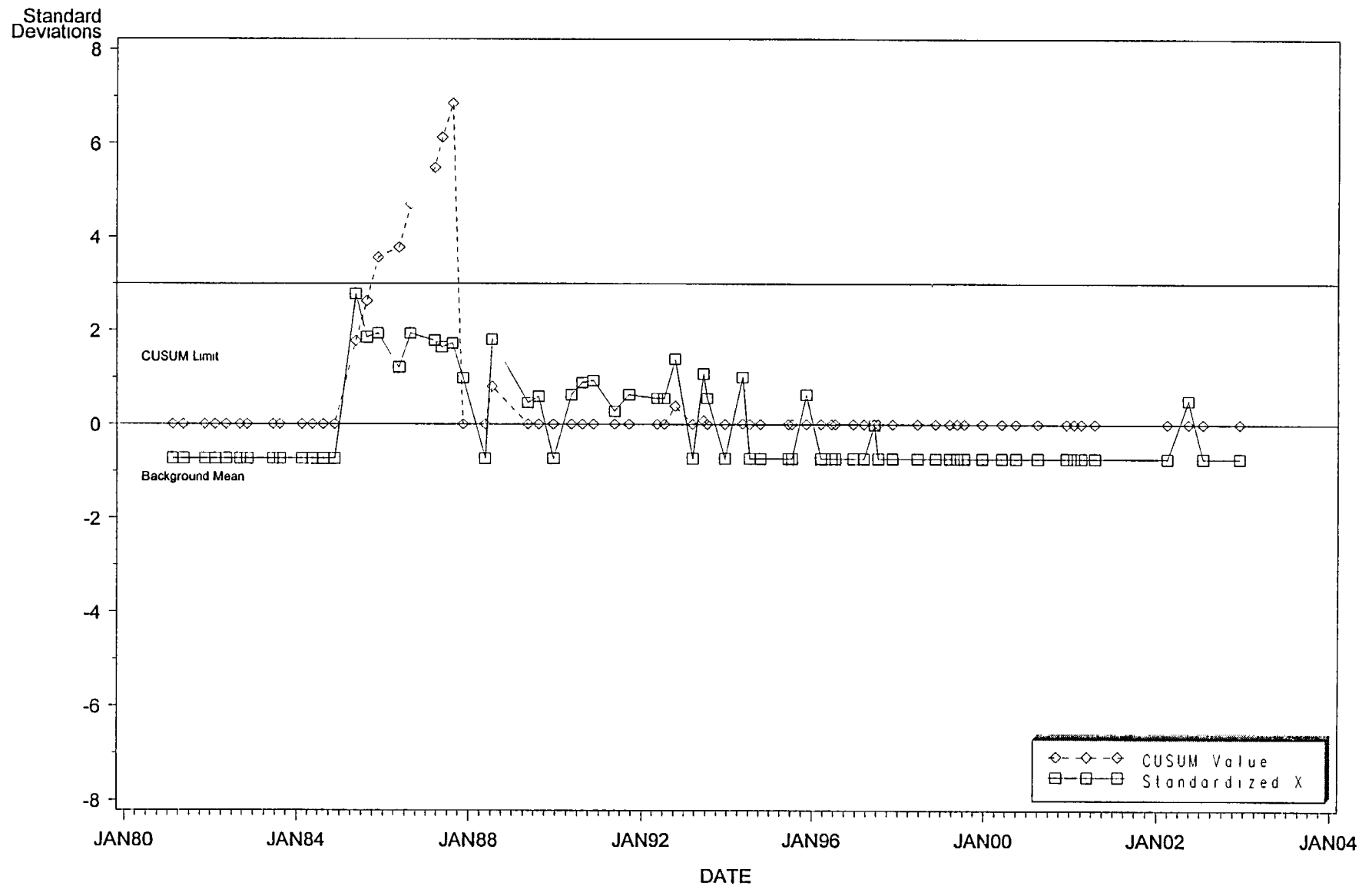
Figure 9a. Control Chart for Co-58 Levels in Blades of Kelp - Station DCM



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Figure 9f. Control Chart for Co-60 Levels in Algae- Station DCM



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 99.8 percent. That is, on average, all samplers were up and running 99.8 percent of the time. At station 8S2, the sampler malfunctioned during the sampling period 1/9/2002-1/16/2002. Approximately 66 hours of sampling was lost. This sampler was also shut down for service to an electrical system for approximately 4 hours later in the first quarter and for several hours due to weather related power outage in the fourth quarter. At station 7D1, the sampler was not functioning for approximately 8 hours due to a power outage during the second quarter. The sampler at station MT1 was out of service for approximately 22 hours in the fourth quarter due to a lightening strike at the Met Tower. Several on-site air samplers (1S1, 8S1, 8S2, and OS2) experienced power outages due to weather during the last week of the year.

MARINE AND TERRESTRIAL SAMPLES

All marine and terrestrial samples were collected as scheduled except for the following: intertidal samples from stations POS and PON were not collected during the 4th quarter due to poor tidal conditions. Vegetation samples were not collected from station 7C1 and 5F2 for January and February due to lack of crops during these collection times. In addition, a vegetation sample was not collected from station 7C1 during July due to immature crops at that location

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

During December, duplicate samples of beach sand were obtained from Avila Beach as a supplement to the routine sampling program. Each of these samples contained detectible activity of cesium-137 which is to be expected due to global fallout resulting from atmospheric bomb testing during the 1950's and

1960's. The detected activity was approximately 14 picoCuries per kilogram which is within the range of activity expected in soil and sand samples throughout the country.

Section 9

REFERENCES

1. DCPD Interdepartmental Administrative Procedure (IDAP), RP1.ID11, "Environmental Radiological Monitoring Procedure."
2. NRC Branch Technical Position, Revision 1, November 1979.
3. DCPD 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	<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>1/1/02 - 12/31/02</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)			
Airborne (pCi/m ³)	<u>Cartridge</u>						
	¹³¹ I (364)				None detected	None detected	0
	<u>Air Particulates</u>						
	Gross Beta (364)		Sta. 8S2 1.1 mi., 128°	1.4E-2 4.0E-3-4.2E-2	1.4E-2(312/312) 4.0E-3-4.3E-2	1.5E-2(52/52) 4.0E-3-5.9E-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	1/1/02 - 12/31/02

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°	22.5 mR/qtr	16.0 mR/qtr	Sta. 5F1	0
				(12/12)	(360/360)	(12/12)	
				20.6–23.6 mR/qtr	9.1–23.6 mR/qtr	15.2–18.0 mR/qtr	
				90.0 mR/yr	64.0 mR/yr (360/360) 38.6–90.0 mR/yr	66.8 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>1/1/02 - 12/31/02</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	2.1E2 (3/36)			None detected	None detected	
	¹³⁴ Cs				None detected	None detected	
	¹³⁷ Cs				None detected	None detected	
	¹⁴⁰ Ba-La	4.75E1 (2/36)			None detected	None detected	
					None detected	None detected	
	Tritium Analysis (36)		Sta. DCM				
	³ H		0 2mi, 270°	3.48E2(1/12)	3.48E2(1/12)	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>1/1/02 - 12/31/02</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			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 Diablo Canyon Power Plant
 Location of Facility San Luis Obispo, California
 (County, State)

Docket No. 50-275 and 50-323
 Report Period 1/1/02 - 12/31/02.

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	1/1/02- 12/31/02

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	<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>1/1/02- 12/31/02</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
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			40.3(3/28) 19.8-68.4	None detected	
	⁶⁰ Co			9.7(1/28)	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	Diablo Canyon Power Plant	Docket No.	50-275 and 50-323
Location of Facility	San Luis Obispo, California (County, State)	Report Period	1/1/02- 12/31/02

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	<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>1/1/02- 12/31/02</u>

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 (34)				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	1/1/02- 12/31/02

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 ^(b)
Milk/Gamma	I-131	December	84	86	.98	Agreement
	Ce-141	December	112	111	1.01	Agreement
	Cr-51	December	353	346	1.02	Agreement
	Cs-134	December	90	99	.91	Agreement
	Cs-137	December	233	220	1.06	Agreement
	Mn-54	December	146	142	1.03	Agreement
	Fe-59	December	79	72	1.10	Agreement
	Zn-65	December	185	178	1.04	Agreement
	Co-60	December	165	164	1.01	Agreement
	Co-58	December	139	139	1.00	Agreement
Water/Gamma	Cr-51	May	185	218	.85	Agreement
	Mn-54	May	100	88	1.14	Agreement
	Co-58	May	93	93	1.00	Agreement
	Fe-59	May	Not Reported	75		-
	Co-60	May	116	115	1.01	Agreement
	Zn-65	May	191	166	1.15	Agreement
	Cs-134	May	98	111	.88	Agreement
	Cs-137	May	82	84	.98	Agreement
	Ce-141	May	81	83	.98	Agreement
	I-131	May	94	94	1.00	Agreement
Soil/Gamma	Mn-54	May	.127	.129	.98	Agreement
	Co-60	May	.174	.168	1.04	Agreement
	Zn-65	May	.266	.243	1.09	Agreement
	Cs-134	May	.134	.163	.82	Agreement
	Cs-137	May	.223	.208	1.07	Agreement
	Ce-141	May	.129	.122	1.06	Agreement
	Cr-51	May	.354	.318	1.11	Agreement
	Co-58	May	.124	.135	.92	Agreement
	Fe-59	May	.104	.109	.95	Agreement
Vegetation/Gamma	Ce-141	December	.225	.188	1.20	Agreement
	Cr-51	December	.625	.587	1.06	Agreement
	Cs-134	December	.166	.168	.99	Agreement
	Cs-137	December	.418	.373	1.12	Agreement
	Co-58	December	.244	.235	1.04	Agreement
	Mn-54	December	.260	.241	1.08	Agreement
	Fe-59	December	.142	.122	1.16	Agreement
	Zn-65	December	.320	.303	1.06	Agreement
	Co-60	December	.313	.279	1.12	Agreement
Cartridge/Gamma	I-131	May	92	92	1.00	Agreement
Water/Alpha	Gross Alpha	May	49	40	1.23	Agreement
Water/Beta	Gross Beta	May	255	280	.91	Agreement
Water/Tritium	Tritium	May	7083	6970	1.02	Agreement
Particulate Filter	Alpha	December	56	66	.85	Agreement
Particulate Filter	Beta	December	154	168	.92	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.

Appendix B

ANALYTICAL RESULTS

Table B-1
Diablo Canyon Power Plant 2002 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	02A37	01/24/2002	ND	16 ± 43	ND	ND
		02A89	02/19/2002	ND	29 ± 27	ND	ND
		02B89	03/20/2002	ND	29 ± 10	ND	ND
		02C73	04/23/2002	ND	ND	ND	ND
		02D40	05/21/2002	ND	ND	ND	ND
		02E45	06/19/2002	ND	ND	ND	ND
		02F13	07/25/2002	ND	ND	ND	ND
		02F75	08/20/2002	ND	ND	ND	ND
		02G52	09/17/2002	ND	ND	ND	ND
		02H38	10/22/2002	ND	16 ± 31	ND	ND
		02I42	11/19/2002	ND	4 ± 48	ND	ND
		02J03	12/17/2002	ND	90 ± 37	ND	ND
Milk	5F2	02A38	01/24/2002	ND	1374 ± 155	—	ND
		02A90	02/19/2002	ND	1337 ± 165	—	ND
		02B90	03/20/2002	ND	1389 ± 137	—	ND
		02C74	04/23/2002	ND	1447 ± 132	—	ND
		02D41	05/21/2002	ND	1443 ± 137	—	ND
		02E46	06/19/2002	ND	1530 ± 155	—	ND
		02F08	07/23/2002	ND	1481 ± 148	—	ND
		02F76	08/20/2002	ND	1511 ± 155	—	ND
		02G53	09/17/2002	ND	1374 ± 128	—	ND
		02H39	10/22/2002	ND	1396 ± 136	—	ND
		02I43	11/19/2002	ND	1420 ± 138	—	ND
		02J04	12/17/2002	ND	1547 ± 144	—	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 2002 Annual Report
State Cross-Check Results

Sample	Station	Sample No.	Collection Date	Gamma Activity pCi/L Original	K-40 Activity pCi/L Original	II-3 Activity pCi/L	I-131 Activity pCi/L
Outfall Water	OUT	02A35	01/24/2002	ND	322± 53	ND	—
		02A87	02/19/2002	ND	364 ± 64	ND	—
		02B87	03/20/2002	ND	366 ± 51	ND	—
		02C71	04/23/2002	ND	337 ± 57	ND	—
		02D38	05/21/2002	ND	338 ± 58	ND	—
		02E43	06/19/2002	ND	336 ± 73	ND	—
		02F11	07/25/2002	ND	330 ± 42	ND	—
		02F73	08/20/2002	ND	341 ± 45	ND	—
		02G50	09/17/2002	ND	302 ± 77	ND	—
		02H36	10/22/2002	ND	335 ± 41	ND	—
		02I40	11/19/2002	ND	360± 75	ND	—
		02J01	12/17/2002	ND	320± 76	ND	—
Drinking Water	5S2	02A36	01/24/2002	ND	ND	ND	ND
		02A88	02/19/2002	ND	ND	ND	ND
		02B88	03/20/2002	ND	ND	ND	ND
		02C72	04/23/2002	ND	ND	ND	ND
		02D39	05/21/2002	ND	ND	ND	ND
		02E44	06/19/2002	ND	ND	ND	ND
		02F12	07/25/2002	ND	ND	ND	ND
		02F74	08/20/2002	ND	6± 27	ND	ND
		02G51	09/17/2002	ND	16± 31	ND	ND
		02H37	10/22/2002	ND	ND	ND	ND
		02I41	11/19/2002	ND	ND	ND	ND
		02J02	12/17/2002	ND	ND	ND	ND

Table B-1 (Continued)
Diablo Canyon Power Plant 2002 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	02B20	03/01/2002	ND	9541 ± 1245	—	—
		02D59	05/22/2002	ND	7545 ± 780	—	—
		02F29	07/30/2002	Co-58 33±14	8820 ± 817	—	—
		02H91	10/29/2002	ND	8781 ± 817	—	—
Vegetable Greens ^(b)	7G1	02C15	04/03/2002	Be-7 191 ± 89	3971 ± 391	—	—
		02D07	05/06/2002	Be-7 139 ± 102	5305 ± 524	—	—
		02F54	08/06/2002	ND	4181 ± 416	—	—
		02I59	12/03/2002	ND	3359 ± 366	—	—
Fish ^(b)	DCM	02A65	01/30/2002	ND	4597 ± 665	—	—
		02D68	04/12/2002	ND	4631 ± 543	—	—
		02G34	09/05/2002	ND	4239 ± 540	—	—
		02J58	01/14/2003	ND	4259 ± 628	—	—
Sediment ^(c)	DCM	02J57	01/14/2003	ND	9082 ± 913	—	—

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 2002 Annual Report
Marine and Terrestrial Sample Data
Detected Nuclides (Nonnaturally Occurring) – pCi/l Water
pCi/kg Algae

Description	Sta. No.	Collection Date	Sam. No.	⁵⁸ Co	⁶⁰ Co	⁵⁴ Mn	¹³⁷ Cs	3H
Iridaea	DCM	02/25/02	02B29	1.98E1±1.09E1				
Iridaea	DCM	05/16/02	02D71	6.84E1±1.12E1	9.7E0±4.6E0			
Giant Kelp Blade	DCM	07/30/02	02F29	3.26E1±1.39E1				
Surface Water (Seawater)	DCM	07/30/02	02F24					3.48E2±1.85E2

Table B-3
Diablo Canyon Power Plant 2002 Annual Report
Airborne Radioactivity
Station 0S2 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta		Gamma Scan
			Activity	2Sigma	
01/02/02-01/09/02	492.8	01/17/02	.013	.002	
01/09/02-01/16/02	481.2	01/23/02	.028	.003	
01/16/02-01/23/02	448.8	01/30/02	.016	.002	
01/23/02-01/30/02	470.5	02/05/02	.008	.001	
01/30/02-02/06/02	443.9	02/14/02	.022	.002	
02/06/02-02/13/02	440.4	02/21/02	.016	.002	
02/13/02-02/20/02	434.2	02/22/02	.013	.002	
02/20/02-02/27/02	443.8	03/08/02	.012	.001	
02/27/02-03/06/02	425.8	03/08/02	.028	.003	
03/06/02-03/13/02	438.2	03/20/02	.009	.001	
03/13/02-03/20/02	459.7	03/23/02	.011	.001	
03/20/02-03/27/02	436.2	04/03/02	.013	.002	
03/27/02-04/03/02	436.0	05/05/02	.015	.002	
04/03/02-04/10/02	436.3	04/19/02	.010	.001	
04/10/02-04/17/02	465.7	04/24/02	.007	.001	
04/17/02-04/24/02	464.3	04/30/02	.011	.001	
04/24/02-05/01/02	402.3	05/09/02	.008	.001	
05/01/02-05/08/02	406.2	05/14/02	.015	.002	
05/08/02-05/15/02	416.3	05/21/02	.039	.004	
05/15/02-05/22/02	426.2	05/28/02	.006	.001	
05/22/02-05/29/02	418.5	06/07/02	.009	.001	
05/29/02-06/05/02	415.9	06/14/02	.006	.001	
06/05/02-06/12/02	473.1	06/16/02	.007	.001	
06/12/02-06/19/02	440.3	06/23/02	.009	.001	
06/19/02-06/26/02	434.6	07/12/02	.004	.001	
06/26/02-07/03/02	449.6	07/13/02	.004	.001	
07/03/02-07/10/02	454.8	07/20/02	.004	.001	
07/10/02-07/17/02	434.6	08/02/02	.005	.001	
07/17/02-07/24/02	448.8	08/03/02	.005	.001	
07/24/02-07/31/02	432.2	08/13/02	.011	.001	
07/31/02-08/07/02	405.6	08/14/02	.005	.001	
08/07/02-08/14/02	449.7	08/20/02	.012	.002	
08/14/02-08/21/02	513.4	08/28/02	.008	.001	
08/21/02-08/28/02	536.9	09/13/02	.007	.001	
08/28/02-09/04/02	546.8	09/13/02	.010	.001	
09/04/02-09/11/02	551.9	09/19/02	.011	.001	
09/11/02-09/18/02	402.6	09/24/02	.006	.001	
09/18/02-09/25/02	435.2	10/01/02	.009	.001	

Table B-3 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
Airborne Radioactivity
Station 0S2 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta		Gamma Scan
			Activity	2Sigma	
09/25/02-10/02/02	466.8	10/20/02	.013	.001	
10/02/02-10/09/02	475.9	10/20/02	.020	.002	
10/09/02-10/16/02	364.0	10/26/02	.023	.002	
10/16/02-10/23/02	402.4	10/26/02	.022	.002	
10/23/02-10/30/02	417.2	11/18/02	.030	.003	
10/30/02-11/06/02	443.7	11/19/02	.033	.003	
11/06/02-11/13/02	452.2	11/23/02	.008	.001	
11/13/02-11/20/02	460.0	11/27/02	.023	.002	
11/20/02-11/27/02	475.6	12/12/02	.035	.003	
11/27/02-12/04/02	488.3	12/12/02	.037	.004	
12/04/02-12/11/02	510.8	12/17/02	.036	.003	
12/11/02-12/18/02	456.8	12/31/02	.010	.001	
12/18/02-12/24/02	391.1	01/01/03	.005	.001	
12/24/02-12/31/02	455.7	01/08/03	.010	.001	

Gamma Activity On Filter Composites

Collection Period	Counting Date	Nuclide	Concentration (pCi/m ³)
01/02/02-04/03/02	5/6/02	ND	
04/03/02-07/03/02	7/23/02	ND	
07/03/02-10/02/02	10/23/02	ND	
10/02/02-12/31/02	1/28/03	ND	

Table Notation

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

Table B-3 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
Airborne Radioactivity
Station 1S1 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta Activity	2Sigma	Gamma Scan
01/02/02-01/09/02	463.8	01/17/02	.014	.002	
01/09/02-01/16/02	470.7	01/23/02	.025	.002	
01/16/02-01/23/02	375.7	01/30/02	.017	.002	
01/23/02-01/30/02	456.5	02/05/02	.006	.001	
01/30/02-02/06/02	454.3	02/12/02	.022	.002	
02/06/02-02/13/02	461.8	02/21/02	.014	.002	
02/13/02-02/20/02	464.9	02/25/02	.012	.002	
02/20/02-02/27/02	460.4	03/08/02	.012	.001	
02/27/02-03/06/02	446.3	03/08/02	.029	.003	
03/06/02-03/13/02	456.5	03/20/02	.011	.001	
03/13/02-03/20/02	474.2	03/23/02	.012	.001	
03/20/02-03/27/02	463.2	04/04/02	.012	.001	
03/27/02-04/03/02	473.2	05/05/02	.014	.002	
04/03/02-04/10/02	465.8	04/19/02	.010	.001	
04/10/02-04/17/02	375.9	04/24/02	.007	.001	
04/17/02-04/24/02	435.2	04/30/02	.009	.001	
04/24/02-05/01/02	379.5	05/09/02	.011	.001	
05/01/02-05/08/02	424.7	05/14/02	.013	.002	
05/08/02-05/15/02	445.8	05/21/02	.018	.002	
05/15/02-05/22/02	454.5	05/28/02	.007	.001	
05/22/02-05/29/02	446.8	06/07/02	.027	.003	
05/29/02-06/05/02	436.8	06/14/02	.007	.001	
06/05/02-06/12/02	456.3	06/16/02	.006	.001	
06/12/02-06/19/02	438.3	06/23/02	.009	.001	
06/19/02-06/26/02	433.5	07/12/02	.004	.001	
06/26/02-07/03/02	455.2	07/13/02	.004	.001	
07/03/02-07/10/02	449.8	07/20/02	.005	.001	
07/10/02-07/17/02	440.7	08/02/02	.005	.001	
07/17/02-07/24/02	478.9	08/03/02	.005	.001	
07/24/02-07/31/02	457.7	08/13/02	.008	.001	
07/31/02-08/07/02	477.3	08/14/02	.005	.001	
08/07/02-08/14/02	465.7	08/20/02	.013	.001	
08/14/02-08/21/02	463.7	08/28/02	.009	.001	
08/21/02-08/28/02	478.3	09/13/02	.007	.001	
08/28/02-09/04/02	470.4	09/13/02	.012	.001	
09/04/02-09/11/02	462.6	09/19/02	.010	.001	
09/11/02-09/18/02	467.8	09/24/02	.009	.001	
09/18/02-09/25/02	458.4	10/01/02	.009	.001	

Table B-3 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
Airborne Radioactivity
Station 1S1 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta Activity	2Sigma	Gamma Scan
09/25/02-10/02/02	477.6	10/20/02	.016	.002	
10/02/02-10/09/02	472.2	10/20/02	.020	.002	
10/09/02-10/16/02	466.6	10/26/02	.022	.002	
10/16/02-10/23/02	477.4	10/26/02	.024	.002	
10/23/02-10/30/02	506.7	11/19/02	.028	.003	
10/30/02-11/06/02	470.9	11/19/02	.027	.003	
11/06/02-11/13/02	476.1	11/23/02	.010	.001	
11/13/02-11/20/02	481.7	11/27/02	.021	.002	
11/20/02-11/27/02	491.1	12/12/02	.040	.004	
11/27/02-12/04/02	479.5	12/12/02	.033	.003	
12/04/02-12/11/02	502.7	12/17/02	.033	.003	
12/11/02-12/18/02	472.3	01/01/03	.010	.001	
12/18/02-12/24/02	383.9	01/01/03	.007	.001	
12/24/02-12/31/02	448.7	01/08/03	.013	.002	

Gamma Activity On Filter Composites

Collection Period	Counting Date	Nuclide	Concentration (pCi/m ³)
01/02/02-04/03/02	5/6/02	ND	
04/03/02-07/03/02	7/23/02	ND	
07/03/02-10/02/02	10/24/02	ND	
10/02/02-12/31/02	1/28/03	ND	

Table Notation:

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

Table B-3 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
Airborne Radioactivity
Station 5F1 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta		Gamma Scan
			Activity	2Sigma	
01/02/02-01/09/02	473.3	01/16/02	.015	.002	
01/09/02-01/16/02	452.9	01/23/02	.025	.003	
01/16/02-01/23/02	454.2	01/30/02	.016	.002	
01/23/02-01/30/02	469.2	02/04/02	.007	.001	
01/30/02-02/06/02	461.4	02/12/02	.025	.003	
02/06/02-02/13/02	474.2	02/21/02	.017	.002	
02/13/02-02/20/02	480.9	02/25/02	.020	.002	
02/20/02-02/27/02	458.0	03/07/02	.012	.001	
02/27/02-03/06/02	400.5	03/08/02	.059	.006	
03/06/02-03/13/02	424.5	03/20/02	.010	.001	
03/13/02-03/20/02	424.4	03/23/02	.014	.002	
03/20/02-03/27/02	421.5	04/03/02	.013	.002	
03/27/02-04/03/02	437.6	05/05/02	.017	.002	
04/03/02-04/10/02	424.8	04/19/02	.019	.002	
04/10/02-04/17/02	423.0	04/23/02	.009	.001	
04/17/02-04/24/02	439.7	04/29/02	.009	.001	
04/24/02-05/01/02	443.7	05/09/02	.009	.001	
05/01/02-05/08/02	476.9	05/14/02	.008	.001	
05/08/02-05/15/02	473.4	05/21/02	.011	.001	
05/15/02-05/22/02	468.7	05/28/02	.010	.001	
05/22/02-05/29/02	470.4	06/06/02	.009	.001	
05/29/02-06/05/02	465.4	06/13/02	.006	.001	
06/05/02-06/12/02	467.2	06/16/02	.010	.001	
06/12/02-06/19/02	470.0	06/23/02	.010	.001	
06/19/02-06/26/02	462.1	07/12/02	.004	.001	
06/26/02-07/03/02	488.1	07/12/02	.004	.001	
07/03/02-07/10/02	460.8	07/20/02	.005	.001	
07/10/02-07/17/02	464.6	08/02/02	.008	.001	
07/17/02-07/24/02	466.1	08/03/02	.006	.001	
07/24/02-07/31/02	466.4	08/13/02	.009	.001	
07/31/02-08/07/02	479.6	08/14/02	.005	.001	
08/07/02-08/14/02	474.9	08/19/02	.012	.001	
08/14/02-08/21/02	473.9	08/27/02	.008	.001	
08/21/02-08/28/02	485.9	09/12/02	.007	.001	
08/28/02-09/04/02	476.0	09/13/02	.012	.001	
09/04/02-09/11/02	501.0	09/18/02	.012	.001	
09/11/02-09/18/02	469.2	09/24/02	.008	.001	
09/18/02-09/25/02	477.3	09/30/02	.009	.001	

Table B-3 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
Airborne Radioactivity
Station 5F1 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta		Gamma Scan
			Activity	2Sigma	
09/25/02-10/02/02	484.6	10/19/02	.012	.001	
10/02/02-10/09/02	482.2	10/20/02	.018	.002	
10/09/02-10/16/02	484.9	10/26/02	.022	.002	
10/16/02-10/23/02	486.2	10/26/02	.023	.002	
10/23/02-10/30/02	487.9	11/18/02	.032	.003	
10/30/02-11/06/02	491.2	11/19/02	.031	.003	
11/06/02-11/13/02	495.9	11/23/02	.010	.001	
11/13/02-11/20/02	497.9	11/26/02	.021	.002	
11/20/02-11/27/02	499.4	12/12/02	.039	.004	
11/27/02-12/04/02	503.0	12/12/02	.034	.003	
12/04/02-12/11/02	525.7	12/17/02	.036	.003	
12/11/02-12/18/02	489.6	12/31/02	.011	.001	
12/18/02-12/24/02	433.8	01/01/03	.006	.001	
12/24/02-12/31/02	505.7	01/08/03	.011	.001	

Gamma Activity on Filter Composites

Collection Period	Counting Date	Nuclide	Concentration (pCi/m ³)
01/02/02-04/03/02	5/2/02	ND	
04/03/02-07/03/02	7/22/02	ND	
07/03/02-10/02/02	10/23/02	ND	
10/02/02-12/31/02	1/27/03	ND	

Table Notation:

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

Table B-3 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
Airborne Radioactivity
Station 7D1 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta Activity	2Sigma	Gamma Scan
01/02/02-01/09/02	467.6	01/16/02	.015	.002	
01/09/02-01/16/02	465.3	01/23/02	.022	.002	
01/16/02-01/23/02	449.4	01/30/02	.015	.002	
01/23/02-01/30/02	469.4	02/04/02	.007	.001	
01/30/02-02/06/02	453.2	02/12/02	.021	.002	
02/06/02-02/13/02	460.7	02/21/02	.015	.002	
02/13/02-02/20/02	472.9	02/22/02	.017	.002	
02/20/02-02/27/02	461.6	03/08/02	.011	.001	
02/27/02-03/06/02	426.2	03/08/02	.043	.004	
03/06/02-03/13/02	433.7	03/20/02	.009	.001	
03/13/02-03/20/02	434.8	03/23/02	.010	.001	
03/20/02-03/27/02	428.5	04/03/02	.012	.001	
03/27/02-04/03/02	438.4	05/05/02	.016	.002	
04/03/02-04/10/02	424.9	04/19/02	.010	.001	
04/10/02-04/17/02	419.8	04/23/02	.007	.001	
04/17/02-04/24/02	444.1	04/29/02	.011	.001	
04/24/02-05/01/02	439.0	05/09/02	.010	.001	
05/01/02-05/08/02	445.7	05/14/02	.010	.001	
05/08/02-05/15/02	444.3	05/21/02	.012	.001	
05/15/02-05/22/02	445.1	05/28/02	.006	.001	
05/22/02-05/29/02	447.5	06/07/02	.012	.001	
05/29/02-06/05/02	451.0	06/14/02	.006	.001	
06/05/02-06/12/02	454.7	06/16/02	.008	.001	
06/12/02-06/19/02	447.6	06/23/02	.011	.001	
06/19/02-06/26/02	442.7	07/12/02	.004	.001	
06/26/02-07/03/02	447.1	07/12/02	.005	.001	
07/03/02-07/10/02	447.4	07/20/02	.008	.001	
07/10/02-07/17/02	450.5	08/02/02	.006	.001	
07/17/02-07/24/02	456.6	08/05/02	.006	.001	
07/24/02-07/31/02	441.0	08/13/02	.009	.001	
07/31/02-08/07/02	454.7	08/14/02	.005	.001	
08/07/02-08/14/02	451.4	08/19/02	.012	.001	
08/14/02-08/21/02	445.7	08/27/02	.010	.001	
08/21/02-08/28/02	442.0	09/12/02	.006	.001	
08/28/02-09/04/02	446.6	09/13/02	.012	.002	
09/04/02-09/11/02	458.5	09/18/02	.010	.001	

Table B-3 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
Airborne Radioactivity
Station 7D1 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta		Gamma Scan
			Activity	2Sigma	
09/11/02-09/18/02	481.3	09/24/02	.010	.001	
09/18/02-09/25/02	463.4	09/30/02	.009	.001	
09/25/02-10/02/02	466.7	10/19/02	.013	.001	
10/02/02-10/09/02	472.1	10/20/02	.018	.002	
10/09/02-10/16/02	494.2	10/26/02	.022	.002	
10/16/02-10/23/02	486.9	10/26/02	.024	.002	
10/23/02-10/30/02	507.3	11/18/02	.030	.003	
10/30/02-11/06/02	471.3	11/19/02	.033	.003	
11/06/02-11/13/02	502.7	11/23/02	.010	.001	
11/13/02-11/20/02	486.4	11/26/02	.019	.002	
11/20/02-11/27/02	493.7	12/12/02	.032	.003	
11/27/02-12/04/02	503.8	12/12/02	.038	.004	
12/04/02-12/11/02	516.6	12/17/02	.034	.003	
12/11/02-12/18/02	480.5	12/31/02	.010	.001	
12/18/02-12/24/02	415.8	01/01/03	.006	.001	
12/24/02-12/31/02	519.3	01/08/03	.009	.001	

Gamma Activity on Filter Composites

Collection Period	Counting Date	Nuclide	Concentration (pCi/m ³)
01/02/02-04/03/02	5/6/02	ND	
04/03/02-07/03/02	7/22/02	ND	
07/03/02-10/02/02	10/23/02	ND	
10/02/02-12/31/02	1/27/03	ND	

Table Notation

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

Table B-3 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
Airborne Radioactivity
Station 8S1 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta	2Sigma	Gamma Scan
			Activity		
01/02/02-01/09/02	459.2	01/17/02	.013	.002	
01/09/02-01/16/02	468.3	01/23/02	.026	.003	
01/16/02-01/23/02	439.0	01/30/02	.014	.002	
01/23/02-01/30/02	479.9	02/05/02	.006	.001	
01/30/02-02/06/02	474.6	02/12/02	.025	.003	
02/06/02-02/13/02	475.6	02/21/02	.015	.002	
02/13/02-02/20/02	479.1	02/22/02	.013	.002	
02/20/02-02/27/02	475.6	03/08/02	.013	.002	
02/27/02-03/06/02	469.6	03/08/02	.031	.003	
03/06/02-03/13/02	475.6	03/20/02	.009	.001	
03/13/02-03/20/02	481.3	03/23/02	.010	.001	
03/20/02-03/27/02	474.8	04/03/02	.013	.001	
03/27/02-04/03/02	483.0	05/05/02	.024	.002	
04/03/02-04/10/02	470.5	04/19/02	.009	.001	
04/10/02-04/17/02	472.8	04/24/02	.008	.001	
04/17/02-04/24/02	477.6	04/30/02	.011	.001	
04/24/02-05/01/02	475.1	05/09/02	.019	.002	
05/01/02-05/08/02	495.3	05/14/02	.011	.001	
05/08/02-05/15/02	487.6	05/21/02	.011	.001	
05/15/02-05/22/02	495.0	05/28/02	.007	.001	
05/22/02-05/29/02	485.9	06/07/02	.008	.001	
05/29/02-06/05/02	466.0	06/14/02	.007	.001	
06/05/02-06/12/02	508.3	06/16/02	.008	.001	
06/12/02-06/19/02	457.4	06/23/02	.010	.001	
06/19/02-06/26/02	448.8	07/12/02	.004	.001	
06/26/02-07/03/02	473.7	07/17/02	.004	.001	
07/03/02-07/10/02	454.4	07/22/02	.006	.001	
07/10/02-07/17/02	471.7	08/02/02	.006	.001	
07/17/02-07/24/02	484.0	08/03/02	.005	.001	
07/24/02-07/31/02	448.0	08/13/02	.010	.001	
07/31/02-08/07/02	470.4	08/14/02	.006	.001	
08/07/02-08/14/02	461.5	08/19/02	.011	.001	
08/14/02-08/21/02	468.3	08/28/02	.009	.001	
08/21/02-08/28/02	462.6	09/12/02	.006	.001	
08/28/02-09/04/02	473.5	09/13/02	.012	.001	
09/04/02-09/11/02	460.3	09/18/02	.010	.001	
09/11/02-09/18/02	464.6	09/24/02	.010	.001	

Table B-3 (Continued)
Diablo Canyon Power Plant 2001 Annual Report
Airborne Radioactivity
Station 8S1 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta	2Sigma	Gamma Scan
			Activity		
09/18/02-09/25/02	462.0	10/01/02	.008	.001	
09/25/02-10/02/02	463.6	10/19/02	.013	.001	
10/02/02-10/09/02	486.0	10/20/02	.023	.002	
10/09/02-10/16/02	466.0	10/26/02	.024	.002	
10/16/02-10/23/02	469.5	10/26/02	.020	.002	
10/23/02-10/30/02	473.8	11/18/02	.033	.003	
10/30/02-11/06/02	451.1	11/19/02	.032	.003	
11/06/02-11/13/02	459.3	11/23/02	.007	.001	
11/13/02-11/20/02	468.9	11/26/02	.018	.002	
11/20/02-11/27/02	469.5	12/12/02	.035	.003	
11/27/02-12/04/02	463.1	12/12/02	.036	.004	
12/04/02-12/11/02	487.0	12/17/02	.035	.003	
12/11/02-12/18/02	457.1	12/31/02	.012	.001	
12/18/02-12/24/02	395.4	01/01/03	.007	.001	
12/24/02-12/31/02	458.6	01/08/03	.009	.001	

Gamma Activity on Filter Composites

Collection Period	Counting Date	Nuclide	Concentration (pCi/m ³)
01/02/02-04/03/02	5/6/02	ND	
04/03/02-07/03/02	7/22/02	ND	
07/03/02-10/02/02	10/23/02	ND	
10/02/02-12/31/02	1/27/03	ND	

Table Notation:

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

Table B-3 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
Airborne Radioactivity
Station 8S2 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta		Gamma Scan
			Activity	2Sigma	
01/02/02-01/09/02	445.7	01/17/02	.013	.002	
*01/09/02-01/16/02	274.2	01/23/02	.029	.003	
01/16/02-01/23/02	435.1	01/30/02	.016	.002	
01/23/02-01/30/02	444.8	02/05/02	.007	.001	
01/30/02-02/06/02	431.5	02/04/02	.022	.002	
02/06/02-02/13/02	433.5	02/21/02	.017	.002	
02/13/02-02/20/02	430.6	02/22/02	.015	.002	
02/20/02-02/27/02	430.4	03/08/02	.013	.002	
02/27/02-03/06/02	417.6	03/08/02	.033	.003	
03/06/02-03/13/02	419.8	03/20/02	.010	.001	
03/13/02-03/20/02	421.6	03/23/02	.011	.001	
03/20/02-03/27/02	450.8	04/03/02	.011	.001	
03/27/02-04/03/02	437.6	05/05/02	.016	.002	
04/03/02-04/10/02	427.5	04/19/02	.012	.001	
04/10/02-04/17/02	432.1	04/24/02	.007	.001	
04/17/02-04/24/02	441.4	04/30/02	.012	.001	
04/24/02-05/01/02	430.2	05/09/02	.009	.001	
05/01/02-05/08/01	429.4	05/14/02	.014	.002	
05/08/02-05/15/02	428.1	05/21/02	.010	.001	
05/15/02-05/22/02	456.8	05/28/02	.006	.001	
05/22/02-05/29/02	458.1	06/07/02	.009	.001	
05/29/02-06/05/02	437.5	06/14/02	.006	.001	
06/05/02-06/12/02	480.0	06/16/02	.006	.001	
06/12/02-06/19/02	465.6	06/23/02	.015	.002	
06/19/02-06/26/02	453.9	07/12/02	.004	.001	
06/26/02-07/03/02	466.4	07/13/02	.004	.001	
07/03/02-07/10/02	448.7	07/22/02	.007	.001	
07/10/02-07/17/02	444.2	08/02/02	.007	.001	
07/17/02-07/24/02	459.1	08/03/02	.005	.001	
07/24/02-07/31/02	438.2	08/13/02	.008	.001	
07/31/02-08/07/02	509.4	08/14/02	.006	.001	
08/07/02-08/14/02	495.9	08/20/02	.012	.001	
08/14/02-08/21/02	496.2	08/28/02	.010	.001	
08/21/02-08/28/02	505.6	09/13/02	.005	.001	
08/28/02-09/04/02	494.8	09/13/02	.013	.002	
09/04/02-09/11/02	491.9	09/18/02	.010	.001	
09/11/02-09/18/02	500.5	09/24/02	.010	.001	

Table B-3 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
Airborne Radioactivity
Station 8S2 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta		Gamma Scan
			Activity	2Sigma	
09/18/02-09/25/02	497.7	10/01/02	.009	.001	
09/25/02-10/02/02	490.6	10/20/02	.014	.002	
10/02/02-10/09/02	500.2	10/20/02	.019	.002	
10/09/02-10/16/02	498.3	10/26/02	.026	.003	
10/16/02-10/23/02	507.8	10/26/02	.024	.002	
10/23/02-10/30/02	532.3	11/18/02	.030	.003	
10/30/02-11/06/02	490.9	11/19/02	.030	.003	
11/06/02-11/13/02	505.2	11/23/02	.008	.001	
11/13/02-11/20/02	507.5	11/26/02	.022	.002	
11/20/02-11/27/02	516.5	12/12/02	.042	.004	
11/27/02-12/04/02	502.9	12/12/02	.042	.004	
12/04/02-12/11/02	534.9	12/17/02	.037	.004	
12/11/02-12/18/02	485.9	12/31/02	.013	.001	
12/18/02-12/24/02	433.7	01/01/03	.005	.001	
12/24/02-12/31/02	512.3	01/08/03	.011	.001	

Gamma Activity on Filter Composites

Collection Period	Counting Date	Nuclide	Concentration (pCi/m ³)
01/02/02-04/03/02	5/6/02	ND	
04/03/02-07/03/02	7/22/02	ND	
07/03/02-10/02/02	10/23/02	ND	
10/02/02-12/31/02	1/27/03	ND	

*Sampler Off ~ 63 hours

Table Notation:

ND Radionuclides of interest other than naturally occurring were not detected

Table B-3 (continued)
Diablo Canyon Power Plant 2002 Annual Report
Airborne Radioactivity
Station MT1 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta		Gamma Scan
			Activity	2Sigma	
01/02/02-01/09/02	470.4	01/16/02	.014	.002	
01/09/02-01/16/02	487.7	01/23/02	.025	.003	
01/16/02-01/23/02	453.6	01/29/02	.016	.002	
01/23/02-01/30/02	473.0	02/04/02	.007	.001	
01/30/02-02/06/02	472.2	02/12/02	.022	.002	
02/06/02-02/13/02	472.2	02/21/02	.019	.002	
02/13/02-02/20/02	472.8	02/22/02	.013	.002	
02/20/02-02/27/02	472.7	03/07/02	.011	.001	
02/27/02-03/06/02	463.6	03/08/02	.033	.003	
03/06/02-03/13/02	472.2	03/20/02	.009	.001	
03/13/02-03/20/02	489.1	03/23/02	.013	.002	
03/20/02-03/27/02	466.7	04/03/02	.011	.001	
03/27/02-04/03/02	468.5	05/05/02	.014	.002	
04/03/02-04/10/02	467.1	04/19/02	.009	.001	
04/10/02-04/17/02	474.2	04/23/02	.007	.001	
04/17/02-04/24/02	474.2	04/29/02	.010	.001	
04/24/02-05/01/02	439.8	05/09/02	.008	.001	
05/01/02-05/08/02	426.2	05/14/02	.009	.001	
05/08/02-05/15/02	435.6	05/21/02	.011	.001	
05/15/02-05/22/02	444.7	05/28/02	.005	.001	
05/22/02-05/29/02	436.1	06/06/02	.008	.001	
05/29/02-06/05/02	435.7	06/13/02	.006	.001	
06/05/02-06/12/02	466.4	06/16/02	.007	.001	
06/12/02-06/19/02	446.6	06/23/02	.009	.001	
06/19/02-06/26/02	446.6	07/11/02	.006	.001	
06/26/02-07/03/02	456.7	07/12/02	.004	.001	
07/03/02-07/10/02	448.3	07/20/02	.004	.001	
07/10/02-07/17/02	433.8	08/02/02	.005	.001	
07/17/02-07/24/02	445.7	08/02/02	.006	.001	
07/24/02-07/31/02	429.5	08/13/02	.009	.001	
07/31/02-08/07/02	443.0	08/14/02	.006	.001	
08/07/02-08/14/02	439.5	08/19/02	.012	.001	
08/14/02-08/21/02	440.4	08/27/02	.010	.001	
08/21/02-08/28/02	441.1	09/12/02	.006	.001	
08/28/02-09/04/02	445.7	09/13/02	.010	.001	
09/04/02-09/11/02	444.3	09/18/02	.010	.001	
09/11/02-09/18/02	450.7	09/24/02	.006	.001	

Table B-3 (continued)
Diablo Canyon Power Plant 2002 Annual Report
Airborne Radioactivity
Station MT1 (pCi/m³)

Collection Period	Volume (m ³)	Counting Date	Gross Beta		Gamma Scan
			Activity	2Sigma	
09/18/02-09/25/02	441.3	09/30/02	007	001	
09/25/02-10/02/02	441.4	10/19/02	.018	.002	
10/02/02-10/09/02	443.7	10/20/02	018	002	
10/09/02-10/16/02	458.2	10/26/02	.023	002	
10/16/02-10/23/02	478 3	10/26/02	.021	002	
10/23/02-10/30/02	476.5	11/18/02	.027	003	
10/30/02-11/06/02	450.7	11/19/02	.043	.004	
11/06/02-11/13/02	474 6	11/22/02	.010	.001	
11/13/02-11/20/02	408 6	11/26/02	.022	.002	
11/20/02-11/27/02	421 2	12/12/02	.034	.003	
11/27/02-12/04/02	422 0	12/12/02	.036	.004	
12/04/02-12/11/02	432.7	12/17/02	.036	.004	
12/11/02-12/18/02	420 3	12/31/02	.012	.001	
12/18/02-12/24/02	318.4	01/01/03	.006	.001	
12/24/02-12/31/02	456 8	01/08/03	.010	001	

Gamma Activity on Filter Composites

Collection Period	Counting Date	Nuclide	Concentration (pCi/m ³)
01/02/02-04/03/02	5/2/02	ND	
04/03/02-07/03/02	7/22/02	ND	
07/03/02-10/02/02	10/23/02	ND	
10/02/02-12/31/02	1/27/03	ND	

Table Notation:

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

Table B-4
Diablo Canyon Power Plan 2002 Annual Report
Environmental Dosimetry

Station	Quarterly Total (mR) ^(a)				Annual Total	Quarterly Avg.	±2σ
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr			
MT1	19.1 ± 0.4	21.0 ± 0.5	22.1 ± 0.3	20.6 ± 0.8	82.8	20.7	2.5
WN1	11.0 ± 0.3	12.3 ± 0.4	13.4 ± 0.5	11.9 ± 0.4	48.6	12.2	2.0
OS1	17.6 ± 0.3	19.9 ± 0.5	20.0 ± 0.6	18.8 ± 0.3	76.3	19.1	2.2
5S1	20.6 ± 0.6	23.3 ± 0.6	23.6 ± 0.4	22.5 ± 0.7	90.0	22.5	2.7
6S1	11.8 ± 0.3	14.1 ± 0.7	14.1 ± 0.3	12.9 ± 0.4	52.9	13.2	2.2
8S1	14.0 ± 0.2	16.9 ± 0.4	16.6 ± 0.5	15.8 ± 0.3	63.3	15.8	2.6
8S2	18.3 ± 0.6	20.6 ± 0.6	21.0 ± 0.4	19.7 ± 0.7	79.6	19.9	2.4
5S3	15.9 ± 0.4	19.1 ± 0.7	19.1 ± 0.4	18.2 ± 0.4	72.3	18.1	3.0
2D1	10.1 ± 0.2	11.6 ± 0.4	12.2 ± 0.3	11.4 ± 0.2	45.3	11.3	1.8
4D1	9.8 ± 0.2	11.4 ± 0.3	12.1 ± 0.4	11.4 ± 0.3	44.7	11.2	1.9
5F1	15.2 ± 0.5	16.9 ± 0.4	18.0 ± 0.4	16.7 ± 0.4	66.8	16.7	2.3
1A1	9.8 ± 0.4	12.5 ± 0.5	12.7 ± 0.3	11.5 ± 0.5	46.5	11.6	2.7
7D2	14.8 ± 0.4	16.7 ± 0.5	17.6 ± 0.5	15.5 ± 0.5	64.6	16.2	2.5
7G2	14.9 ± 0.4	16.9 ± 0.6	18.6 ± 0.5	16.8 ± 0.8	67.2	16.8	3.0
7C1	16.0 ± 0.3	18.0 ± 0.6	19.1 ± 0.5	17.2 ± 0.6	70.3	17.6	2.6
7F1	14.8 ± 0.4	16.6 ± 0.3	16.5 ± 0.6	15.9 ± 0.3	63.8	16.0	1.7
OB1	8.8 ± 0.2	9.6 ± 0.3	10.5 ± 0.3	9.7 ± 0.4	38.6	9.7	1.4
7D1	9.8 ± 0.3	11.4 ± 0.4	11.5 ± 0.4	11.1 ± 0.3	43.8	11.0	1.6
4C1	9.1 ± 0.4	10.8 ± 0.4	11.3 ± 0.4	10.3 ± 0.2	41.5	10.4	1.9
OS2	15.1 ± 0.3	17.2 ± 0.5	17.7 ± 0.6	17.0 ± 0.7	67.0	16.8	2.3
1S1	15.9 ± 0.4	16.5 ± 0.6	16.3 ± 0.5	15.8 ± 0.5	64.5	16.1	0.7
2S1	14.6 ± 0.4	17.2 ± 0.7	17.4 ± 0.6	16.3 ± 0.2	65.5	16.4	2.6
3S1	18.6 ± 0.4	21.5 ± 0.6	21.8 ± 0.6	20.6 ± 0.4	82.5	20.6	2.9
4S1	16.4 ± 0.4	19.0 ± 0.5	19.0 ± 0.5	18.6 ± 0.4	73.0	18.3	2.5
7S1	16.9 ± 0.4	18.4 ± 0.7	18.6 ± 0.5	18.0 ± 0.4	71.9	18.0	1.5
9S1	19.8 ± 0.4	23.2 ± 0.7	22.2 ± 0.7	21.5 ± 0.7	86.7	21.7	2.9
1C1	11.8 ± 0.1	13.3 ± 0.5	13.4 ± 0.4	12.9 ± 0.5	51.4	12.9	1.5
5C1	13.8 ± 0.4	16.4 ± 0.4	17.7 ± 0.5	16.1 ± 0.5	64.0	16.0	3.2
3D1	10.9 ± 0.3	12.7 ± 0.3	13.1 ± 0.4	12.4 ± 0.4	49.1	12.3	1.9
6D1	13.9 ± 1.0	15.7 ± 0.5	16.8 ± 0.6	16.5 ± 0.6	62.9	15.7	2.6
5F3	20.9 ± 0.4	22.9 ± 0.5	23.2 ± 0.6	22.2 ± 0.6	89.2	22.3	2.0

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 2002
Distance in Miles from the Unit 1 Center Line to the
Nearest Milk Animal, Residence, 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)	331	None
N	None	None	—	None
NNE	None	5.3 (3.3)	018.5	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	None
E	None	7.24 (4.5)	098	7.24 (4.5)
ESE	None	None	—	5.28 (3.3) ^(b)
SE	None	None	—	None

Table Notation:

- ^(a) Sectors not shown contain no land beyond the site boundary, other than islets not used for the purposes indicated in this table.
- ^(b) The vegetable garden indicated is the commercial farm along the westward side of the site access road, however, it does not produce broadleaf vegetation. 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 are about 75% sugar peas and 25% oat hay The farm starts at approximately 3 3 miles and extends to 4 5 miles from the plant.

Table B-6
Diablo Canyon Power Plant 2002 Annual Report
Lower Limits of Detection (LLD) Exceeded*

Sample	Station No.	Date Collected	¹³¹ I**	¹⁴⁰ Ba,La
Seawater	DCM	06/25/02	2.1E2	39.6
Seawater	7C2	06/25/02	1.7E2	47.5
Seawater	DCM	07/30/02	2.2E1	---

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 2002 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
02A05	Vegetative Greens (Snow peas)	7C1	1/10/2002
02A06	Air Particulate, Iodine Cartridge	MT1	1/9/2002
02A07	Air Particulate, Iodine Cartridge	5F1	1/9/2002
02A08	Air Particulate, Iodine Cartridge	7D1	1/9/2002
02A09	Air Particulate, Iodine Cartridge	8S1	1/9/2002
02A10	Air Particulate, Iodine Cartridge	8S2	1/9/2002
02A11	Air Particulate, Iodine Cartridge	0S2	1/9/2002
02A12	Air Particulate, Iodine Cartridge	1S1	1/9/2002
02A15	Market Fish	7D3	1/15/2002
02A16	California Mussels	7C2	1/10/2002
02A17	Intertidal Algae	7C2	1/10/2002
02A19	Air Particulate, Iodine Cartridge	MT1	1/16/2002
02A20	Air Particulate, Iodine Cartridge	5F1	1/16/2002
02A21	Air Particulate, Iodine Cartridge	7D1	1/16/2002
02A22	Air Particulate, Iodine Cartridge	8S1	1/16/2002
02A23	Air Particulate, Iodine Cartridge	8S2	1/16/2002
02A24	Air Particulate, Iodine Cartridge	0S2	1/16/2002
02A25	Air Particulate, Iodine Cartridge	1S1	1/16/2002
02A35	Surface Water (Outfall)	OUT	1/24/2002
02A36	Drinking Water	5S2	1/24/2002
02A37	Drinking Water	DW1	1/24/2002
02A38	Milk	5F2	1/24/2002
02A39	Air Particulate, Iodine Cartridge	MT1	1/23/2002
02A40	Air Particulate, Iodine Cartridge	5F1	1/23/2002
02A41	Air Particulate, Iodine Cartridge	7D1	1/23/2002

Table B-7 (Continued)

**Diablo Canyon Power Plant 2002 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed**

Sample No.	Description	Station No.	Collection Date
02A42	Air Particulate, Iodine Cartridge	8S1	1/23/2002
02A43	Air Particulate, Iodine Cartridge	8S2	1/23/2002
02A44	Air Particulate, Iodine Cartridge	0S2	1/23/2002
02A45	Air Particulate, Iodine Cartridge	1S1	1/23/2002
02A49	Surface Water (Seawater)	DCM	1/29/2002
02A50	Surface Water (Seawater)	7C2	1/29/2002
02A53	Air Particulate, Iodine Cartridge	MT1	1/30/2002
02A54	Air Particulate, Iodine Cartridge	5F1	1/30/2002
02A55	Air Particulate, Iodine Cartridge	7D1	1/30/2002
02A56	Air Particulate, Iodine Cartridge	8S1	1/30/2002
02A57	Air Particulate, Iodine Cartridge	8S2	1/30/2002
02A58	Air Particulate, Iodine Cartridge	0S2	1/30/2002
02A59	Air Particulate, Iodine Cartridge	1S1	1/30/2002
02A62	Perch	PON	1/25/2002
02A63	Rockfish	PON	1/25/2002
02A64	Perch	DCM	1/30/2002
02A65	Rockfish	DCM	1/30/2002
02A66	Perch	POS	1/31/2002
02A67	Rockfish	POS	1/31/2002
02A68	Perch	7C2	1/25/2002
02A69	Rockfish	7C2	1/25/2002
02A70	Air Particulate, Iodine Cartridge	MT1	2/6/2002
02A71	Air Particulate, Iodine Cartridge	5F1	2/6/2002
02A72	Air Particulate, Iodine Cartridge	7D1	2/6/2002
02A73	Air Particulate, Iodine Cartridge	8S1	2/6/2002

Table B-7 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
02A74	Air Particulate, Iodine Cartridge	8S2	2/6/2002
02A75	Air Particulate, Iodine Cartridge	0S2	2/6/2002
02A76	Air Particulate, Iodine Cartridge	1S1	2/6/2002
02A80	Air Particulate, Iodine Cartridge	MT1	2/13/2002
02A81	Air Particulate, Iodine Cartridge	5F1	2/13/2002
02A82	Air Particulate, Iodine Cartridge	7D1	2/13/2002
02A83	Air Particulate, Iodine Cartridge	8S1	2/13/2002
02A84	Air Particulate, Iodine Cartridge	8S2	2/13/2002
02A85	Air Particulate, Iodine Cartridge	0S2	2/13/2002
02A86	Air Particulate, Iodine Cartridge	1S1	2/13/2002
02A87	Surface Water (Outfall)	OUT	2/19/2002
02A88	Drinking Water	5S2	2/19/2002
02A89	Drinking Water	DW1	2/19/2002
02A90	Milk	5F2	2/19/2002
02A91	California Mussels	POS	2/8/2002
02A94	Surface Water (Seawater)	DCM	2/21/2002
02A95	Surface Water (Seawater)	7C2	2/20/2002
02A96	Vegetative Greens (Peas)	7C1	2/21/2002
02A97	Air Particulate, Iodine Cartridge	MT1	2/20/2002
02A98	Air Particulate, Iodine Cartridge	5F1	2/20/2002
02A99	Air Particulate, Iodine Cartridge	7D1	2/20/2002
02B00	Air Particulate, Iodine Cartridge	8S1	2/20/2002
02B01	Air Particulate, Iodine Cartridge	8S2	2/20/2002
02B02	Air Particulate, Iodine Cartridge	0S2	2/20/2002
02B03	Air Particulate, Iodine Cartridge	1S1	2/20/2002

Table B-7 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
02B19	Giant Kelp Blade	DCM	3/1/2002
02B20	Giant Kelp Pneumatocyst	DCM	3/1/2002
02B21	Bull Kelp Blade	POS	3/1/2002
02B22	Bull Kelp Pneumatocyst	POS	3/1/2002
02B23	Bull Kelp Blade	7C2	3/1/2002
02B24	Bull Kelp Pneumatocyst	7C2	3/1/2002
02B25	Bull Kelp Blade	PON	3/1/2002
02B26	Bull Kelp Pneumatocyst	PON	3/1/2002
02B27	California Mussels	PON	3/5/2002
02B28	California Mussels	DCM	2/25/2002
02B29	Iridaea	DCM	2/25/2002
02B30	Air Particulate, Iodine Cartridge	MT1	2/27/2002
02B31	Air Particulate, Iodine Cartridge	5F1	2/27/2002
02B32	Air Particulate, Iodine Cartridge	7D1	2/27/2002
02B33	Air Particulate, Iodine Cartridge	8S1	2/27/2002
02B34	Air Particulate, Iodine Cartridge	8S2	2/27/2002
02B35	Air Particulate, Iodine Cartridge	0S2	2/27/2002
02B36	Air Particulate, Iodine Cartridge	1S1	2/27/2002
02B53	Air Particulate, Iodine Cartridge	MT1	3/6/2002
02B54	Air Particulate, Iodine Cartridge	5F1	3/6/2002
02B55	Air Particulate, Iodine Cartridge	7D1	3/6/2002
02B56	Air Particulate, Iodine Cartridge	8S1	3/6/2002
02B57	Air Particulate, Iodine Cartridge	8S2	3/6/2002
02B58	Air Particulate, Iodine Cartridge	0S2	3/6/2002
02B59	Air Particulate, Iodine Cartridge	1S1	3/6/2002

Table B-7 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
02B64	Air Particulate, Iodine Cartridge	MT1	3/13/2002
02B65	Air Particulate, Iodine Cartridge	5F1	3/13/2002
02B66	Air Particulate, Iodine Cartridge	7D1	3/13/2002
02B67	Air Particulate, Iodine Cartridge	8S1	3/13/2002
02B68	Air Particulate, Iodine Cartridge	8S2	3/13/2002
02B69	Air Particulate, Iodine Cartridge	0S2	3/13/2002
02B70	Air Particulate, Iodine Cartridge	1S1	3/13/2002
02B87	Surface Water (Outfall)	OUT	3/20/2002
02B88	Drinking Water	5S2	3/20/2002
02B89	Drinking Water	DW1	3/20/2002
02B90	Milk	5F2	3/20/2002
02B91	Air Particulate, Iodine Cartridge	MT1	3/20/2002
02B92	Air Particulate, Iodine Cartridge	5F1	3/20/2002
02B93	Air Particulate, Iodine Cartridge	7D1	3/20/2002
02B94	Air Particulate, Iodine Cartridge	8S1	3/20/2002
02B95	Air Particulate, Iodine Cartridge	8S2	3/20/2002
02B96	Air Particulate, Iodine Cartridge	0S2	3/20/2002
02B97	Air Particulate, Iodine Cartridge	1S1	3/20/2002
02B99	Surface Water (Seawater)	DCM	3/27/2002
02C00	Surface Water (Seawater)	7C2	3/27/2002
02C01	Vegetative Greens (Peas)	7C1	3/26/2002
02C02	Air Particulate, Iodine Cartridge	MT1	3/27/2002
02C03	Air Particulate, Iodine Cartridge	5F1	3/27/2002
02C04	Air Particulate, Iodine Cartridge	7D1	3/27/2002
02C05	Air Particulate, Iodine Cartridge	8S1	3/27/2002

Table B-7 (Continued)**Diablo Canyon Power Plant 2002 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed**

Sample No.	Description	Station No.	Collection Date
02C06	Air Particulate, Iodine Cartridge	8S2	3/27/2002
02C07	Air Particulate, Iodine Cartridge	0S2	3/27/2002
02C08	Air Particulate, Iodine Cartridge	1S1	3/27/2002
02C14	Vegetative Greens (Lettuce)	5F2	4/3/2002
02C15	Vegetative Greens (Lettuce)	7G1	4/3/2002
02C16	Air Particulate, Iodine Cartridge	MT1	4/3/2002
02C17	Air Particulate, Iodine Cartridge	5F1	4/3/2002
02C18	Air Particulate, Iodine Cartridge	7D1	4/3/2002
02C19	Air Particulate, Iodine Cartridge	8S1	4/3/2002
02C20	Air Particulate, Iodine Cartridge	8S2	4/3/2002
02C21	Air Particulate, Iodine Cartridge	0S2	4/3/2002
02C22	Air Particulate, Iodine Cartridge	1S1	4/3/2002
02C23	Vegetative Greens (Mixed)	6C1	4/4/2002
02C46	Air Particulate, Iodine Cartridge	MT1	4/10/2002
02C47	Air Particulate, Iodine Cartridge	5F1	4/10/2002
02C48	Air Particulate, Iodine Cartridge	7D1	4/10/2002
02C49	Air Particulate, Iodine Cartridge	8S1	4/10/2002
02C50	Air Particulate, Iodine Cartridge	8S2	4/10/2002
02C51	Air Particulate, Iodine Cartridge	0S2	4/10/2002
02C52	Air Particulate, Iodine Cartridge	1S1	4/10/2002
02C53	Vegetative Greens (Lettuce)	5F2	4/16/2002
02C54	Vegetative Greens (Bokchoy)	7G1	4/16/2002
02C64	Air Particulate, Iodine Cartridge	MT1	4/17/2002
02C65	Air Particulate, Iodine Cartridge	5F1	4/17/2002
02C66	Air Particulate, Iodine Cartridge	7D1	4/17/2002

Table B-7 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
02C67	Air Particulate, Iodine Cartridge	8S1	4/17/2002
02C68	Air Particulate, Iodine Cartridge	8S2	4/17/2002
02C69	Air Particulate, Iodine Cartridge	0S2	4/17/2002
02C70	Air Particulate, Iodine Cartridge	1S1	4/17/2002
02C71	Surface Water (Outfall)	OUT	4/23/2002
02C72	Drinking Water	5S2	4/23/2002
02C73	Drinking Water	DW1	4/23/2002
02C74	Milk	5F2	4/23/2002
02C76	Air Particulate, Iodine Cartridge	MT1	4/24/2002
02C77	Air Particulate, Iodine Cartridge	5F1	4/24/2002
02C78	Air Particulate, Iodine Cartridge	7D1	4/24/2002
02C79	Air Particulate, Iodine Cartridge	8S1	4/24/2002
02C80	Air Particulate, Iodine Cartridge	8S2	4/24/2002
02C81	Air Particulate, Iodine Cartridge	0S2	4/24/2002
02C82	Air Particulate, Iodine Cartridge	1S1	4/24/2002
02C94	Vegetative Greens (Peas)	7C1	4/29/2002
02C95	Surface Water (Seawater)	DCM	4/30/2002
02C96	Surface Water (Seawater)	7C2	4/30/2002
02C99	Air Particulate, Iodine Cartridge	MT1	5/1/2002
02D00	Air Particulate, Iodine Cartridge	5F1	5/1/2002
02D01	Air Particulate, Iodine Cartridge	7D1	5/1/2002
02D02	Air Particulate, Iodine Cartridge	8S1	5/1/2002
02D03	Air Particulate, Iodine Cartridge	8S2	5/1/2002
02D04	Air Particulate, Iodine Cartridge	0S2	5/1/2002
02D05	Air Particulate, Iodine Cartridge	1S1	5/1/2002

Table B-7 (Continued)

**Diablo Canyon Power Plant 2002 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed**

Sample No.	Description	Station No.	Collection Date
02D06	Vegetative Greens (Lettuce)	5F2	5/6/2002
02D07	Vegetative Greens (Lettuce)	7G1	5/6/2002
02D10	Air Particulate, Iodine Cartridge	MT1	5/8/2002
02D11	Air Particulate, Iodine Cartridge	5F1	5/8/2002
02D12	Air Particulate, Iodine Cartridge	7D1	5/8/2002
02D13	Air Particulate, Iodine Cartridge	8S1	5/8/2002
02D14	Air Particulate, Iodine Cartridge	8S2	5/8/2002
02D15	Air Particulate, Iodine Cartridge	0S2	5/8/2002
02D16	Air Particulate, Iodine Cartridge	1S1	5/8/2002
02D31	Air Particulate, Iodine Cartridge	MT1	5/15/2002
02D32	Air Particulate, Iodine Cartridge	5F1	5/15/2002
02D33	Air Particulate, Iodine Cartridge	7D1	5/15/2002
02D34	Air Particulate, Iodine Cartridge	8S1	5/15/2002
02D35	Air Particulate, Iodine Cartridge	8S2	5/15/2002
02D36	Air Particulate, Iodine Cartridge	0S2	5/15/2002
02D37	Air Particulate, Iodine Cartridge	1S1	5/15/2002
02D38	Surface Water (Outfall)	OUT	5/21/2002
02D39	Drinking Water	5S2	5/21/2002
02D40	Drinking Water	DW1	5/21/2002
02D41	Milk	5F2	5/21/2002
02D42	Surface Water (Seawater)	DCM	5/22/2002
02D43	Surface Water (Seawater)	7C2	5/22/2002
02D44	Air Particulate, Iodine Cartridge	MT1	5/22/2002
02D45	Air Particulate, Iodine Cartridge	5F1	5/22/2002
02D46	Air Particulate, Iodine Cartridge	7D1	5/22/2002

Table B-7 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
02D47	Air Particulate, Iodine Cartridge	8S1	5/22/2002
02D48	Air Particulate, Iodine Cartridge	8S2	5/22/2002
02D49	Air Particulate, Iodine Cartridge	0S2	5/22/2002
02D50	Air Particulate, Iodine Cartridge	1S1	5/22/2002
02D56	Vegetative Greens (Snow peas)	7C1	5/28/2002
02D57	Bull Kelp Blade	PON	5/22/2002
02D58	Bull Kelp Pneumatocyst	PON	5/22/2002
02D59	Giant Kelp Blade	DCM	5/22/2002
02D60	Giant Kelp Pneumatocyst	DCM	5/22/2002
02D61	Bull Kelp Blade	POS	5/22/2002
02D62	Bull Kelp Pneumatocyst	POS	5/22/2002
02D63	Bull Kelp Blade	7C2	5/22/2002
02D64	Bull Kelp Pneumatocyst	7C2	5/22/2002
02D65	Perch	PON	4/25/2002
02D66	Rockfish	PON	4/25/2002
02D67	California Mussels	PON	5/28/2002
02D68	Perch	DCM	4/12/2002
02D69	Rockfish	DCM	4/12/2002
02D70	California Mussels	DCM	5/16/2002
02D71	Intertidal Algae	DCM	5/16/2002
02D72	Perch	POS	4/25/2002
02D73	Rockfish	POS	4/24/2002
02D74	California Mussels	POS	5/28/2002
02D75	Perch	7C2	5/24/2002
02D76	Rockfish	7C2	5/24/2002

Table B-7 (Continued)

**Diablo Canyon Power Plant 2002 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed**

Sample No.	Description	Station No.	Collection Date
02D77	California Mussels	7C2	5/29/2002
02D78	Intertidal Algae	7C2	5/29/2002
02E11	Vegetative Greens (Peas)	7C1	6/12/2002
02E12	Market Fish (English Sole)	7D3	6/12/2002
02E38	Air Particulate, Iodine Cartridge	7D1	6/19/2002
02E39	Air Particulate, Iodine Cartridge	8S1	6/19/2002
02E40	Air Particulate, Iodine Cartridge	8S2	6/19/2002
02E41	Air Particulate, Iodine Cartridge	0S2	6/19/2002
02E42	Air Particulate, Iodine Cartridge	1S1	6/19/2002
02E43	Surface Water (Outfall)	OUT	6/19/2002
02E44	Drinking Water	5S2	6/19/2002
02E45	Drinking Water	DW1	6/19/2002
02E46	Milk	5F2	6/19/2002
02E60	Air Particulate, Iodine Cartridge	5F1	6/26/2002
02E61	Air Particulate, Iodine Cartridge	7D1	6/26/2002
02E62	Air Particulate, Iodine Cartridge	8S1	6/26/2002
02E63	Air Particulate, Iodine Cartridge	8S2	6/26/2002
02E64	Air Particulate, Iodine Cartridge	0S2	6/26/2002
02E65	Air Particulate, Iodine Cartridge	1S1	6/26/2002
02E71	Air Particulate, Iodine Cartridge	MT1	7/3/2002
02E72	Air Particulate, Iodine Cartridge	5F1	7/3/2002
02E73	Air Particulate, Iodine Cartridge	7D1	7/3/2002
02E74	Air Particulate, Iodine Cartridge	8S1	7/3/2002
02E75	Air Particulate, Iodine Cartridge	8S2	7/3/2002
02E76	Air Particulate, Iodine Cartridge	0S2	7/3/2002

Table B-7 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
02E77	Air Particulate, Iodine Cartridge	1S1	7/3/2002
02E82	Air Particulate, Iodine Cartridge	MT1	7/10/2002
02E83	Air Particulate, Iodine Cartridge	5F1	7/10/2002
02E84	Air Particulate, Iodine Cartridge	7D1	7/10/2002
02E85	Air Particulate, Iodine Cartridge	8S1	7/10/2002
02E86	Air Particulate, Iodine Cartridge	8S2	7/10/2002
02E87	Air Particulate, Iodine Cartridge	0S2	7/10/2002
02E88	Air Particulate, Iodine Cartridge	1S1	7/10/2002
02E89	Vegetative Greens (Broccoli)	5F2	7/16/2002
02E98	Air Particulate, Iodine Cartridge	5F1	7/17/2002
02E99	Air Particulate, Iodine Cartridge	7D1	7/17/2002
02F00	Air Particulate, Iodine Cartridge	8S1	7/17/2002
02F01	Air Particulate, Iodine Cartridge	8S2	7/17/2002
02F02	Air Particulate, Iodine Cartridge	0S2	7/17/2002
02F03	Air Particulate, Iodine Cartridge	1S1	7/17/2002
02F08	Milk	5F2	7/23/2002
02F11	Surface Water (Outfall)	OUT	7/25/2002
02F12	Drinking Water	5S2	7/25/2002
02F13	Drinking Water	DW1	7/25/2002
02F18	Air Particulate, Iodine Cartridge	8S2	7/24/2002
02F19	Air Particulate, Iodine Cartridge	0S2	7/24/2002
02F20	Air Particulate, Iodine Cartridge	1S1	7/24/2002
02F23	Vegetative Greens (Swiss Chard)	7G1	7/29/2002
02F24	Surface Water (Seawater)	DCM	7/30/2002
02F25	Surface Water (Seawater)	7C2	7/30/2002

Table B-7 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
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Sample No.	Description	Station No.	Collection Date
02F27	Bull Kelp Blade	PON	7/30/2002
02F28	Bull Kelp Pneumatocyst	PON	7/30/2002
02F29	Giant Kelp Blade	DCM	7/30/2002
02F30	Giant Kelp Pneumatocyst	DCM	7/30/2002
02F31	Bull Kelp Blade	POS	7/30/2002
02F32	Bull Kelp Pneumatocyst	POS	7/30/2002
02F33	Bull Kelp Blade	7C2	7/30/2002
02F34	Bull Kelp Pneumatocyst	7C2	7/30/2002
02F35	California Mussels	DCM	7/26/2002
02F36	Intertidal Algae	DCM	7/26/2002
02F37	California Mussels	POS	7/30/2002
02F58	Air Particulate, Iodine Cartridge	5F1	8/7/2002
02F59	Air Particulate, Iodine Cartridge	7D1	8/7/2002
02F60	Air Particulate, Iodine Cartridge	8S1	8/7/2002
02F61	Air Particulate, Iodine Cartridge	8S2	8/7/2002
02F62	Air Particulate, Iodine Cartridge	0S2	8/7/2002
02F63	Air Particulate, Iodine Cartridge	1S1	8/7/2002
02F66	Air Particulate, Iodine Cartridge	MT1	8/14/2002
02F67	Air Particulate, Iodine Cartridge	5F1	8/14/2002
02F68	Air Particulate, Iodine Cartridge	7D1	8/14/2002
02F69	Air Particulate, Iodine Cartridge	8S1	8/14/2002
02F70	Air Particulate, Iodine Cartridge	8S2	8/14/2002
02F71	Air Particulate, Iodine Cartridge	0S2	8/14/2002
02F72	Air Particulate, Iodine Cartridge	1S1	8/14/2002
02F73	Surface Water (Outfall)	OUT	8/20/2002

Table B-7 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed.

Sample No.	Description	Station No.	Collection Date
02F74	Drinking Water	5S2	8/20/2002
02F75	Drinking Water	DW1	8/20/2002
02F76	Milk	5F2	8/20/2002
02F86	Air Particulate, Iodine Cartridge	7D1	8/21/2002
02F87	Air Particulate, Iodine Cartridge	8S1	8/21/2002
02F88	Air Particulate, Iodine Cartridge	8S2	8/21/2002
02F89	Air Particulate, Iodine Cartridge	0S2	8/21/2002
02F90	Air Particulate, Iodine Cartridge	1S1	8/21/2002
02F99	Air Particulate, Iodine Cartridge	MT1	8/28/2002
02G00	Air Particulate, Iodine Cartridge	5F1	8/28/2002
02G01	Air Particulate, Iodine Cartridge	7D1	8/28/2002
02G02	Air Particulate, Iodine Cartridge	8S1	8/28/2002
02G03	Air Particulate, Iodine Cartridge	8S2	8/28/2002
02G04	Air Particulate, Iodine Cartridge	0S2	8/28/2002
02G05	Air Particulate, Iodine Cartridge	1S1	8/28/2002
02G06	Air Particulate, Iodine Cartridge	MT1	9/4/2002
02G07	Air Particulate, Iodine Cartridge	5F1	9/4/2002
02G08	Air Particulate, Iodine Cartridge	7D1	9/4/2002
02G09	Air Particulate, Iodine Cartridge	8S1	9/4/2002
02G10	Air Particulate, Iodine Cartridge	8S2	9/4/2002
02G11	Air Particulate, Iodine Cartridge	0S2	9/4/2002
02G12	Air Particulate, Iodine Cartridge	1S1	9/4/2002
02G31	Perch	PON	9/5/2002
02G32	Rockfish	PON	9/5/2002
02G33	Perch	DCM	9/5/2002

Table B-7 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
02G34	Rockfish	DCM	9/5/2002
02G35	Perch	POS	7/30/2002
02G36	Rockfish	POS	7/30/2002
02G37	Perch	7C2	7/30/2002
02G38	Rockfish	7C2	7/30/2002
02G50	Surface Water (Outfall)	OUT	9/17/2002
02G51	Drinking Water	5S2	9/17/2002
02G52	Drinking Water	DW1	9/17/2002
02G53	Milk	5F2	9/17/2002
02G61	Air Particulate, Iodine Cartridge	0S2	9/18/2002
02G62	Air Particulate, Iodine Cartridge	1S1	9/18/2002
02G65	Vegetative Greens (Bell Peppers)	5F2	9/24/2002
02G66	Vegetative Greens (Celery)	7G1	9/24/2002
02G67	Vegetative Greens (Snow Peas)	7C1	9/24/2002
02G72	Air Particulate, Iodine Cartridge	5F1	9/25/2002
02G73	Air Particulate, Iodine Cartridge	7D1	9/25/2002
02G74	Air Particulate, Iodine Cartridge	8S1	9/25/2002
02G75	Air Particulate, Iodine Cartridge	8S2	9/25/2002
02G76	Air Particulate, Iodine Cartridge	0S2	9/25/2002
02G77	Air Particulate, Iodine Cartridge	1S1	9/25/2002
02G79	Vegetative Greens (mixed)	6C1	9/30/2002
02G80	Market Fish	7D3	9/16/2002
02G81	California Mussels	7C2	9/19/2002
02G82	Intertidal Algae	7C2	9/19/2002
02G85	Air Particulate, Iodine Cartridge	MT1	10/2/2002

Table B-7 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
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Sample No.	Description	Station No.	Collection Date
02G86	Air Particulate, Iodine Cartridge	5F1	10/2/2002
02G87	Air Particulate, Iodine Cartridge	7D1	10/2/2002
02G88	Air Particulate, Iodine Cartridge	8S1	10/2/2002
02G89	Air Particulate, Iodine Cartridge	8S2	10/2/2002
02G90	Air Particulate, Iodine Cartridge	0S2	10/2/2002
02G91	Air Particulate, Iodine Cartridge	1S1	10/2/2002
02G93	Vegetative Greens (Peppers)	5F2	10/8/2002
02G94	Vegetative Greens (Peas)	7C1	10/8/2002
02G98	Air Particulate, Iodine Cartridge	7D1	10/9/2002
02G99	Air Particulate, Iodine Cartridge	8S1	10/9/2002
02H00	Air Particulate, Iodine Cartridge	8S2	10/9/2002
02H01	Air Particulate, Iodine Cartridge	0S2	10/9/2002
02H02	Air Particulate, Iodine Cartridge	1S1	10/9/2002
02H27	Air Particulate, Iodine Cartridge	MT1	10/16/2002
02H28	Air Particulate, Iodine Cartridge	5F1	10/16/2002
02H29	Air Particulate, Iodine Cartridge	7D1	10/16/2002
02H30	Air Particulate, Iodine Cartridge	8S1	10/16/2002
02H31	Air Particulate, Iodine Cartridge	8S2	10/16/2002
02H32	Air Particulate, Iodine Cartridge	0S2	10/16/2002
02H33	Air Particulate, Iodine Cartridge	1S1	10/16/2002
02H36	Surface Water (Outfall)	OUT	10/22/2002
02H37	Drinking Water	5S2	10/22/2002
02H38	Drinking Water	DW1	10/22/2002
02H39	Milk	5F2	10/22/2002
02H69	Air Particulate, Iodine Cartridge	8S2	10/23/2002

Table B-7 (Continued)

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List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
02H70	Air Particulate, Iodine Cartridge	0S2	10/23/2002
02H71	Air Particulate, Iodine Cartridge	1S1	10/23/2002
02H73	Vegetative Greens (Celery)	7G1	10/23/2002
02H86	Surface Water (Seawater)	DCM	10/29/2002
02H87	Surface Water (Seawater)	7C2	10/29/2002
02H89	Bull Kelp Blade	PON	10/30/2002
02H90	Bull Kelp Pneumatocyst	PON	10/30/2002
02H91	Giant Kelp Blade	DCM	10/29/2002
02H92	Giant Kelp Pneumatocyst	DCM	10/29/2002
02H93	Bull Kelp Blade	POS	10/30/2002
02H94	Bull Kelp Pneumatocyst	POS	10/30/2002
02H95	Bull Kelp Blade	7C2	10/29/2002
02H96	Bull Kelp Pneumatocyst	7C2	10/29/2002
02I13	Vegetative Greens (Peppers)	5F2	11/5/2002
02I18	Air Particulate, Iodine Cartridge	MT1	11/6/2002
02I19	Air Particulate, Iodine Cartridge	5F1	11/6/2002
02I20	Air Particulate, Iodine Cartridge	7D1	11/6/2002
02I21	Air Particulate, Iodine Cartridge	8S1	11/6/2002
02I22	Air Particulate, Iodine Cartridge	8S2	11/6/2002
02I23	Air Particulate, Iodine Cartridge	0S2	11/6/2002
02I24	Air Particulate, Iodine Cartridge	1S1	11/6/2002
02I28	Air Particulate, Iodine Cartridge	MT1	11/13/2002
02I29	Air Particulate, Iodine Cartridge	5F1	11/13/2002
02I30	Air Particulate, Iodine Cartridge	7D1	11/13/2002
02I31	Air Particulate, Iodine Cartridge	8S1	11/13/2002

Table B-7 (Continued)
Diablo Canyon Power Plant 2002 Annual Report
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Sample No.	Description	Station No.	Collection Date
02I32	Air Particulate, Iodine Cartridge	8S2	11/13/2002
02I33	Air Particulate, Iodine Cartridge	0S2	11/13/2002
02I34	Air Particulate, Iodine Cartridge	1S1	11/13/2002
02I40	Surface Water (Outfall)	OUT	11/19/2002
02I41	Drinking Water	5S2	11/19/2002
02I42	Drinking Water	DW1	11/19/2002
02I43	Milk	5F2	11/19/2002
02I46	Vegetative Greens (Snow Peas)	7C1	11/20/2002
02I52	Air Particulate, Iodine Cartridge	0S2	11/20/2002
02I53	Air Particulate, Iodine Cartridge	1S1	11/20/2002
02I56	Surface Water (Seawater)	DCM	11/26/2002
02I57	Surface Water (Seawater)	7C2	11/26/2002
02I61	Air Particulate, Iodine Cartridge	MT1	11/27/2002
02I62	Air Particulate, Iodine Cartridge	5F1	11/27/2002
02I63	Air Particulate, Iodine Cartridge	7D1	11/27/2002
02I64	Air Particulate, Iodine Cartridge	8S1	11/27/2002
02I65	Air Particulate, Iodine Cartridge	8S2	11/27/2002
02I66	Air Particulate, Iodine Cartridge	0S2	11/27/2002
02I67	Air Particulate, Iodine Cartridge	1S1	11/27/2002
02I71	California Mussels	DCM	12/3/2002
02I72	Intertidal Algae	DCM	12/3/2002
02I73	California Mussels	7C2	12/3/2002
02I74	Intertidal Algae	7C2	12/3/2002
02I76	Air Particulate, Iodine Cartridge	MT1	12/4/2002
02I77	Air Particulate, Iodine Cartridge	5F1	12/4/2002

Table B-7 (Continued)

**Diablo Canyon Power Plant 2002 Annual Report
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Sample No.	Description	Station No.	Collection Date
02I78	Air Particulate, Iodine Cartridge	7D1	12/4/2002
02I79	Air Particulate, Iodine Cartridge	8S1	12/4/2002
02I80	Air Particulate, Iodine Cartridge	8S2	12/4/2002
02I81	Air Particulate, Iodine Cartridge	0S2	12/4/2002
02I82	Air Particulate, Iodine Cartridge	1S1	12/4/2002
02I89	Vegetative Greens (Peas)	7C1	12/9/2002
02I90	Beach Sand	Avila Beach	12/09/2002
02I93	Air Particulate, Iodine Cartridge	5F1	12/11/2002
02I94	Air Particulate, Iodine Cartridge	7D1	12/11/2002
02I95	Air Particulate, Iodine Cartridge	8S1	12/11/2002
02I96	Air Particulate, Iodine Cartridge	8S2	12/11/2002
02I97	Air Particulate, Iodine Cartridge	0S2	12/11/2002
02I98	Air Particulate, Iodine Cartridge	1S1	12/11/2002
02J00	Beach Sand (Replicate)	Avila Beach	12/09/2002
02J01	Surface Water (Outfall)	OUT	12/17/2002
02J02	Drinking Water	5S2	12/17/2002
02J03	Drinking Water	DW1	12/17/2002
02J04	Milk	5F2	12/17/2002
02J05	Goat Meat	On site	12/17/2002
02J12	Air Particulate, Iodine Cartridge	MT1	12/18/2002
02J13	Air Particulate, Iodine Cartridge	5F1	12/18/2002
02J14	Air Particulate, Iodine Cartridge	7D1	12/18/2002
02J15	Air Particulate, Iodine Cartridge	8S1	12/18/2002
02J16	Air Particulate, Iodine Cartridge	8S2	12/18/2002
02J17	Air Particulate, Iodine Cartridge	0S2	12/18/2002

Table B-7 (Continued)
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Sample No.	Description	Station No.	Collection Date
02J18	Air Particulate, Iodine Cartridge	1S1	12/18/2002
02J20	Air Particulate, Iodine Cartridge	MT1	12/24/2002
02J21	Air Particulate, Iodine Cartridge	5F1	12/24/2002
02J22	Air Particulate, Iodine Cartridge	7D1	12/24/2002
02J23	Air Particulate, Iodine Cartridge	8S1	12/24/2002
02J24	Air Particulate, Iodine Cartridge	8S2	12/24/2002
02J25	Air Particulate, Iodine Cartridge	0S2	12/24/2002
02J26	Air Particulate, Iodine Cartridge	1S1	12/24/2002
02J29	Surface Water (Seawater)	DCM	12/27/2002
02J30	Surface Water (Seawater)	7C2	12/27/2002
02J34	Air Particulate, Iodine Cartridge	7D1	12/31/2002
02J35	Air Particulate, Iodine Cartridge	8S1	12/31/2002
02J36	Air Particulate, Iodine Cartridge	8S2	12/31/2002
02J37	Air Particulate, Iodine Cartridge	0S2	12/31/2002
02J38	Air Particulate, Iodine Cartridge	1S1	12/31/2002
02J39	Market Fish	7D3	12/3/2002
02J57	Sediment	DCM	1/14/2003
02J58	Perch	DCM	1/14/2003
02J59	Rockfish	DCM	1/14/2003
02J60	Sediment	7C2	1/15/2003
02J61	Perch	POS	1/16/2003
02J62	Rockfish	POS	1/16/2003