

James R. Becker Vice President Diablo Canyon Operations and Station Director Diablo Canyon Power Plant P. O. Box 56 Avila Beach, CA 93424

805.545.3462 Fax: 805.545.4234

April 28, 2006

PG&E Letter DCL-06-059

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

Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2
2005 Annual Radiological Environmental Operating Report

Dear Commissioners and Staff:

Enclosed is the 2005 Annual Radiological Environmental Operating Report for Diablo Canyon Power Plant, Units 1 and 2, submitted in accordance with Technical Specification 5.6.2. The enclosure contains material consistent with the objectives of the Offsite Dose Calculation Manual, and 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

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

Sincerely,

James R. Becker

ddm/4347/R0273567

Enclosure

cc/enc:

Larry Allen

Edgar D. Bailey, State of California, Department of Health Services

Roger W. Briggs

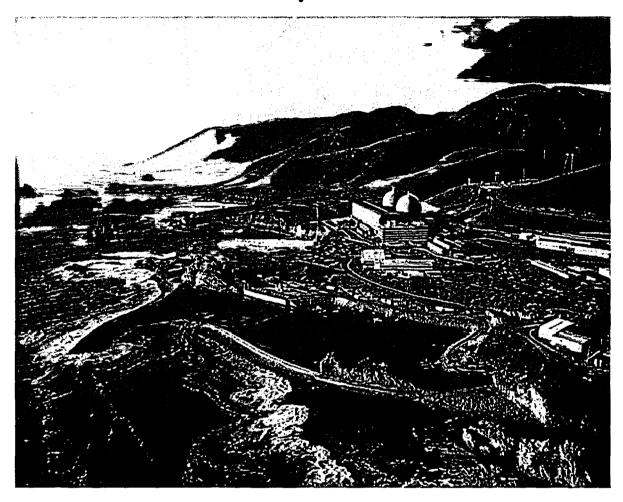
Terry W. Jackson, NRC Senior Resident

Bruce S. Mallett, NRC Region IV Alan B. Wang, NRR Project Manager

CC:

Diablo Distribution

2005 Annual Radiological Environmental Operating Report Diablo Canyon Power Plant



April 2006

Prepared by
Pacific Gas and Electric Company
Technical and Ecological Services
3400 Crow Canyon Road
San Ramon, CA 94583

Report Number 420DC-06.11

© 2006 by Pacific Gas and Electric Company All Rights Reserved





2005 ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

Prepared by: R.W. Lorenz RW Holey 4/11/06

Supervisor, Radiological Services, TES

Reviewed by: M.B. Wright Islantin Wright 4/12/06

REMP Engineer, DCPP

Approved by: R.E. Hite Koppen & Jule 4/12/06

Manager, Radiation Protection, DCPP

APRIL 2006

REPORT NO.: 420DC-06.11



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, 2005, through December 31, 2005. 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 2005 REMP showed no unusual findings from plant operations, and that the operation of DCPP had no significant radiological impact on the environment. Plant operations had no significant impact on airborne radioactivity in the environment. The ambient direct radiation levels in the DCPP environs did not change and were within the preoperational range. No plant related radionuclides were detected in surface water samples. The plant had no significant impact on surface water. Food crops sampled during their growing season and milk samples collected detected only naturally occurring radioactivity; and therefore, there was no impact from plant operation. Seven marine samples contained other than naturally occurring radionuclides. Cobalt-58 was detected in two algae samples collected from Diablo Cove. The cobalt-58 detected in these algae samples was slightly above detection levels. 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. In addition, Zinc-65 was detected in one kelp sample and a mussel sample collected from Diablo Cove. Zinc-65 had been previously identified in a mussel sample from Diablo Cove, but it is not unexpected since mussels are known to concentrate zinc and the plant has released more of this isotope since the introduction of stable zinc to the reactor coolant system as a corrosion inhibitor several years ago. One sample of fish obtained from a local fish market, one sample of fish from Station 7C2 (Rattlesnake Canyon), and one sample of fish from Diablo Cove each contained a small concentration of cesium-137. This isotope in a comparable concentration is routinely measured in fish collected worldwide due to fallout of this long lived isotope from past nuclear weapons tests in the atmosphere.



CONTENTS

		Page
1	INTRODUCTION	1-1
	DCPP ENVIRONMENTAL MONITORING PROGRAM	1-1
2	SAMPLING METHODS	2-1
	AIRBORNE RADIOACTIVITY	2-1
	DIRECT RADIATION	2-1
	WATER SAMPLES	2-2
	MARINE BIOLOGICAL AND SEDIMENT SAMPLES	2-2
	FOOD CROPS	2-2
	MILK	2-3
3	SAMPLE ANALYSES	3-1
	AIRBORNE RADIOACTIVITY	3-1
	DIRECT RADIATION	3-1
	WATER SAMPLES	3-3
	MARINE BIOLOGICAL AND SEDIMENT SAMPLES	3-3
	FOOD CROPS	3-3
	MILK	3-3
4	QUALITY CONTROL	4-1
5	LAND USE CENSUS	5-1
6	RESULTS AND DISCUSSION	6-1
	AIRBORNE RADIOACTIVITY	6-1
	DIRECT RADIATION	6-6
	WATER SAMPLES	6-6
	MARINE BIOLOGICAL AND SEDIMENT SAMPLES	6-6
	FOOD CROPS	6-8
	MILK	6-9
7	COMPARISON OF PREOPERATIONAL AND OPERATIONAL DATA	7-1
	AIRBORNE RADIOACTIVITY	7-1
	DIRECT RADIATION	7-2



CONTENTS (Continued)

		Page
	ALGAE SAMPLES	7-3
	MUSSEL SAMPLE	7-5
	MARKET FISH	7-5
8	PROGRAM VARIANCE	8-1
	AIRBORNE RADIOACTIVITY	8-1
	MARINE AND TERRESTRIAL SAMPLES	8-1
	SUPPLEMENTAL SAMPLES	8-1
9	REFERENCES	9-1
Αŗ	ppendix A:	
	ENVIRONMENTAL RADIATION MONITORING PROGRAM SUMMARIES	
Αŗ	ppendix B:	
	ANALYTICAL RESULTS	

FIGURES

Figure		Page
1	Units 1 and 2 Diablo Canyon off-site stations.	1-6
2a	Units 1 and 2 Diablo Canyon on-site stations.	1-7
2b	Units 1 and 2 Diablo Canyon on-site stations.	1-8
3	Units 1 and 2 Diablo Canyon Power Plant land use census.	5-4
4	Air particulates gross beta activities	6-2
5	Environmental dosimeter comparisons	6-7
6	Control chart for air particulate filters.	7-2
7	Control chart for TLD data	7-3
8	Control Chart for Co-58 Levels in Algae - Station DCM	7-4
9	Control Chart for Zn-65 Levels in Blades of Kelp - Station DCM	7-4
10	Control Chart for Zn-65 Levels in Mussels - Station DCM	7-5
11a	Control Chart for Cs-137 Levels in Commercial Fish - Salmon	7-6
11b	Control Chart for Cs-137 Levels in Surfperch (Embiotocidae) - Station 7C2	7-6
11c	Control Chart for Cs-137 Levels in Rockfish (Sebastes spp.) - Station DCM	7-7
	TABLES	
Table		Page
1	Summary of the Radiological Environmental Monitoring Program	1-2
2	Distances and Directions to Environmental Monitoring Stations	1-4
3	Maximum Values for Lower Limits of Detection (LLD)	3-2
4	Reporting Levels for Radioactivity Concentrations in Environmental Samples	6-9
A-1	Environmental Radiological Monitoring Program Summary - Airborne	A-1
A-2	Environmental Radiological Monitoring Program Summary - Direct Radiation	A-2
A-3a	Environmental Radiological Monitoring Program Summary - Surface Water	A-3
A-3b	Environmental Radiological Monitoring Program Summary - Drinking Water	A-4
A-4	Environmental Radiological Monitoring Program Summary - Mussels	A-5
A-5	Environmental Radiological Monitoring Program Summary - Fish	A-6
A-6	Environmental Radiological Monitoring Program Summary - Algae	A-7
A-7	Environmental Radiological Monitoring Program Summary - Sediment	A-8
A-8	Environmental Radiological Monitoring Program Summary - Food Crops	A-9
4 0	Environmental Radiological Monitoring Program Summary - Food Crops	
A-9	Environmental Radiological Monitoring Program Summary - Milk	A-10



TABLES (Continued)

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

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, 2005, through December 31, 2005. 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 (page 1-2). 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 (page 1-4). The off-site and on-site stations are shown in Figures 1 and 2 (page 1-6), 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	

⁽a) Three TLD badges are placed at each station.
(b) See Figures 1 and 2 for locations.

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

⁽d) Supplemental sample.

Table 1 (continued) Summary of the Radiological Environmental Monitoring Program

Exposure Pathway and/or Sample	Sampling Locations ^(b)	Type of Analysis	Collection Frequency
Rockfish (Sebastes sp.)	Diablo Cove (DCM) Pacific Ocean North (PON) ^(d) Pacific Ocean South (POS) ^(d) Rattlesnake Canyon (7C2)	Gamma isotopic	Quarterly if Available
Perch (Family Embiotocidae)	Diablo Cove (DCM) Pacific Ocean North (PON) ^(d) Pacific Ocean South (POS) ^(d) Rattlesnake Canyon (7C2)	Gamma isotopic	Quarterly if Available
Fish (species unspecified)	Fish Market at Avila Pier (7D3) ^(d) Morro Bay Market (2F1) ^(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		Radial Direction** (True Heading)	Radial Distance** From Plant	
Code ^(a)	Station Name	(Degrees)	(km) (Miles)	
ØS1	Exclusion Fence-Northwest Corner	320	0.2	(0.1)
ØS2	North Gate	320	0.8	(0.5)
181	Wastewater Pond	330	0.6	(0.4)
2 S1	Back Road-300 m North of Plant	0	0.3	(0.2)
3 S1	Road NW of 230 kV Switchyard	23	0.6	(0.4)
4S 1	Back Road between Switchyard	43	0.8	(0.5)
5S1	500 kV Switchyard	58	0.6	(0.4)
5 \$2	Diablo Creek Weir	65	1.0	(0.6)
5 S3	Microwave Tower Road	70	1.0	(0.7)
6S 1	Microwave Tower	94	0.8	(0.5)
7 S1	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

L

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

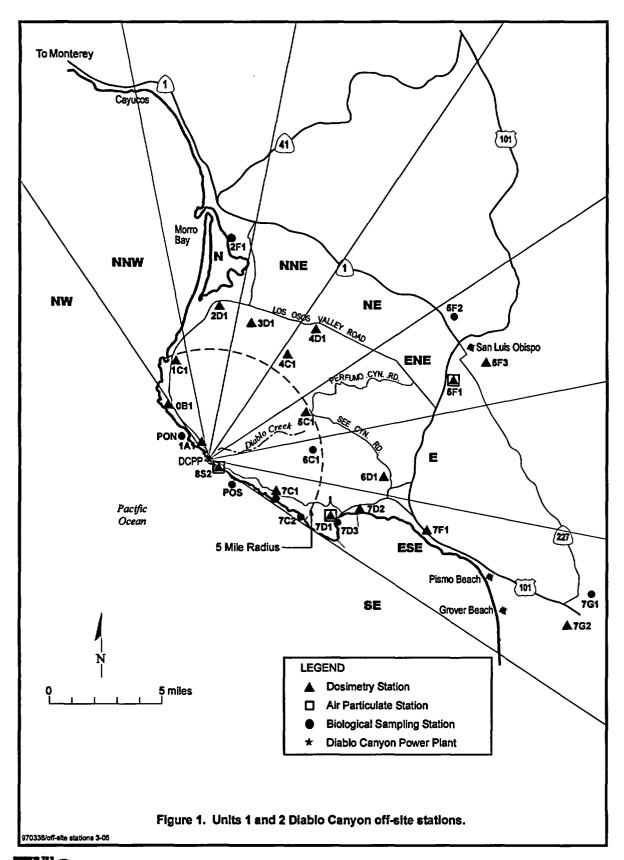
G - 15-20 miles from plant

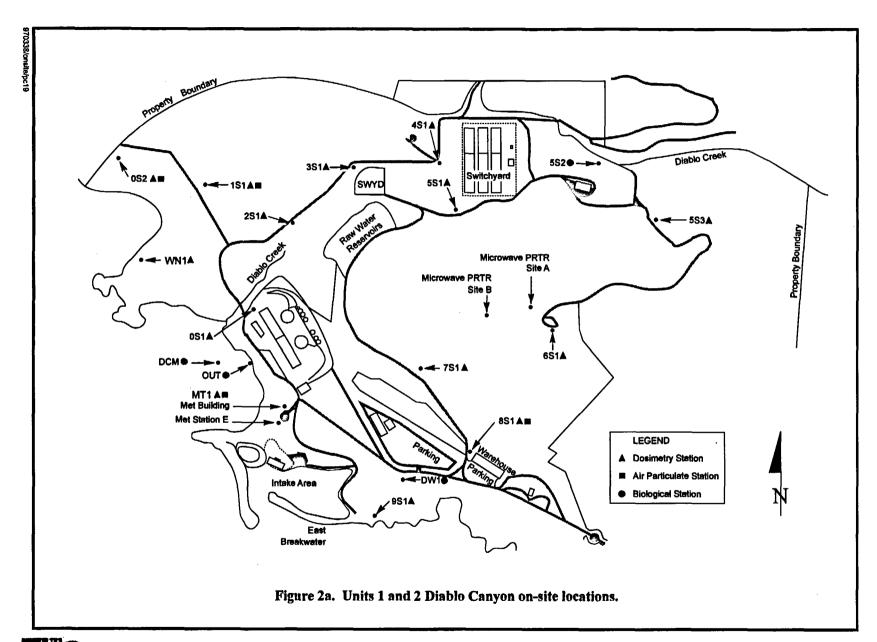
H - Greater than 20 miles from plant

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).





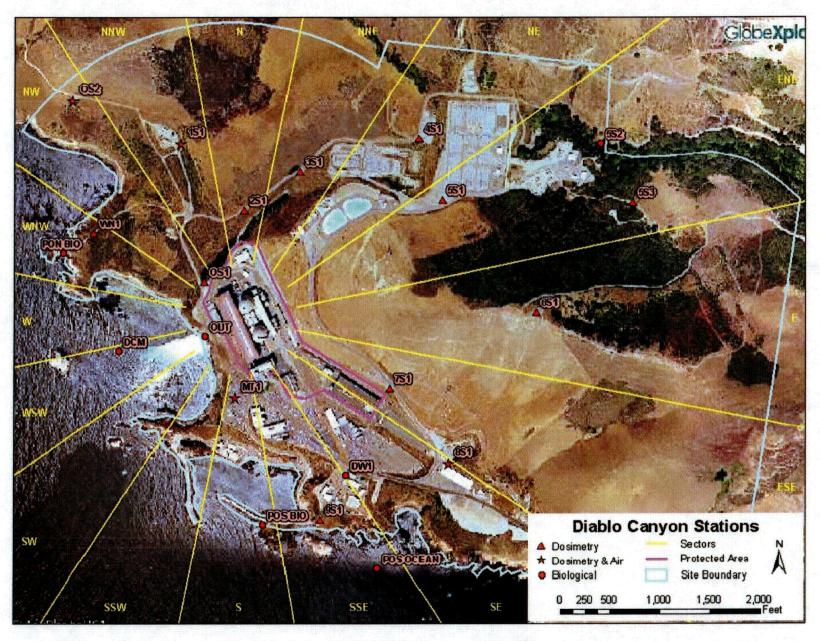


Figure 2b. Units 1 and 2 Diablo Canyon on-site stations.



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. The sample volumes were determined by F&J Corporation model DF-1 flowmeters (corrected to standard temperature and pressure, STP) which are installed downstream of the sample head.

For the sampling period starting August 3, the particulate filter type used in the air sampling train was changed to F&J Model 521120 and the iodine cartridge type was changed to the F&J TE2B model. The HV H-70 particulate filters previously used were no longer available, prompting the switch to the F&J type filter for environmental sampling. The switch to F&J charcoal cartridges was made because F&J provides additional benefits for handling and efficiency determination. Prior to the switchover, TES determined background activity on the new particulate filters and charcoal cartridges. The potassium-40 content of the F&J particulate filters is higher than that of the HV H-70 particulate filters which translates to a higher gross beta background count. Given that net values are reported, there is no impact on reported activity.

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 DCPP using Panasonic UD814 TLD badges. These badges were replaced on a quarterly basis.

The field TLD badge packets were prepared by DCPP 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 (station OUT). Drinking water samples were collected from Diablo Creek Weir (station 5S2) located on-site and from the drinking water system at DCPP (station DW1). 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.



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 (page 3-2), were achieved under routine conditions. The LLD is an <u>a-priori</u> (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 <u>a-posteriori</u> (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 (page 1-2) for the summary of the type of analyses that were performed on the different sample media.

AIRBORNE RADIOACTIVITY

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

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

DIRECT RADIATION

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



Table 3

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

Analysis	Water (pCi/L)	Airborne Particulate or Gas (pCi/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:

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

where

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

sb 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.



⁽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):

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.



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 DCPP Interdepartmental Administrative Procedure, RP1.ID11, Environmental Radiological Monitoring Procedure, requires that the TES laboratory participate in the Environmental Protection Agency's Environmental Radioactivity Laboratory Intercomparison Study or equivalent program. At the end of 1998, the EPA ceased to operate their Intercomparison Study. For the years of 1999 through 2005, TES has participated in an equivalent program operated by Analytics, Inc. of Atlanta, GA. The TES participation has included all determinations (sample medium-radionuclide combination) offered by Analytics which match those as part of the REMP.

The results of TES participation in Analytics Environmental Cross Check Program for this year are shown in Appendix A, Table A-10. 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
- iodine-131 and gamma emitters in water
- gamma emitters on particulate filter

Except for Co-58 in each of one sample of water and soil, all of the TES results of these blind samples were acceptable using the NRC criteria for determining agreement of confirmatory radiochemical measurements (See Table A-10). The June, 2005 Gamma Emitters in Water (E4576-35) and Gamma Emitters in Soil (E4575-35) contained Co-58 at a level below the calculated MDA for the analytical lab and was therefore not recognized using routine counting protocol. The TES counting protocol is sufficient to detect Co-58 at the required LLD.



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 2005 cross-check program can be found in Appendix B, Table B-1. The California Department of Health Services (CDHS) has yet to issue a report for 1999 through 2004. Since TES has been informed that these reports have a low priority with CDHS, TES requested and obtained the results from the SRL of their comparable analyses of duplicate and split samples from the DCPP environs. TES review of this data versus that of the TES laboratory for the year 2004 (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 CDHS resumes producing a cross-check report.

LAND USE CENSUS

Diablo Canyon Power Plant (DCPP) radiation protection personnel conducted a Land Use Census in the vicinity of DCPP for 2005. The land use census is based on Nuclear Regulatory Commission (NRC) Regulatory Guide 4.8, "Environmental Technical Specifications for Nuclear Power Plants" and 10 CFR 50 Appendix I section IV. B. 3.

DCPP Program Directive CY2, "Radiological Monitoring and Controls Program" requires performance of a land use census.

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

The 2005 Land Use Census was conducted using phone interviews. Nine individual landowners or tenants were contacted on November 28, 2005.

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

The nearest residence, relative to all sectors, is a small trailer located in the NW sector about 1.93 kilometers (1.2 miles) from the plant. Ranch workers occupy this BLANCHARD residence approximately 1 month per year during cattle round-ups.

The nearest residence in each sector is summarized in Table B-5.

The land use census identified two household gardens greater than 50 square meters (500 square feet) that produce broadleaf vegetation. The READ garden is approximately ¼ acre and located in the NNE sector at 7.08 kilometers (4.41 miles). The KOONZE garden is approximately 500 square feet and located in the E sector at 7.24 kilometers (4.5 miles).

MELLO manages a farm on the coastal plateau, along the site access road, in the ESE sector. The farm starts at approximately 4.8 km and extends to 7.2 km (3 to 4.5 miles) from the plant. This commercial farm produces no broadleaf vegetation. The farm area is about 100 acres of land with 6 to 10 rotational plantings per year (not all 100 acres planted at any one time). Commercial crops consist of about 25%



legumes (sugar peas) and 75% cereal grass (oat hay). Less than 10 farm workers periodically occupy this area during the growing season.

Much of the area outside the plant site-boundary is used for rotational cattle grazing by five separate cattle operations. For purposes of this census, the five cattle ranches are called BLANCHARD, SINSHEIMER, READ, ANDRE, and MELLO.

BLANCHARD has about 120 cattle outside the plant site-boundary and utilizes the NW, NNW, N, and NNE sectors. About 80 yearling cattle were sold to mass market in 2005. BLANCHARD slaughtered two cattle in 2005 for personal consumption.

Additionally, BLANCHARD managed about 250 goats that were used for weed abatement in all landward sectors within the plant site-boundary. During 2005, approximately 200 baby goats were born and then taken to Santa Margarita California where they are grass fed for 1 year. After one year, the 200 yearling goats are then to be sold to mass-market auction. BLANCHARD did not slaughter any goats in 2005 for personal consumption.

BLANCHARD also managed about 60 sheep outside the plant site-boundary in the NW and NNW sectors. These sheep were sold to mass market. BLANCHARD did not slaughter any sheep in 2005 for personal consumption.

SINSHEIMER has about 100 cattle outside the plant site-boundary in the NNE sector. These cattle were allowed to breed and about 90 calves were sold to mass market in 2005. SINSHEIMER did not slaughter any cattle for personal consumption in 2005.

READ has about 150 cattle outside the plant site-boundary in the NNE sector.

ANDRE has about 80 cattle outside the plant site-boundary in the ENE sector. About 80 calves were sold to mass market in 2005. ANDRE did not slaughter any cattle in 2005 for personal consumption.

MELLO manages about 1000 cattle outside the plant site-boundary in the E, ESE, and SE sectors. Harris Ranch Beef Corporation owned these cattle and sold all of them to mass market in 2005. MELLO did not slaughter any cattle in 2005 for personal consumption.

Two landowners (JOHE and ANDRE) take wild game for personal consumption outside the plant site-boundary in the NNE, NE, and ENE sectors. This wild game consists of approximately 2 deer and 4 wild pigs per landowner.



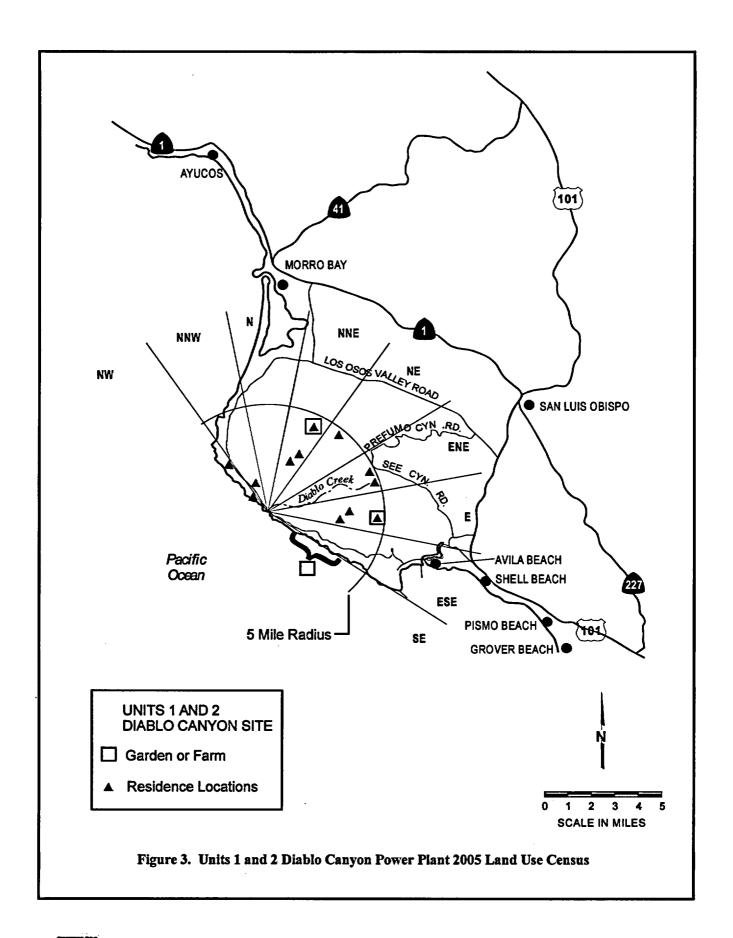
There is a California State Park Ranger Office in the NNW sector at 7.483 kilometers (4.65 miles) from the plant. Approximately 3 people occupy this office from 1000 to 1500 each day per week.

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

A total of 14 residences were identified within the 8-kilometer (5-mile) radius of the plant, which were confirmed or appear to be occupied during 2005. Two abandoned structures are located in each of the NNW and NNE sectors.

Table B-5 summarizes the nearest residences in each meteorological sector. Figure 3 (page 5-4) shows the locations of the residences and gardens in the vicinity of DCPP.





RESULTS AND DISCUSSION

The results for the DCPP REMP are listed in Appendices A and B. The ± 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 (page 3-2) were met for all analyses. 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 6-9).

AIRBORNE RADIOACTIVITY

Air particulates and radioiodine samples were collected weekly from six indicator stations (MT1, ØS2, 1S1, 7D1, 8S1, and 8S2) in the DCPP environs and one control station (5F1). A total of 363 air particulate filters and 363 iodine cartridges were collected and analyzed. The data collected for the air-sampling program is summarized in Appendix A, Table A-1.

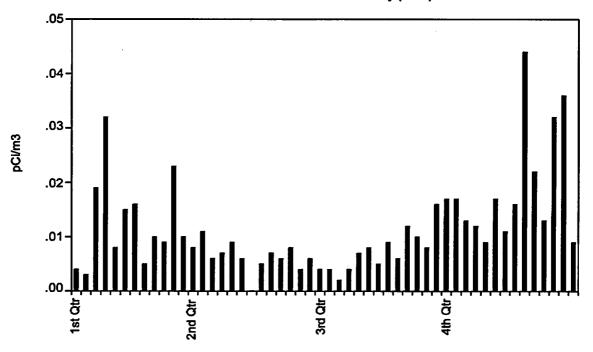
Air Particulates

Gross beta activity was detected in all weekly air particulate samples collected from all control stations and in all but one indicator station. The range for the indicator stations was <0.001 - 0.045 pCi/m³ with a mean of 0.012 pCi/m³. The range for the control station was 0.003 - 0.046 pCi/m³ with a mean of 0.013 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.



Station MT1 Air Particulate Gross Beta Activity (2005)



Station 5F1
Air Particulate Gross Beta Activity (2005)

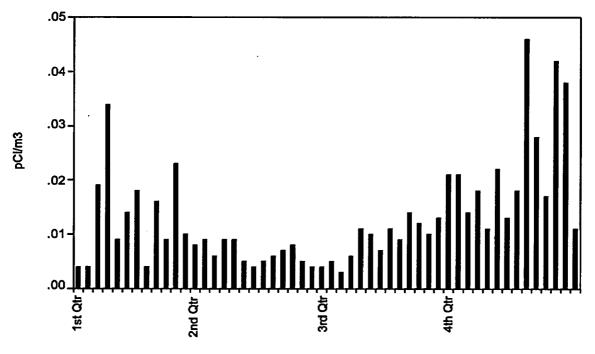
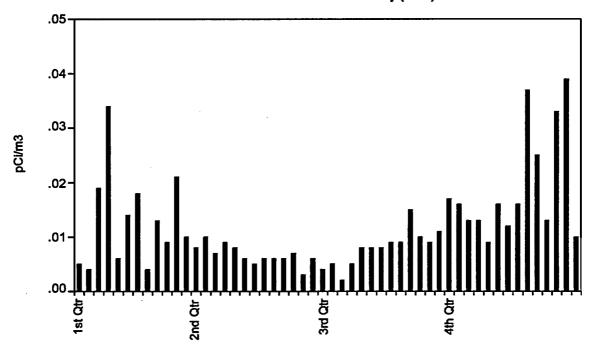


Figure 4. Air particulate gross beta activities.

990308/05-MT1and 5F1



Station 7D1 Air Particulate Gross Beta Activity (2005)



Station 8S1 Air Particulate Gross Beta Activity (2005)

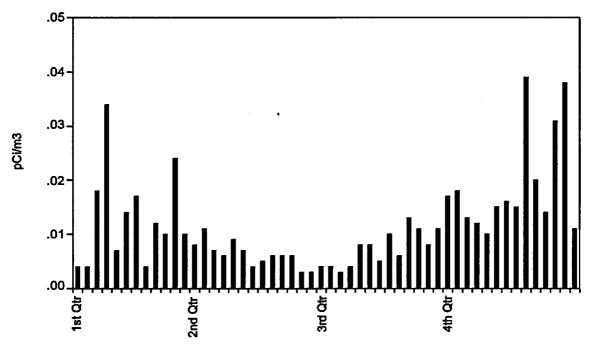
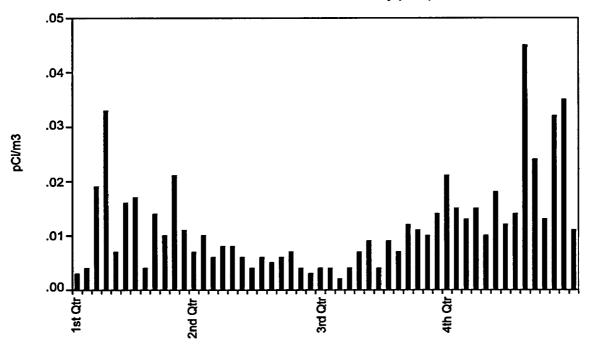


Figure 4. continued.

990308/05-7D1 and 8S1



Station 8S2 Air Particulate Gross Beta Activity (2005)



Station 0S2 Air Particulate Gross Beta Activity (2005)

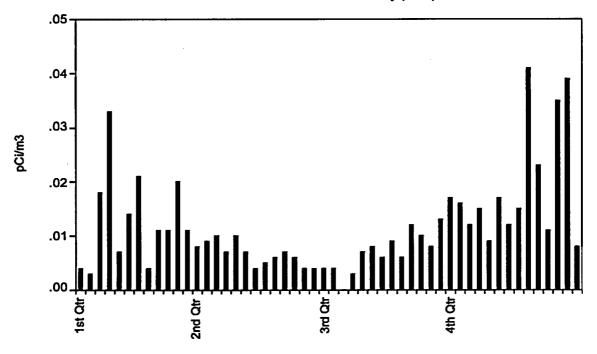


Figure 4. continued.

990308/05-8S2 and 0S2



Station 1S1 Air Particulate Gross Beta Activity (2005)

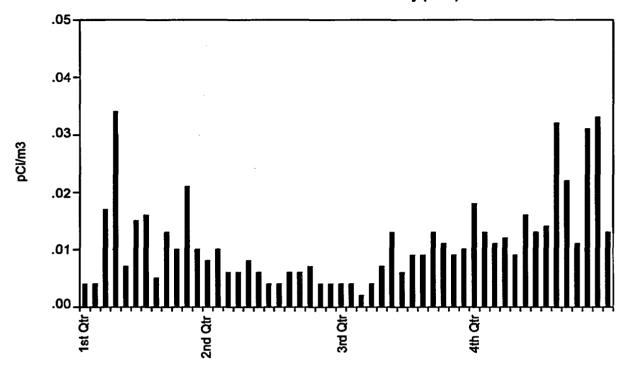


Figure 4. continued.

990308/05-151

Radioiodine

A total of 363 iodine cartridges were analyzed for iodine-131. No Iodine-131 was detected in any of the iodine cartridges.

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 – 23.2 mR/qtr with a mean of 16.2 mR/qtr. The exposure level at the control station 5F1 ranged from 16.3 – 18.8 mR/qtr with a mean of 17.6 mR/qtr. The exposure levels for 2005 did not differ significantly from the previous year, or from the pre-operational data. They indicate that the operation of DCPP 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. Figure 5 shows the long term comparisons of direct radiation exposure rates for the Inner Ring, Outer Ring, Special Interest, and Control Stations.

WATER SAMPLES

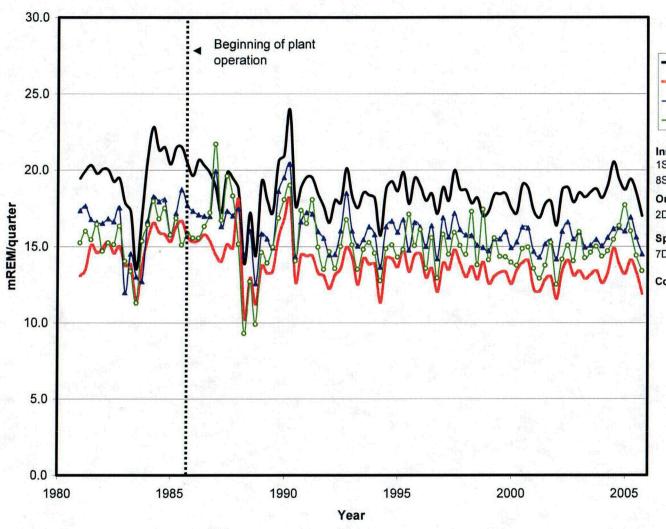
A total of 61 water samples (24 drinking water samples, 37 surface water samples) were collected and analyzed. The results of the water samples collected from the indicator and control stations are summarized in Appendix A, Tables A-3 (a) and (b).

Gamma isotopic and tritium analyses were performed on all water samples. No plant related gamma emitters were detected in any surface water sample or drinking water sample. Iodine-131 analysis by ion exchange was also performed on all drinking water. Iodine-131 was not detected in any drinking water samples. The water sample data indicates that the operation of DCPP did not have any significant impact on water in the plant environs.

MARINE BIOLOGICAL AND SEDIMENT SAMPLES

A total of 92 marine biological and sediment samples were collected from the indicator, control and supplemental stations. They included 37 fish samples, 13 mussel samples, 40 algae samples, and 2 ocean bottom sediment samples. Table B-7 lists the marine samples collected for 2005. The results obtained





Inner Ring Stations
Outer Ring Stations
Special Interest Stations
Control Stations

Inner Ring Stations -OS1, WN1, OS2, 1S1, 2S1, 3S1, 4S1, 5S1, 5S3,6S1, 7S1, 8S1, 8S2, 9S1, and MT1

Outer Ring Stations - 1A1, 0B1, 1C1, 2D1, 3D1, 4C1, 5C1, 6D1, and 7C1

Special Interest Stations - 7F1, 7D1, 7D2, 7G2, and 5F3

Control Stations - 4D1 and 5F1

Figure 5. Environmental Dosimeter Comparisons



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 2005. It is unlikely that abalone will be collected at DCPP 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 except for one sample collected from station DCM. Zinc-65 was detected in this sample at a level just above detection level.

Fish

A total of 37 fish samples from stations DCM, 7C2, PON, POS, 2F1 and 7D3 were analyzed. One sample of market purchased fish obtained at 2F1, one sample of Perch from 7C2, and one sample of Rockfish from DCM contained measurable Cs-137 attributable to environmental contamination from past atmospheric nuclear weapons testing. All other samples contained only naturally occurring radioactivity. The operation of DCPP had no detectable impact on fish in the plant environs.

Algae

A total of 40 algae samples were collected from stations DCM, 7C2, PON, and POS. These samples are supplemental to the REMP. Two samples collected from DCM contained a small, but detectable level of cobalt-58. One other kelp sample collected from DCM contained measurable Zn-65. All other samples contained only naturally occurring radioactivity. The operation of DCPP had no significant impact in algae in the plant environs.

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 DCPP had no detectable impact in ocean sediment in the plant environs.

FOOD CROPS

A total of 40 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 DCPP 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	

⁽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. DCPP 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 four sample media during 2005. Co-58 was measured in two intertidal algae samples collected from DCM. Zn-65 was measured in one kelp and one mussel sample collected from DCM. Cs-137 was measured in three samples of fish. The Shewart-CUSUM control charts for the detected radionuclide-media combinations as well as 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 detectible result. Detectible results noted in the past are described in the past annual report(s) in which the detectible result was initially noted.

AIRBORNE RADIOACTIVITY

Air Particulates

The Shewart-CUSUM control chart for gross beta activities in air particulates (see Figure 6) showed that there is no increasing trend during the operational years (1985-2005), 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.



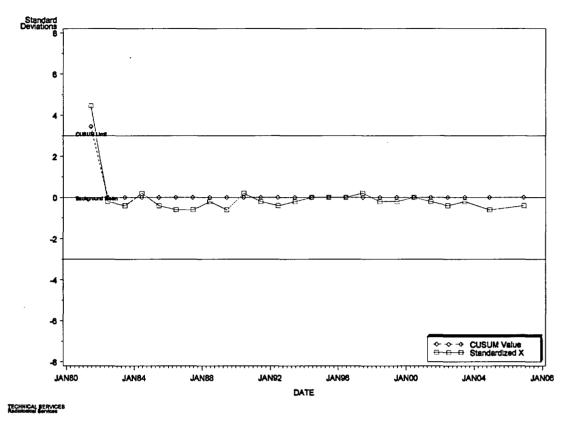


Figure 6. Control Chart for Air Particulate Filters - Difference Between Indicator and Control Station Annual Means

In 2005, 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 in prevailing downwind sectors on-site compared to stations on-site which are in least prevalent wind direction (see Figure 7) shows that there has been no increasing trend during the operational years. The mean exposure rate measured at the stations in the prevalent wind directions has consistently been lower than the mean exposure rate measured from those stations in the least prevalent wind directions. This difference has remained essentially constant during both the preoperational and operational periods. The only period which shows significant differences in this long term trend was during the period between 1987 and 1990. This period was a time of high sunspot activity and rapid variations in the cosmic radiation portion of the background radiation, and also during this period the dosimeter used to measure the exposure rates in the environment was changed from Victoreen bulbs and the Panasonic badge type dosimeters. One or both



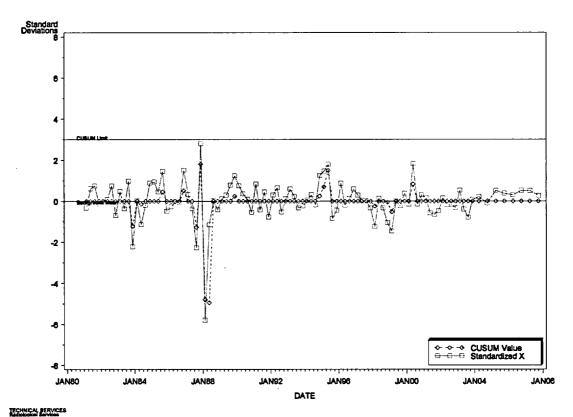


Figure 7. Control Chart for TLD Data - Difference between Downwind and Upwind Station Quarterly Means

of these events were the likely cause of the short term differences in the compared exposure rates.

ALGAE SAMPLES

Algae sampling is not a REMP requirement and is therefore considered a supplemental sample. There is no reporting requirement for radioactivity levels in algae. Two species of algae are normally collected from DCM quarterly when available. Several times during the operational period small concentrations of various plant related radioactivity have been detected in the algae. These radioactivity concentrations detected have been random in the past so one can conclude that there is no increasing trend in radioactivity concentrations in algae from Diablo Cove. Co-58 was measured in two Iridaea samples from DCM during 2005. The control chart for Co-58 in algae (Iridaea) is shown as Figure 8.

In one sample of kelp another algae supplemental sample collected from DCM, Zn-65 was also measured. Stable zinc has been added to the reactor coolant at DCPP as a corrosion inhibitor for the last several years, and Zn-65 is a part of the normal plant effluent. The control chart for Zn-65 in algae (blades of kelp) is shown as Figure 9.



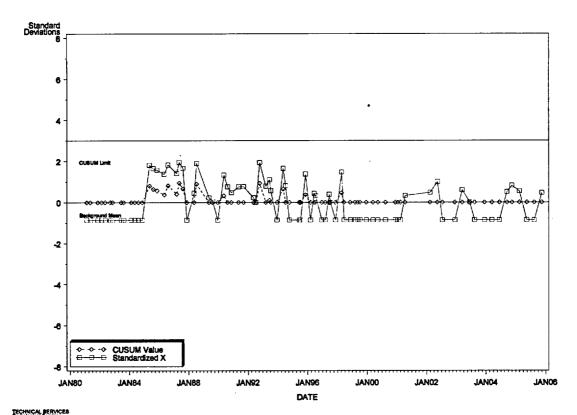


Figure 8. Control Chart for Co-58 Levels in Algae - Station DCM

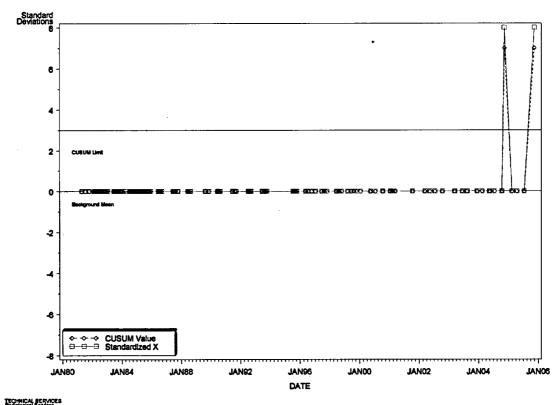


Figure 9. Control Chart for Zn-65 Levels in Blades of Kelp - Station DCM



7-4

MUSSEL SAMPLE

Zn-65 was also detected in one mussel sample collected in 2005. The mussel sample was collected from DCM. The control chart for Zn-65 in mussels is shown as Figure 10.

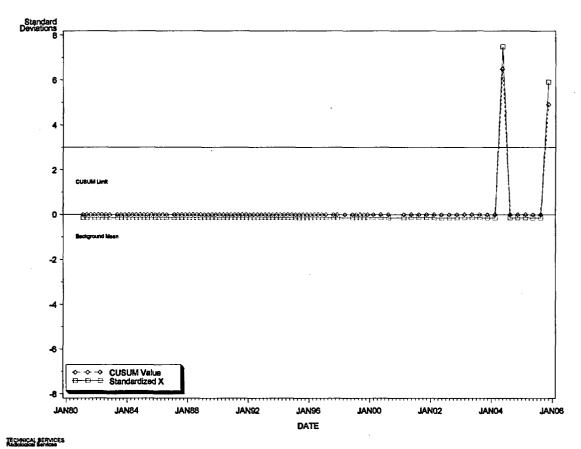
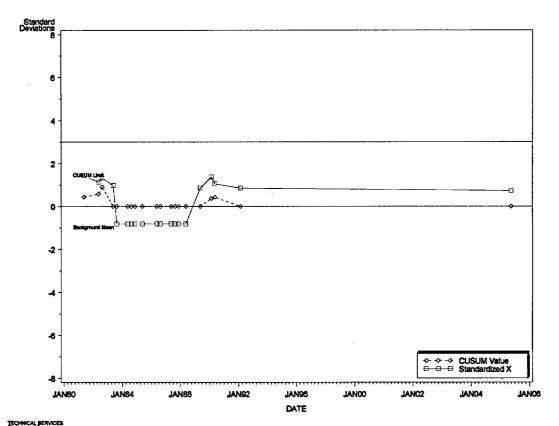
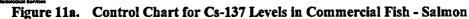


Figure 10. Control Chart for Zn-65 Levels in Mussels - Station DCM

FISH

Cs-137 was measured in three samples of fish (one that was purchased at a local fish market). Cs-137 has been routinely measured in fish. This Cs-137 is most likely due to the fallout from past atmospheric nuclear test rather than being related to discharges from the plant. The control charts for Cs-137 in fish are shown as Figure 11a, 11b, and 11c.





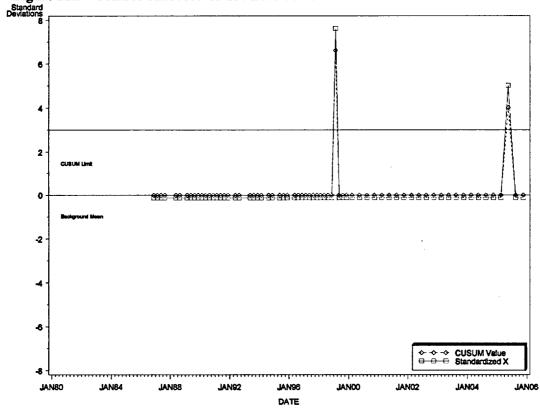
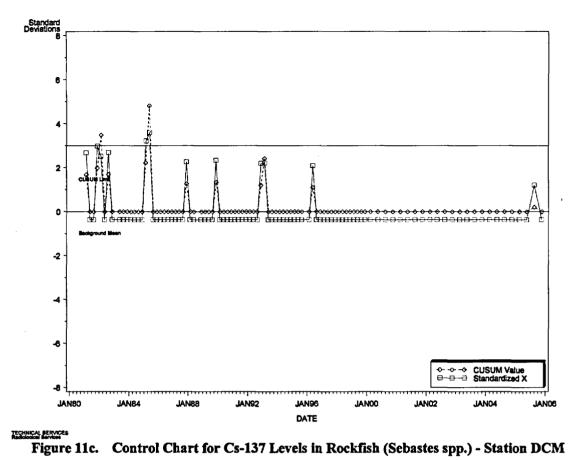


Figure 11b. Control Chart for Cs-137 Levels in Surfperch (Embiotocidae) - Station 7C2



7-6



7-7

Section 8

PROGRAM VARIANCE

The DCPP REMP includes both required and supplemental samples. This section describes the variances with the required samples and describes some of the supplemental sampling during the year.

AIRBORNE RADIOACTIVITY

The mean percent availability for all on-site and off-site samplers was 99.4 percent. That is, on average, all samplers were up and running 99.4 percent of the time. Some sampling time was lost for the following events: at station 7D1, approximately 40 hours of sampling time was lost due to a blown electrical fuse during the week of 4/20 - 4/27; at station MT1, approximately 168 hours of sampling was lost during the week of 5/4 - 5/11 due to a blown fuse; stations 0S2, 1S1, 8S1 and 8S2 lost approximately 17 - 20 hours each due to a site power outage during the sampling week 8/17 - 8/24.

MARINE AND TERRESTRIAL SAMPLES

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

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 DCPP environs in the near future. Note that the sampling of abalone is supplemental to the REMP.

SUPPLEMENTAL SAMPLES

As a supplement to the routine sampling program, a replicate fish sample was collected from Station PON during the second quarter. An additional surface water sample was collected from Station DCM in the first quarter. Also as a supplement to the routine sampling program, sand samples were collected in fourth quarter from several beaches in San Luis Obispo County. These sand samples were analyzed using gamma spectrum analysis. A replicate sample of sand was collected at one of the beaches.

Sand was collected from beaches in the following areas: Cambria Beach, Pismo Beach, Avila Beach (replicate sample), Montana de Oro Beach, and Cayucos Beach. Cesium-137 was detected in two of the samples near the detection level for the gamma analysis technique used. The results were similar to past samples of this type and represent the ambient level of Cs-137 in the environment as the result of



atmospheric nuclear testing conducted in the 1950's and 1960's. The results of the analyses of the replicate samples were within expected correlation.

One sample of supplemental ground water was collected from a well (Water Well 02) on site and analyzed for tritium. No tritium was detected in this well water.

A sample of beef was collected from Blanchard Ranch as a supplemental sample. Only naturally occurring isotopes were detected in this sample.

Section 9

REFERENCES

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



Appendix A

ENVIRONMENTAL RADIATION MONITORING PROGRAM SUMMARIES



Table A-1 **Environmental Radiological Monitoring Program Summary**

Name of Facility	Diablo Canyon Power Plant	Docket No.	50-275 and 50-323
Location of Facility	San Luis Obispo, California	Report Period	1/1/05 - 12/31/05
	(County, State)	-	

Medium or Pathway Sampled	Type and Total Number of	Lower Limit of			All Indicator Locations	All Control Locations	Number of
(Unit of Measurement)	Analyses Performed	Detection ^(a) (LLD)	Name, Distance and Direction	Mean ^(b) Range ^(b)	Mean ^(b) Range ^(b)	Mean ^(b) Range ^(b)	Reportable Occurrences
Airborne (pCi/m ³)	Cartridge						
	⁴⁶⁴ [(363)				none detected	none detected	0
	Air Particulates						
	Gross Beta (363)		Sta. 8S2 1.1 mi., 128°	1.2E-2 2.0E-3-4.5E-2	1.2E-2(311/311) <1.0E-3-4.5E-2	1.3E-2(52/52) 3.0E-3-4.6E-2	0
	Gamma Isotopic (363)				none detected	none detected	0

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



⁽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-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	Report Period	1/1/05 - 12/31/05
· -	(County, State)	-	

Medium or Pathway Sampled	Type and Total Number of	Lower Limit of		tor with nnual Mean	All Indicator Locations	All Control Locations	Number of
(Unit of Analyses Detec	Detection ^(a) (LLD)	Name, Distance and Direction	Mean ^(b) Range ^(b)	Mean ^(b) Range ^(b)	Mean ^(b) Range ^(b)	Reportable Occurrences	
Direct radiation (mR)	TLD Packet ^(c) (372)	3 mR/qtr	Sta. 5S1 0.4 mi, 58°	22.4 mR/qtr (12/12) 21.2–23.0 mR/qtr	16.2 mR/qtr (360/360) 9.1-23.2 mR/qtr	Sta. 5F1 17.6 mR/qtr (12/12) 16.3-18.8 mR/qtr	0
				89.6 mR/yr	64.8 mR/yr (360/360) 39.6-89.6 mR/yr	70.4 mR/yr	

(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 Diablo Canyon Power Plant Docket No. 50-275 and 50-323

Location of Facility San Luis Obispo, California Report Period 1/1/05 – 12/31/05

(County, State)

Medium or Pathway Sampled	Type and Total Number of	Lower Limit of	Indicator Highest Ann		All Indicator Locations	All Control Locations	Number of
(Unit of Measurement)	Analyses Performed	Detection ^(a) (LLD)	Name, Distance and Direction	Mean ^(b) Range ^(b)	Mean ^(b) Range ^(b)	Mean ^(b) Range ^(b)	Reportable Occurrences
Surface water (pCi/L)	Gamma Isotopic (37)				Sta. DCM Sta. OUT	Sta. 7C2	0
	*7Mn *Fe *(Co *3Co **Zn **Zr **Nb *6*1 *6*7Cs **3Ba-La				none detected	none detected	
	Tritium Analysis (37)				none detected	none detected	0

- (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 Diablo Canyon Power Plant Docket No. 50-275 and 50-323

Location of Facility San Luis Obispo, California Report Period 1/1/05 – 12/31/05

(County, State)

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) Gamma Isotopic (24)		Sta. 5S2, DW1	none detected	0
	87Mn 8 Fe 8;Co 93Co 98Zn <8Zr <8Nb 464I 467Cs 46:Cs			none detected none detected none detected none detected none detected none detected none detected none detected none detected none detected	

- (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	Docket No.	50-275 and 50-323	_
Location of Facility	San Luis Obispo, California	Report Period	1/1/05 - 12/31/05	
· •	(County, State)	_		

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
	⁸⁷ Mn			none detected	none detected	
	⁵Fe			none detected	none detected	
	⁸ ;Co			none detected	none detected	
	⁹³ Co			none detected	none detected	
	<*Nb			none detected	none detected	
	⁴⁶⁷ Cs			none detected	none detected	
	46:Cs			none detected	none detected	
	464 _I			none detected	none detected	
	⁶⁵ Zn			24.5(1/8)	none detected	

- (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 Report Period 1/1/05 – 12/31/05

(County, State)

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
	⁸⁷ Mn			none detected	none detected	
	8 <fe< td=""><td></td><td></td><td>none detected</td><td>none detected</td><td></td></fe<>			none detected	none detected	
	⁸ ;Co			none detected	none detected	
	⁹³ Co			none detected	none detected	
	98Zn			none detected	none detected	
	⁴⁶⁷ Cs			none detected	none detected	
	46:Cs			2.8(1/8)	3.3(1/8)	
	464 _I			none detected	none detected	

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



Table A-6
Environmental Radiological Monitoring Program Summary

Name of Facility	Diablo Canyon Power Plant	Docket No.	50-275 and 50-323
Location of Facility	San Luis Obispo, California	Report Period	1/1/05 - 12/31/05
•	(County, State)	· ·	

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
	⁸⁷ Mn			none detected	none detected	
	⁵Fe			none detected	none detected	
	⁸ ·Co ⁸ ·Co			none detected 21.4 (2/12) 19.2-23.5	none detected none detected	
	⁹³ Co			none detected	none detected	
	⁴⁶⁴ [none detected	none detected	
	443p Ag			none detected	none detected	
	46:Cs			none detected	none detected	
	p [86			23.0(1/12)	none detected	

- (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	Report Period	1/1/05 - 12/31/05
•	(County, State)	•	

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
	⁸⁷ Mn			none detected	none detected	
	⁵Fe			none detected	none detected	
	^{в;} Со			none detected	none detected	
	⁹³ Co			none detected	none detected	
	98Zn			none detected	none detected	
	⁴⁶⁷ Cs			none detected	none detected	
	⁴⁶ :Cs			none detected	none detected	

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



Table A-8

Environmental Radiological Monitoring Program Summary

Name of Facility	Diablo Canyon Power Plant	Docket No.	50-275 and 50-323
Location of Facility	San Luis Obispo, California	Report Period	1/1/05 - 12/31/05
•	(County, State)	-	

Medium or Pathway Type and Total Sampled Number of		Lower Limit of	Location Highest Anni		Locations	Number of
(Unit of Measurement)	Analyses Performed	Detection ^(a) (LLD)	Name, Distance and Direction	Mean ^(b) Range ^(b)	Mean ^(b) Range ^(b)	Reportable Occurrences
Food crops* (pCi/kg original)	Gamma Isotopic (40)				Sta. 7C1, 7G1, 5F2, 6C1	0
	⁴⁶⁴ I				none detected	
	⁴⁶⁷ Cs				none detected	
	46:Cs				none detected	

- (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	Report Period	1/1/05 - 12/31/05
-	(County, State)	•	

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)	⁴⁶⁴ I (12)		Sta 5F2, 12.6 mi, 60°	none detected	0
(pci/L)	Gamma Isotopic (12)				0
	⁴⁶⁷ Cs			none detected	
	⁴⁶ :Cs			none detected	
	⁴⁷³ Ba-La			none detected	

- (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.



 ${\bf Table~A-10}$ ${\bf Analytics~Performance~Evaluation~Program^{(a)}}$

Sample/Analysis	Radionuclide	Month	TES	Analytics	Ratio	Evaluation
Milk/Gamma	I-131	December	78.4	74.6	1.05	Agreement
	Ce-141	December	227	224	1.01	Agreement
	Cr-51	December	191	193	0.99	Agreement
	Cs-134	December	85.1	87.3	0.97	Agreement
	Cs-137	December	211	189	1.12	Agreement
	Co-58	December	77.3	77.5	1.00	Agreement
	Mn-54	December	162	152	1.07	Agreement
	Fe-59	December	88.4	82.4	1.07	Agreement
	Zn-65	December	158	154	1.02	Agreement
	Co-60	December	112	111	1.01	Agreement
Water/Gamma	Cr-51	June	327	330	0.99	Agreement
	Mn-54	June	131	136	0.96	Agreement
	Co-58	June	*	5.8	*	Non-agreement
	Fe-59	June	65.6	69.7	0.94	Agreement
	Co-60	June	161	158	1.02	Agreement
·	Zn-65	June	175	169	1.04	Agreement
	Cs-134	June	103	104	0.99	Agreement
	Cs-137	June	215	206	1.05	Agreement
	Ce-141	June	107	101	1.06	Agreement
	I-131	June	93.7	93.8	1.00	Agreement
Water/Gamma	I-131	December	54.4	53.1	1.02	Agreement
	Ce-141	December	171	165	1.04	Agreement
	Cr-51	December	139	142	0.98	Agreement
	Cs-134	December	62.9	64.3	0.98	Agreement
	Cs-137	December	147	139	1.06	Agreement
	Co-58	December	60.4	57.1	1.06	Agreement
	Mn-54	December	122	112	1.09	Agreement
	Fe-59	December	71.7	60.6	1.18	Agreement
	Zn-65	December	111	113	0.98	Agreement
	Co-60	December	80.5	81.4	0.99	Agreement
Soil/Gamma	Mn-54	June	0.260	0.246	1.06	Agreement
	Co-60	June	0.304	0.285	1.07	Agreement
	Zn-65	June	0.328	0.305	1.08	Agreement
	Cs-134	June	0.189	0.187	1.01	Agreement
	Cs-137	June	0.505	0.474	1.07	Agreement
	Ce-141	June	0.199	0.182	1.09	Agreement
	Cr-51	June	0.626	0.596	1.05	Agreement
	Co-58	June	*	0.100	*	Non-agreement
	Fe-59	June	0.148	0.126	1.17	Agreement

^{*}constituent present at level below detection limit for analytical lab - see section 4



Table A-10 (Continued)

Analytics Performance Evaluation Program^(a)

Sample/Analysis	Radionuclide	Month	TES	Analytics	Ratio	Evaluations
Vegetation/Gamma	Ce-141	December	0.630	0.531	1.19	Agreement
	Cr-51	December	0.450	0.458	0.98	Agreement
	Cs-134	December	0.200	0.207	0.97	Agreement
	Cs-137	December	0.510	0.449	1.14	Agreement
	Co-58	December	0.210	0.184	1.14	Agreement
	Mn-54	December	0.430	0.361	1.19	Agreement
	Fe-59	December	0.240	0.195	1.23	Agreement
	Zn-65	December	0.420	0.365	1.15	Agreement
	Co-60	December	0.280	0.262	1.07	Agreement
Gamma/Filter	Ce-141	December	155	147	1.05	Agreement
	Cr-51	December	134	127	1.05	Agreement
	Cs-134	December	51.0	57.5	0.89	Agreement
	Cs-137	December	135	125	1.09	Agreement
	Co-58	December	52.3	51.0	1.03	Agreement
	Mn-54	December	119	100	1.18	Agreement
	Fe-59	December	66.1	54.2	1.22	Agreement
	Zn-65	December	113	101	1.11	Agreement
	Co-60	December	76.9	72.8	1.06	Agreement
Cartridge/Gamma	I-131	June	94.5	94.1	1.00	Agreement
Water/Alpha	Gross Alpha	June	60.5	52.0	1.16	Agreement
Water/Beta	Gross Beta	June	223	214	1.04	Agreement
Water/Tritium	Tritium	June	8760	9100	0.96	Agreement
Particulate Filter	Alpha	December	37.1	38.3	0.97	Agreement
Particulate Filter	Beta	December	238	208	1.15	Agreement

⁽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 2005 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	05A96	01/31/2005	ND	ND	ND	ND
		05B38	02/10/2005	ND	ND	ND	ND
		05C50	03/29/2005	ND	ND	ND	ND
		05D24	04/26/2005	ND	ND	ND	ND
		05E13	05/31/2005	ND	ND	ND	ND
		05E79	06/15/2005	ND	ND	ND	ND
		05G02	07/29/2005	ND	ND	ND	ND
		05G32	08/08/2005	ND	ND	ND	ND
		05H32	09/15/2005	ND	ND	ND	ND
		05121	10/24/2005	ND	ND	ND	ND
		05157	11/07/2005	ND	ND	ND	ND
		05J99	12/08/2005	ND	ND	ND	ND
Milk	5F2	05A97	01/31/2005	ND	1293 ± 112		ND
		05B59	02/16/2005	ND	1296 ± 92		ND
		05C51	03/29/2005	ND	1310 ± 111		ND
		05D25	04/27/2005	ND	1292 ± 89		ND
		05E14	05/31/2005	ND	1376 ± 116		ND
		05E80	06/15/2005	ND	1311 ± 109		ND
		05F96	07/28/2005	ND	1362 ± 109		ND
		05G33	08/08/2005	ND	1294 ± 102		ND
		05H33	09/15/2005	ND	1334 ± 110		ND
		05122	10/24/2005	ND	2238 ± 159		ND
		05158	11/07/2005	ND	1335 ± 112		ND
		05K00	12/08/2005	ND	1508 ± 112		ND

⁽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 2005 Annual Report

State Cross-Check Results

Sample	Station	Sample No.	Collection Date	Gamma Activity pCi/L Original	K-40 Activity pCi/L Original	H-3 Activity pCi/L	I-131 Activity pCi/L
Outfall Water	OUT	05A94	01/31/2005	ND	303 ± 70	ND	
		05B87	03/01/2005	ND	324 ± 48	ND	
		05C48	03/29/2005	ND	364 ± 49	ND	
		05D22	04/26/2005	ND	286 ± 72	ND	
		05E15	05/31/2005	ND	331 ± 33	ND	
		05E96	06/23/2005	ND	272 ± 62	ND	
		05F95	07/28/2005	ND	274 ± 64	ND	
		05G34	08/08/2005	ND	314 ± 66	ND	
		05H30	09/15/2005	ND	320 ± 51	ND	
		05119	10/24/2005	ND	311 ± 45	ND	
		05159	11/072005	ND	318 ± 54	ND	
		05K01	12/08/2005	ND	362 ± 52	ND	
Drinking Water	5 S2	05A95	01/31/2005	ND	ND	ND	ND
J		05B42	02/10/2005	ND	ND	ND	ND
		05C49	03/29/2005	ND	ND	ND	ND
		05D23	04/26/2005	ND	ND	ND	ND
		05E32	06/02/2005	ND	ND	ND	ND
		05E78	06/15/2005	ND	ND	ND	ND
		05G03	07/29/2005	ND	30 ± 35	ND	ND
		05G31	08/08/2005	ND	ND	ND	ND
		05H31	09/15/2005	ND	ND	ND	ND
		05120	10/24/2005	ND	ND	ND	ND
		05156	11/07/2005	ND	ND	ND	ND
		05J98	12/08/2005	ND	ND	ND	ND



Table B-1 (Continued) Diablo Canyon Power Plant 2005 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	05B52	03/01/2005	ND	17040 ± 1220		
•		05D29	04/25/2005	ND	11210 ± 730		
		05G14	07/28/2005	ND	10190 ± 730		
		05194	11/18/2005	$Zn-65: 23.0 \pm 8.1$	8109 ± 491		
Vegetable Greens(b)	7G1	05B89	03/01/2005	⁷ Be :174 ± 112	3981 ± 401		
		05E30	06/01/2005	ND	7399 ± 577		
		05G29	08/05/2005	ND	3118 ± 307		
		05106	10/12/2005	ND	3852 ± 369		
Fish ^(b)	DCM	05C22	02/03/2005	ND	3326 ± 296		
		05E10	05/26/2005	ND	439 ± 311	===	
		05H13	09/02/2005	ND	3899 ± 485		
		05J48	11/23/2005	ND	4715 ± 401		
Sediment(c)	DCM	05E27	05/29/2005	ND	9180 ± 720		



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

Table B-2

Diablo Canyon Power Plant 2005 Annual Report

Marine and Terrestrial Sample Data

Detected Nuclides (Non-naturally Occurring) – pCi/liter Water

pCi/kg Algae & Fish

Description	Sta. No.	Collection Date	Sam. No.	⁵⁸ Co	⁶⁵ Zn	¹³⁷ Cs
Iridaea	DCM	02/09/05	05B47	23.5 ± 10.2		
Salmon	2F1	05/04/05	05D47	23.3 ± 10.2		6.9 ± 4.0
Perch	7C2	05/29/05	05E25			3.3 ± 3.8
Rockfish	DCM	09/02/05	05H14			2.8 ± 2.4
Giant Kelp	DCM	11/18/05	05194		23.0 ± 8.1	
Mussels	DCM	11/29/05	05J55		24.5 ± 5.7	
Iridaea	DCM	11/29/05	05J56	19.2 ± 10.3		



Table B-3

Diablo Canyon Power Plant 2005 Annual Report

Airborne Radioactivity

Station 0S2 (pCi/m³)

			Gross Beta		
Collection Period	Volume (m³)	Counting Date	Activity	2Sigma	Gamma Scan
12/29/04 - 01/05/05	456.4	01/10/05	0.004	0.001	
01/05/05 - 01/12/05	457.6	01/22/05	0.003	0.001	
01/12/05 - 01/19/05	468.3	02/02/05	0.018	0.002	
01/19/05 - 01/26/05	442.0	02/01/05	0.033	0.003	
01/26/05 - 02/02/05	450.6	02/12/05	0.007	0.001	
02/02/05 - 02/09/05	466.9	02/12/05	0.014	0.002	
02/09/05 - 02/16/05	438.7	02/18/05	0.021	0.002	
02/16/05 - 02/23/05	465.5	03/02/05	0.004	0.001	
02/23/05 - 03/02/05	452.3	03/04/05	0.011	0.001	
03/02/05 - 03/09/05	452.4	03/15/05	0.011	0.001	
03/09/05 - 03/16/05	440.3	03/20/05	0.020	0.002	
03/16/05 - 03/23/05	462.4	04/01/05	0.011	0.001	
03/23/05 - 03/30/05	443.3	04/08/05	0.008	0.001	
03/30/05 - 04/06/05	448.1	04/14/05	0.009	0.001	
04/06/05 - 04/13/05	442.0	04/19/05	0.010	0.001	
04/13/05 - 04/20/05	451.1	04/23/05	0.007	0.001	
04/20/05 - 04/27/05	456.2	05/03/05	0.010	0.001	
04/27/05 - 05/04/05	438.9	05/09/05	0.007	0.001	
05/04/05 - 05/11/05	446.9	05/18/05	0.004	0.001	
05/11/05 - 05/18/05	443.7	05/25/05	0.005	0.001	
05/18/05 - 05/25/05	448.7	05/29/05	0.006	0.001	
05/25/05 - 06/01/05	448.6	06/07/05	0.007	0.001	
06/01/05 - 06/08/05	452.8	06/12/05	0.006	0.001	
06/08/05 - 06/15/05	421.1	06/24/05	0.004	0.001	
06/15/05 - 06/22/05	429.7	07/08/05	0.004	0.001	
06/22/05 - 06/29/05	435.0	07/12/05	0.004	0.001	
06/29/05 - 07/06/05	433.3	07/16/05	0.004	0.001	
07/06/05 - 07/13/05	442.1	07/20/05	< 0.001		
07/13/05 - 07/20/05	446.1	07/24/05	0.003	0.001	
07/20/05 - 07/27/05	433.3	07/31/05	0.007	0.001	
07/27/05 - 08/03/05	423.1	08/10/05	0.008	0.001	
08/03/05 - 08/10/05	406.5	08/15/05	0.006	0.001	
08/10/05 - 08/17/05	420.4	08/25/05	0.009	0.002	
08/17/05 - 08/24/05	405.3	08/31/05	0.006	0.001	
08/24/05 - 08/31/05	453.8	09/04/05	0.012	0.002	
08/31/05 - 09/07/05	460.0	09/19/05	0.010	0.002	
09/07/05 - 09/14/05	469.8	09/20/05	0.008	0.001	
09/14/05 - 09/21/05	452.2	09/27/05	0.013	0.002	



Diablo Canyon Power Plant 2005 Annual Report Airborne Radioactivity Station 0S2 (pCi/m³)

	3.		Gross Beta	4.53	~ ~
Collection Period	Volume (m³)	Counting Date	Activity	2Sigma	Gamma Scan
09/21/05 - 09/28/05	445.0	10/02/05	0.017	0.002	
09/28/05 - 10/05/05	460.1	10/08/05	0.016	0.002	
10/05/05 - 10/12/05	433.2	10/16/05	0.012	0.002	
10/12/05 - 10/19/05	430.5	10/22/05	0.015	0.002	
10/19/05 - 10/26/05	439.0	10/29/05	0.009	0.002	
10/26/05 - 11/02/05	452.7	11/05/05	0.017	0.002	
11/02/05 - 11/09/05	452.9	11/18/05	0.012	0.002	
11/09/05 - 11/16/05	446.3	11/28/05	0.015	0.002	
11/16/05 - 11/23/05	440.3	12/01/05	0.041	0.004	
11/23/05 - 11/30/05	471.9	12/08/05	0.023	0.003	
11/30/05 - 12/07/05	448.0	12/11/05	0.011	0.002	
12/07/05 - 12/14/05	433.3	12/18/05	0.035	0.004	
12/14/05 - 12/21/05	419.0	12/25/05	0.039	0.004	
12/21/05 - 12/28/05	424.2	01/01/06	0.008	0.002	

Gamma Activity on Filter Composites

Collection Period	Counting Date	Nuclide	Concentration (pCi/m³)
12/29/04 - 03/30/05	04/14/05	ND	
03/30/05 - 06/29/05	07/21/05	ND	
06/29/05 - 09/28/05	10/12/05	ND	
09/28/05 - 12/28/05	01/12/06	ND	

Table Notation:

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

* Volume determined by calculation using timer and flow rate data.



Diablo Canyon Power Plant 2005 Annual Report Airborne Radioactivity Station 1S1 (pCi/m³)

			Gross Beta		
Collection Period	Volume (m³)	Counting Date	Activity	2Sigma	Gamma Scan
12/29/04 - 01/05/05	500.9	01/10/05	0.004	0.001	
01/05/05 - 01/12/05	495.5	01/22/05	0.004	0.001	
01/12/05 - 01/19/05	496.1	01/31/05	0.017	0.002	
01/19/05 - 01/26/05	474.8	02/01/05	0.034	0.003	
01/26/05 - 02/02/05	488.3	02/14/05	0.007	0.001	
02/02/05 - 02/09/05	512.5	02/12/05	0.015	0.002	
02/09/05 - 02/16/05	477.5	02/18/05	0.016	0.002	
02/16/05 - 02/23/05	514.2	03/02/05	0.005	0.001	l
02/23/05 - 03/02/05	423.7	03/04/05	0.013	0.002	i
03/02/05 - 03/09/05	478.0	03/15/05	0.010	0.001	
03/09/05 - 03/16/05	474.0	03/20/05	0.021	0.002	
03/16/05 - 03/23/05	497.7	04/01/05	0.010	0.001	
03/23/05 - 03/30/05	484.8	04/08/05	0.008	0.001	
03/30/05 - 04/06/05	499.2	04/14/05	0.010	0.001	
04/06/05 - 04/13/05	504.5	04/19/05	0.006	0.001	
04/13/05 - 04/20/05	472.5	04/23/05	0.006	0.001	
04/20/05 - 04/27/05	492.9	05/03/05	0.008	0.001	
04/27/05 - 05/04/05	467.1	05/10/05	0.006	0.001	
05/04/05 - 05/11/05	480.1	05/18/05	0.004	0.001	
05/11/05 - 05/18/05	476.3	05/25/05	0.004	0.001	
05/18/05 - 05/25/05	483.5	05/29/05	0.006	0.001	
05/25/05 - 06/01/05	489.7	06/07/05	0.006	0.001	
06/01/05 - 06/08/05	505.3	06/12/05	0.007	0.001	
06/08/05 - 06/15/05	418.3	06/24/05	0.004	0.001	
06/15/05 - 06/22/05	423.3	07/08/05	0.004	0.001	
06/22/05 - 06/29/05	427.4	07/12/05	0.004	0.001	
06/29/05 - 07/06/05	431.0	07/16/05	0.004	0.001	
07/06/05 - 07/13/05	445.3	07/20/05	0.002	0.001	
07/13/05 - 07/20/05	432.6	07/24/05	0.004	0.001	
07/20/05 - 07/27/05	423.6	07/31/05	0.007	0.001	
07/27/05 - 08/03/05	422.2	08/10/05	0.013	0.002	
08/03/05 - 08/10/05	424.3	08/15/05	0.006	0.001	
08/10/05 - 08/17/05	421.4	08/25/05	0.009	0.002	
08/17/05 - 08/24/05	399.7	08/31/05	0.009	0.002	
08/24/05 - 08/31/05	439.4	09/04/05	0.013	0.002	
08/31/05 - 09/07/05	440.8	09/19/05	0.011	0.002	
09/07/05 - 09/14/05	434.9	09/20/05	0.009	0.002	
09/14/05 - 09/21/05	449.9	09/25/05	0.010	0.002	



Diablo Canyon Power Plant 2005 Annual Report Airborne Radioactivity Station 1S1 (pCi/m³)

	3	-	Gross Beta		
Collection Period	Volume (m³)	Counting Date	<u>Activity</u>	2Sigma	Gamma Scan
09/21/05 - 09/28/05	420.1	10/02/05	0.018	0.002	
09/28/05 - 10/05/05	448.7	10/08/05	0.013	0.002	
10/05/05 - 10/12/05	457.1	10/16/05	0.011	0.002	
10/12/05 - 10/19/05	426.4	10/22/05	0.012	0.002	
10/19/05 - 10/26/05	440.2	10/29/05	0.009	0.002	
10/26/05 - 11/02/05	451.3	11/05/05	0.016	0.002	
11/02/05 - 11/09/05	450.2	11/18/05	0.013	0.002	
11/09/05 - 11/16/05	449.2	11/28/05	0.014	0.002	
11/16/05 - 11/23/05	427.5	12/01/05	0.032	0.004	
11/23/05 - 11/30/05	456.8	12/08/05	0.022	0.003	
11/30/05 - 12/07/05	410.3	12/11/05	0.011	0.002	
12/07/05 - 12/14/05	435.4	12/18/05	0.031	0.003	
12/14/05 - 12/21/05	419.8	12/25/05	0.033	0.004	
12/21/05 - 12/28/05	427.3	01/01/06	0.013	0.002	

Gamma Activity on Filter Composites

Collection Period	Counting Date	Nuclide	Concentration (pCi/m³)
12/29/04 - 03/30/05	04/14/05	ND	
03/30/05 - 06/29/05	07/21/05	ND	
06/29/05 - 09/28/05	10/12/05	ND	
09/28/05 - 12/28/05	01/18/05	ND	

Table Notation:

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

* Volume determined by calculation using timer and flow rate data.

No sample collected.



Diablo Canyon Power Plant 2005 Annual Report Airborne Radioactivity Station 5F1 (pCi/m³)

			Gross Beta		
Collection Period	Volume (m³)	Counting Date	Activity	2Sigma	Gamma Scan
12/29/04 - 01/05/05	476.9	01/09/05	0.004	0.001	
01/05/05 - 01/12/05	479.6	01/21/05	0.004	0.001	
01/12/05 - 01/19/05	493.9	01/31/05	0.019	0.002	
01/19/05 - 01/26/05	459.8	02/01/05	0.034	0.003	
01/26/05 - 02/02/05	474.1	02/11/05	0.009	0.001	
02/02/05 - 02/09/05	482.6	02/12/05	0.014	0.002	
02/09/05 - 02/16/05	495.2	02/18/05	0.018	0.002	
02/16/05 - 02/23/05	465.2	03/01/05	0.004	0.001	
02/23/05 - 03/02/05	491.2	03/04/05	0.016	0.002	
03/02/05 - 03/09/05	456.9	03/14/05	0.009	0.001	
03/09/05 - 03/16/05	480.7	03/20/05	0.023	0.002	
03/16/05 - 03/23/05	499.1	04/01/05	0.010	0.001	
03/23/05 - 03/30/05	477.9	04/07/05	0.008	0.001	
03/30/05 - 04/06/05	484.3	04/13/05	0.009	0.001	
04/06/05 - 04/13/05	457.6	04/19/05	0.006	0.001	
04/13/05 - 04/20/05	485.9	04/23/05	0.009	0.001	
04/20/05 - 04/27/05	501.0	05/03/05	0.009	0.001	
04/27/05 - 05/04/05	468.5	05/09/05	0.005	0.001	
05/04/05 - 05/11/05	484.9	05/17/05	0.004	0.001	
05/11/05 - 05/18/05	482.7	05/24/05	0.005	0.001	
05/18/05 - 05/25/05	496.1	05/29/05	0.006	0.001	
05/25/05 - 06/01/05	474.8	06/06/05	0.007	0.001	
06/01/05 - 06/08/05	484.5	06/11/05	0.008	0.001	
06/08/05 - 06/15/05	423.1	06/24/05	0.005	0.001	
06/15/05 - 06/22/05	432.0	07/07/05	0.004	0.001	
06/22/05 - 06/29/05	413.9	07/12/05	0.004	0.001	
06/29/05 - 07/06/05	431.4	07/15/05	0.005	0.001	
07/06/05 - 07/13/05	426.9	07/19/05	0.003	0.001	
07/13/05 - 07/20/05	434.6	07/23/05	0.006	0.001	
07/20/05 - 07/27/05	428.4	07/31/05	0.011	0.001	
07/27/05 - 08/03/05	416.9	08/10/05	0.010	0.001	
08/03/05 - 08/10/05	432.1	08/15/05	0.007	0.001	
08/10/05 - 08/17/05	425.2	08/27/05	0.011	0.002	
08/17/05 - 08/24/05	444.8	08/31/05	0.009	0.002	
08/24/05 - 08/31/05	422.3	09/03/05	0.014	0.002	
08/31/05 - 09/07/05	447.4	09/19/05	0.012	0.002	
09/07/05 - 09/14/05	429.0	09/20/05	0.010	0.002	
09/14/05 - 09/21/05	455.4	09/25/05	0.013	0.002	



Diablo Canyon Power Plant 2005 Annual Report Airborne Radioactivity Station 5F1 (pCi/m³)

Collection Period	Volume (m³)	Counting Date	Gross Beta Activity	2Sigma	Gamma Scan
09/21/05 - 09/28/05	433.8	10/02/05	0.021	0.002	
09/28/05 - 10/05/05	432.0	10/08/05	0.021	0.003	
10/05/05 - 10/12/05	443.7	10/16/05	0.014	0.002	
10/12/05 - 10/19/05	441.6	10/22/05	0.018	0.002	
10/19/05 - 10/26/05	456.6	10/29/05	0.011	0.002	
10/26/05 - 11/02/05	436.1	11/05/05	0.022	0.003	
11/02/05 - 11/09/05	448.7	11/18/05	0.013	0.002	
11/09/05 - 11/16/05	439.3	11/28/05	0.018	0.002	
11/16/05 - 11/23/05	413.3	12/01/05	0.046	0.005	
11/23/05 - 11/30/05	447.6	12/08/05	0.028	0.003	
11/30/05 - 12/07/05	415.9	12/11/05	0.017	0.002	
12/07/05 - 12/14/05	430.0	12/18/05	0.042	0.004	
12/14/05 - 12/21/05	408.3	12/25/05	0.038	0.004	
12/21/05 - 12/28/05	419.9	01/01/06	0.011	0.002	

Gamma Activity on Filter Composites

	Concentration		
Collection Period	Date	Nuclide	(pCi/m³)
12/29/04 - 03/30/05	04/14/05	ND	
03/30/05 - 06/29/05	07/21/05	ND	
06/29/05 - 09/28/05	10/11/05	ND	
09/28/05 - 12/28/05	01/12/06	ND	

Table Notation:

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

Volume determined by calculation using timer and flow rate data.



Diablo Canyon Power Plant 2005 Annual Report Airborne Radioactivity Station 7D1 (pCi/m³)

			Gross Beta	· · · · · · · · · · · · · · · · · · ·	
Collection Period	Volume (m ³)	Counting Date	Activity	2Sigma	Gamma Scan
12/29/04 - 01/05/05	458.2	01/09/05	0.005	0.001	
01/05/05 - 01/12/05	462.6	01/21/05	0.004	0.001	
01/12/05 - 01/19/05	476.1	01/31/05	0.019	0.002	
01/19/05 - 01/26/05	460.4	02/01/05	0.034	0.003	
01/26/05 - 02/02/05	444.3	02/12/05	0.006	0.001	
02/02/05 - 02/09/05	460.7	02/12/05	0.014	0.002	
02/09/05 - 02/16/05	455.8	02/18/05	0.018	0.002	
02/16/05 - 02/23/05	462.2	03/01/05	0.004	0.001	
02/23/05 - 03/02/05	467.7	03/04/05	0.013	0.001	
03/02/05 - 03/09/05	458.0	03/14/05	0.009	0.001	
03/09/05 - 03/16/05	450.3	03/20/05	0.021	0.002	
03/16/05 - 03/23/05	465.9	04/01/05	0.010	0.001	
03/23/05 - 03/30/05	442.9	04/07/05	0.008	0.001	
03/30/05 - 04/06/05	446.8	04/14/05	0.010	0.001	
04/06/05 - 04/13/05	449.1	04/19/05	0.007	0.001	
04/13/05 - 04/20/05	460.3	04/23/05	0.009	0.001	
04/20/05 - 04/27/05	359.4	05/03/05	0.008	0.001	
04/27/05 - 05/04/05	441.3	05/09/05	0.006	0.001	
05/04/05 - 05/11/05	455.5	05/17/05	0.005	0.001	
05/11/05 - 05/18/05	455.1	05/25/05	0.006	0.001	
05/18/05 - 05/25/05	466.5	05/29/05	0.006	0.001	
05/25/05 - 06/01/05	456.5	06/07/05	0.006	0.001	
06/01/05 - 06/08/05	469.1	06/11/05	0.007	0.001	
06/08/05 - 06/15/05	414.6	06/24/05	0.003	0.001	
06/15/05 - 06/22/05	424.9	07/08/05	0.006	0.001	
06/22/05 - 06/29/05	422.8	07/12/05	0.004	0.001	
06/29/05 - 07/06/05	425.7	07/16/05	0.005	0.001	
07/06/05 - 07/13/05	427.5	07/20/05	0.002	0.001	
07/13/05 - 07/20/05	443.2	07/23/05	0.005	0.001	
07/20/05 - 07/27/05	429.9	07/31/05	0.008	0.001	
07/27/05 - 08/03/05	415.6	08/10/05	0.008	0.001	
08/03/05 - 08/10/05	442.3	08/15/05	0.008	0.001	
08/10/05 - 08/17/05	413.6	08/25/05	0.009	0.002	
08/17/05 - 08/24/05	447.5	09/01/05	0.009	0.002	
08/24/05 - 08/31/05	422.4	09/04/05	0.015	0.002	
08/31/05 - 09/07/05	440.8	09/19/05	0.010	0.002	
09/07/05 - 09/14/05	439.3	09/20/05	0.009	0.001	
09/14/05 - 09/21/05	464.8	09/25/05	0.011	0.002	



Diablo Canyon Power Plant 2005 Annual Report Airborne Radioactivity Station 7D1 (pCi/m³)

Calleration Deviced	77-1 (3	Counting Date	Gross Beta	ag:	C S
Collection Period	Volume (m³)	Counting Date	Activity	2Sigma	Gamma Scan
09/21/05 - 09/28/05	428.3	10/02/05	0.017	0.002	
09/28/05 - 10/05/05	444.7	10/08/05	0.016	0.002	
10/05/05 - 10/12/05	458.5	10/16/05	0.013	0.002	
10/12/05 - 10/19/05	425.8	10/22/05	0.013	0.002	
10/19/05 - 10/26/05	442.4	10/29/05	0.009	0.002	
10/26/05 - 11/02/05	429.8	11/05/05	0.016	0.002	
11/02/05 - 11/09/05	448.8	11/18/05	0.012	0.002	
11/09/05 - 11/16/05	450.6	11/28/05	0.016	0.002	
11/16/05 - 11/23/05	445.8	12/01/05	0.037	0.004	
11/23/05 - 11/30/05	476.1	12/07/05	0.025	0.003	
11/30/05 - 12/07/05	430.9	12/11/05	0.013	0.002	
12/07/05 - 12/14/05	457.8	12/18/05	0.033	0.004	
12/14/05 - 12/21/05	419.1	12/25/05	0.039	0.004	
12/21/05 - 12/28/05	428.6	01/01/06	0.010	0.002	

Gamma Activity on Filter Composites

Collection Period	Counting Date	Nuclide	Concentration (pCi/m³)
12/31/03 - 03/31/04	04/15/04	ND	(2)
03/31/04 - 06/30/04	07/28/04	ND	
06/30/04 - 09/29/04	10/21/04	ND	
09/29/04 - 12/29/04	01/12/05	ND	

Table Notation:

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

* Volume determined by calculation using timer and flow rate data.



Diablo Canyon Power Plant 2005 Annual Report Airborne Radioactivity Station 8S1 (pCi/m³)

			Gross Beta		
Collection Period	Volume (m³)	Counting Date	Activity	2Sigma	Gamma Scan
12/29/04 - 01/05/05	453.7	01/09/05	0.004	0.001	
01/05/05 - 01/12/05	461.1	01/21/05	0.004	0.001	
01/12/05 - 01/19/05	447.7	01/31/05	0.018	0.002	
01/19/05 - 01/26/05	428.2	02/01/05	0.034	0.003	
01/26/05 - 02/02/05	436.8	02/12/05	0.007	0.001	
02/02/05 - 02/09/05	452.5	02/12/05	0.014	0.002	
02/09/05 - 02/16/05	426.4	02/18/05	0.017	0.002	
02/16/05 - 02/23/05	452.2	03/01/05	0.004	0.001	
02/23/05 - 03/02/05	452.6	03/04/05	0.012	0.001	
03/02/05 - 03/09/05	452.7	03/15/05	0.010	0.001	
03/09/05 - 03/16/05	441.3	03/20/05	0.024	0.002	
03/16/05 - 03/23/05	464.0	04/01/05	0.010	0.001	
03/23/05 - 03/30/05	444.5	04/07/05	0.008	0.001	
03/30/05 - 04/06/05	450.7	04/14/05	0.011	0.001	
04/06/05 - 04/13/05	443.8	04/19/05	0.007	0.001	
04/13/05 - 04/20/05	453.8	04/23/05	0.006	0.001	
04/20/05 - 04/27/05	460.8	05/03/05	0.009	0.001	
04/27/05 - 05/04/05	443.4	05/09/05	0.007	0.001	
05/04/05 - 05/11/05	451.1	05/18/05	0.004	0.001	
05/11/05 - 05/18/05	447.1	05/24/05	0.005	0.001	
05/18/05 - 05/25/05	450.3	05/29/05	0.006	0.001	
05/25/05 - 06/01/05	450.2	06/07/05	0.006	0.001	
06/01/05 - 06/08/05	453.7	06/11/05	0.006	0.001	8
06/08/05 - 06/15/05	408.8	06/24/05	0.003	0.001	
06/15/05 - 06/22/05	420.4	07/08/05	0.003	0.001	
06/22/05 - 06/29/05	418.0	07/12/05	0.004	0.001	
06/29/05 - 07/06/05	428.5	07/15/05	0.004	0.001	
07/06/05 - 07/13/05	420.8	07/22/05	0.003	0.001	
07/13/05 - 07/20/05	437.7	07/23/05	0.004	0.001	
07/20/05 - 07/27/05	435.3	07/31/05	0.008	0.001	
07/27/05 - 08/03/05	424.6	08/10/05	0.008	0.001	
08/03/05 - 08/10/05	420.6	08/15/05	0.005	0.001	
08/10/05 - 08/17/05	421.9	08/25/05	0.010	0.002	
08/17/05 - 08/24/05	390.8	08/31/05	0.006	0.001	
08/24/05 - 08/31/05	450.4	09/04/05	0.013	0.002	
08/31/05 - 09/07/05	449.3	09/19/05	0.011	0.002	
09/07/05 - 09/14/05	459.8	09/20/05	0.008	0.001	
09/14/05 - 09/21/05	447.2	09/25/05	0.011	0.002	



Diablo Canyon Power Plant 2005 Annual Report Airborne Radioactivity Station 8S1 (pCi/m³)

Collection Period	Volume (m³)	Counting Date	Gross Beta Activity	2Sigma	Gamma Scan
00/21/05 00/28/05	428.5	10/02/05	0.017	0.002	
09/21/05 - 09/28/05 09/28/05 - 10/05/05	428.3 449.1	10/02/03	0.017	0.002	
10/05/05 - 10/12/05	427.5	10/16/05	0.013	0.002	
10/12/05 - 10/19/05	432.1	10/22/05	0.012	0.002	
10/19/05 - 10/26/05	447.7	10/29/05	0.010	0.002	
10/26/05 - 11/02/05	442.0	11/05/05	0.015	0.002	
11/02/05 - 11/09/05	440.7	11/18/05	0.016	0.002	
11/09/05 - 11/16/05	440.8	11/28/05	0.015	0.002	
11/16/05 - 11/23/05	420.8	12/01/05	0.039	0.004	
11/23/05 - 11/30/05	457.5	12/07/05	0.020	0.003	
11/30/05 - 12/07/05	423.0	12/11/05	0.014	0.002	
12/07/05 - 12/14/05	433.5	12/18/05	0.031	0.003	
12/14/05 - 12/21/05	419.3	12/26/05	0.038	0.004	
12/21/05 - 12/28/05	412.2	01/01/06	0.011	0.002	

Gamma Activity on Filter Composites

Counting			Concentration
Collection Period	Date	Nuclide	(pCi/m³)
12/29/04 - 03/30/05	04/14/05	ND	•
03/30/05 - 06/29/05	07/21/05	ND	
06/29/05 - 09/28/05	10/12/05	ND	
09/28/05 - 12/28/05	01/12/06	ND	

Table Notation:
 ND: Radionuclides of interest other than naturally occurring were not detected.
 * Volume determined by calculation using timer and flow rate data.



Diablo Canyon Power Plant 2005 Annual Report Airborne Radioactivity Station 8S2 (pCi/m³)

	_		Gross Beta		
Collection Period	Volume (m³)	Counting Date	Activity	2Sigma	Gamma Scan
12/29/04 - 01/05/05	464.5	01/09/05	0.003	0.001	
01/05/05 - 01/12/05	465.9	01/22/05	0.004	0.001	
01/12/05 - 01/19/05	476.0	01/31/05	0.019	0.002	
01/19/05 - 01/26/05	463.6	02/01/05	0.033	0.003	
01/26/05 - 02/02/05	450.0	02/12/05	0.007	0.001	
02/02/05 - 02/09/05	469.4	02/12/05	0.016	0.002	
02/09/05 - 02/16/05	462.7	02/18/05	0.017	0.002	
02/16/05 - 02/23/05	483.8	03/02/05	0.004	0.001	
02/23/05 - 03/02/05	466.0	03/04/05	0.014	0.002	
03/02/05 - 03/09/05	466.2	03/15/05	0.010	0.001	
03/09/05 - 03/16/05	460.2	03/20/05	0.021	0.002	;
03/16/05 - 03/23/05	476.2	04/01/05	0.011	0.001	
03/23/05 - 03/30/05	460.4	04/08/05	0.007	0.001	
03/30/05 - 04/06/05	461.7	04/14/05	0.010	0.001	
04/06/05 - 04/13/05	464.0	04/19/05	0.006	0.001	
04/13/05 - 04/20/05	469.9	04/23/05	0.008	0.001	
04/20/05 - 04/27/05	478.4	05/03/05	0.008	0.001	
04/27/05 - 05/04/05	457.5	05/09/05	0.006	0.001	
05/04/05 - 05/11/05	468.1	05/18/05	0.004	0.001	
05/11/05 - 05/18/05	466.3	05/24/05	0.006	0.001	
05/18/05 - 05/25/05	473.4	05/29/05	0.005	0.001	
05/25/05 - 06/01/05	464.8	06/07/05	0.006	0.001	
06/01/05 - 06/08/05	477.2	06/11/05	0.007	0.001	
06/08/05 - 06/15/05	410.7	06/24/05	0.004	0.001	
06/15/05 - 06/22/05	432.2	07/08/05	0.003	0.001	
06/22/05 - 06/29/05	431.2	07/12/05	0.004	0.001	
06/29/05 - 07/06/05	438.0	07/16/05	0.004	0.001	
07/06/05 - 07/13/05	439.2	07/20/05	0.002	0.001	
07/13/05 - 07/20/05	441.0	07/24/05	0.004	0.001	
07/20/05 - 07/27/05	431.8	07/31/05	0.007	0.001	
07/27/05 - 08/03/05	429.4	08/10/05	0.009	0.001	
08/03/05 - 08/10/05	428.0	08/15/05	0.004	0.001	
08/10/05 - 08/17/05	423.4	08/25/05	0.009	0.002	
08/17/05 - 08/24/05	408.8	08/31/05	0.007	0.002	
08/24/05 - 08/31/05	479.1	09/04/05	0.012	0.002	
08/31/05 - 09/07/05	446.3	09/19/05	0.011	0.002	
09/07/05 - 09/14/05	442.4	09/20/05	0.010	0.002	
09/14/05 - 09/21/05	451.4	09/25/05	0.014	0.002	



Diablo Canyon Power Plant 2005 Annual Report Airborne Radioactivity Station 8S2 (pCi/m³)

Collection Period	Volume (m³)	Counting Date	Gross Beta Activity	2Sigma	Gamma Scan
09/21/05 - 09/28/05	442.9	10/02/05	0.021	0.003	
09/28/05 - 10/05/05	441.3	10/08/05	0.015	0.002	
10/05/05 - 10/12/05	463.3	10/16/05	0.013	0.002	
10/12/05 - 10/19/05	431.6	10/22/05	0.015	0.002	
10/19/05 - 10/26/05	443.5	10/29/05	0.010	0.002	
10/26/05 - 11/02/05	446.8	11/05/05	0.018	0.002	
11/02/05 - 11/09/05	444.6	11/18/05	0.012	0.002	
11/09/05 - 11/16/05	436.7	11/28/05	0.014	0.002	
11/16/05 - 11/23/05	424.5	12/01/05	0.045	0.005	
11/23/05 - 11/30/05	451.9	12/08/05	0.024	0.003	
11/30/05 - 12/07/05	425.0	12/11/05	0.013	0.002	
12/07/05 - 12/14/05	435.7	12/18/05	0.032	0.004	
12/14/05 - 12/21/05	418.1	12/25/05	0.035	0.004	
12/21/05 - 12/28/05	428.8	01/01/06	0.011	0.002	

Gamma Activity on Filter Composites

Counting			Concentration
Collection Period	Date	Nuclide	(pCi/m³)
12/29/04 - 03/30/05	04/14/05	ND	
03/30/05 - 06/29/05	07/21/05	ND	
06/29/05 - 09/28/05	10/12/05	ND	
09/28/05 - 12/28/05	01/12/06	ND	

Table Notation:

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

* Volume determined by calculation using timer and flow rate data.



Diablo Canyon Power Plant 2005 Annual Report Airborne Radioactivity Station MT1 (pCi/m³)

	_		Gross Beta		
Collection Period	Volume (m³)	Counting Date	Activity	2Sigma	Gamma Scan
12/29/04 - 01/05/05	517.4	01/09/05	0.004	0.001	
01/05/05 - 01/12/05	523.3	01/21/05	0.003	0.001	
01/12/05 - 01/19/05	523.3	01/31/05	0.019	0.002	
01/19/05 - 01/26/05	506.1	02/01/05	0.032	0.003	
01/26/05 - 02/02/05	514.6	02/12/05	0.008	0.001	
02/02/05 - 02/09/05	517.0	02/12/05	0.015	0.002	
02/09/05 - 02/16/05	507.3	02/18/05	0.016	0.002	
02/16/05 - 02/23/05	516.2	03/01/05	0.005	0.001	
02/23/05 - 03/02/05	518.4	03/04/05	0.010	0.001	
03/02/05 - 03/09/05	509.6	03/14/05	0.009	0.001	
03/09/05 - 03/16/05	501.0	03/20/05	0.023	0.002	
03/16/05 - 03/23/05	519.9	04/01/05	0.010	0.001	
03/23/05 - 03/30/05	498.5	04/07/05	0.008	0.001	
03/30/05 - 04/06/05	507.4	04/13/05	0.011	0.001	
04/06/05 - 04/13/05	512.1	04/19/05	0.006	0.001	
04/13/05 - 04/20/05	518.6	04/23/05	0.007	0.001	
04/20/05 - 04/27/05	520.9	05/03/05	0.009	0.001	
04/27/05 - 05/04/05	504.2	05/09/05	0.006	0.001	
05/04/05 - 05/11/05	*	*	*	*	
05/11/05 - 05/18/05	511.3	05/24/05	0.005	0.001	
05/18/05 - 05/25/05	507.8	05/29/05	0.007	0.001	
05/25/05 - 06/01/05	518.1	06/06/05	0.006	0.001	
06/01/05 - 06/08/05	526.0	06/11/05	0.008	0.001	
06/08/05 - 06/15/05	423.5	06/23/05	0.004	0.001	
06/15/05 - 06/22/05	423.0	07/07/05	0.006	0.001	
06/22/05 - 06/29/05	432.0	07/12/05	0.004	0.001	
06/29/05 - 07/06/05	431.7	07/15/05	0.004	0.001	
07/06/05 - 07/13/05	435.7	07/19/05	0.002	0.001	
07/13/05 - 07/20/05	454.8	07/23/05	0.004	0.001	
07/20/05 - 07/27/05	474.5	07/30/05	0.007	0.001	
07/27/05 - 08/03/05	534.0	08/09/05	0.008	0.001	
08/03/05 - 08/10/05	422.1	08/16/05	0.005	0.001	_
08/10/05 - 08/17/05	421.1	08/25/05	0.009	0.002	•
08/17/05 - 08/24/05	448.3	08/31/05	0.006	0.001	
08/24/05 - 08/31/05	449.8	09/03/05	0.012	0.002	
08/31/05 - 09/07/05	420.6	09/19/05	0.010	0.002	
09/07/05 - 09/14/05	424.2	09/20/05	0.008	0.001	
09/14/05 - 09/21/05	439.6	09/25/05	0.016	0.002	



Table B-3 (Continued)

Diablo Canyon Power Plant 2005 Annual Report Airborne Radioactivity Station MT1 (pCi/m³)

Collection Period	Volume (m³)	Counting Date	Gross Beta Activity	2Sigma	Gamma Scan
09/21/05 - 09/28/05	423.6	10/02/05	0.017	0.002	
09/28/05 - 10/05/05	443.8	10/08/05	0.017	0.002	
10/05/05 - 10/12/05	423.2	10/16/05	0.013	0.002	
10/12/05 - 10/19/05	432.0	10/22/05	0.012	0.002	
10/19/05 - 10/26/05	442.5	10/29/05	0.009	0.002	
10/26/05 - 11/02/05	447.3	11/05/05	0.017	0.002	
11/02/05 - 11/09/05	440.0	11/18/05	0.011	0.002	
11/09/05 - 11/16/05	435.6	11/28/05	0.016	0.002	
11/16/05 - 11/23/05	435.4	12/03/05	0.044	0.005	
11/23/05 - 11/30/05	457.7	12/07/05	0.022	0.003	
11/30/05 - 12/07/05	400.5	12/10/05	0.013	0.002	
12/07/05 - 12/14/05	364.1	12/18/05	0.032	0.004	
12/14/05 - 12/21/05	442.3	12/25/05	0.036	0.004	
12/21/05 - 12/28/05	426.2	01/01/06	0.009	0.002	

^{*} no sample collected - equipment failure

Gamma Activity on Filter Composites

Collection Period	Counting Date	Nuclide	Concentration (pCi/m³)
12/29/04 - 03/30/05	04/13/05	ND	
03/30/05 - 06/29/05	07/21/05	ND	
06/29/05 - 09/28/05	10/11/05	ND	
09/28/05 - 12/28/05	01/12/06	ND	

Table Notation:

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



Volume determined by calculation using timer and flow rate data.

Table B-4 Diablo Canyon Power Plan 2005 Annual Report **Environmental Dosimetry**

	Quarterly Total (mR) (a)			Annual	Quarterly		
Station	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	TOTAL	AVG	±2σ
MT1	21.9 ± 0.5	22.5 ± 0.5	20.4 ± 0.5	20.0 ± 0.4	84.8	21.2	2.4
WN1	12.3 ± 0.2	13.2 ± 0.3	12.3 ± 0.4	11.4 ± 0.3	49.2	12.3	1.4
OS1	21.0 ± 0.6	21.1 ± 0.6	19.9 ± 0.6	18.6 ± 0.4	80.6	20.2	2.3
5S 1	22.9 ± 0.3	23.0 ± 0.5	22.5 ± 0.5	21.2 ± 0.6	89.6	22.4	1.7
6S1	13.9 ± 0.4	14.4 ± 0.3	13.9 ± 0.3	12.2 ± 0.3	54.4	13.6	1.9
8S 1	17.2 ± 0.2	17.4 ± 0.3	16.7 ± 0.6	15.5 ± 0.3	66.8	16.7	1.7
8S2	21.7 ± 0.4	22.2 ± 0.5	20.5 ± 0.5	19.0 ± 0.5	83.4	20.9	2.9
5S3	18.9 ± 0.5	20.0 ± 0.7	19.3 ± 0.5	17.4 ± 0.5	75.6	18.9	2.2
2D1	12.8 ± 0.5	13.4 ± 0.4	12.6 ± 0.4	11.4 ± 0.3	50.2	12.6	1.7
4D1	17.2 ± 2.5	13.3 ± 0.5	11.6 ± 0.3	10.5 ± 0.3	52.6	13.1	5.9
5F1	18.2 ± 0.4	18.8 ± 0.3	17.1 ± 0.3	16.3 ± 0.4	70.4	17.6	2.2
1A1	12.1 ± 0.2	13.0 ± 0.2	11.9 ± 0.3	10.6 ± 0.3	47.6	11.9	2.0
7D2	16.6 ± 0.4	17.3 ± 0.5	16.2 ± 0.6	15.2 ± 0.3	65.3	16.3	1.8
7G2	17.7 ± 0.6	18.4 ± 0.4	16.9 ± 0.5	15.6 ± 0.7	68.6	17.2	2.4
7C1	18.3 ± 0.4	19.3 ± 0.5	17.9 ± 0.5	16.3 ± 0.3	71.8	17.9	2.5
7F1	17.5 ± 0.3	18.9 ± 0.3	16.5 ± 0.4	15.9 ± 0.4	68.8	17.2	2.6
OB1	9.8 ± 0.2	10.8 ± 0.3	9.9 ± 0.2	9.1 ± 0.4	39.6	9.9	1.4
7D1	11.5 ± 0.3	12.2 ± 0.2	11.4 ± 0.3	10.2 ± 0.4	45.3	11.3	1.7
4C1	11.0 ± 0.3	11.3 ± 0.4	10.5 ± 0.3	9.3 ± 0.2	42.1	10.5	1.8
OS2	17.0 ± 0.4	18.3 ± 0.3	17.4 ± 0.6	15.7 ± 0.4	68.4	17.1	2.2
1 S 1	16.7 ± 0.3	17.2 ± 0.6	16.8 ± 0.4	15.7 ± 0.4	66.4	16.6	1.3
2S1	16.9 ± 0.5	18.1 ± 0.4	16.4 ± 0.3	14.6 ± 0.5	66.0	16.5	2.9
3S 1	21.3 ± 0.4	22.5 ± 0.5	21.1 ± 0.6	18.5 ± 0.3	83.4	20.9	3.4
4S1	19.0 ± 0.4	19.5 ± 0.3	18.5 ± 0.3	17.8 ± 0.6	74.8	18.7	1.5
7 S1	18.1 ± 0.4	19.0 ± 0.5	18.6 ± 0.4	17.0 ± 0.3	72.7	18.2	1.7
9 S1	21.5 ± 0.6	23.2 ± 0.5	22.6 ± 0.4	20.0 ± 0.6	87.3	21.8	2.8
1C1	13.4 ± 0.3	14.5 ± 0.3	12.8 ± 0.4	11.7 ± 0.3	52.4	13.1	2.3
5C1	15.5 ± 0.4	16.5 ± 0.2	16.8 ± 0.4	15.3 ± 0.3	64.1	16.0	1.5
3D1	12.8 ± 0.1	13.6 ± 0.3	13.0 ± 0.3	11.4 ± 0.4	50.8	12.7	1.9
6D1	13.2 ± 0.4	14.4 ± 0.3	14.3 ± 0.3	12.1 ± 0.4	54.0	13.5	2.2
5F3	16.9 ± 0.5	17.9 ± 0.6	16.9 ± 0.4	15.5 ± 0.4	67.2	16.8	1.9

Table Notation:

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

Table B-5
Land Use Census 2005

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

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

Table Notation:

- (a) Sectors not shown contain no land (other than islets not used for the purposes indicated in this table) beyond the site boundary.
- (b) BLANCHARD residence will remain as full-time residence for critical receptor calculations even though actual occupation is part-time. Reason is for conservative approach.
- (c) The READ vegetable garden located in the NNE sector is located at the 020 azimuth degree. There is also a full time residence at this location.
- (d) The KOONZE vegetable garden is located in the E sector and located at the 098 azimuth degree. There is also a full time residence at this location.
- (e) The MELLO garden is the commercial farm along the westward side of the site access road; however, it does not produce broadleaf vegetation. This farm extends from 4.8 km to 7.2 km (3 to 4.5 miles) from the plant.



Table B-6 Diablo Canyon Power Plant 2005 Annual Report Lower Limits of Detection (LLD) Exceeded*

Sample	Station No.	Date Collected	¹³¹ I**	
None Exceeded				

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 2005 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Description	Station No.	Collection Date
Air Particulate, Iodine Cartridge	MT1	1/5/2005
Air Particulate, Iodine Cartridge	5F1	1/5/2005
Air Particulate, Iodine Cartridge	7D1	1/5/2005
Air Particulate, Iodine Cartridge	8S1	1/5/2005
Air Particulate, Iodine Cartridge	8S2	1/5/2005
Air Particulate, Iodine Cartridge	0 S2	1/5/2005
Air Particulate, Iodine Cartridge	1S1	1/5/2005
Air Particulate, Iodine Cartridge	MT1	1/12/2005
Air Particulate, Iodine Cartridge		1/12/2005
		1/12/2005
· · · · · · · · · · · · · · · · · · ·		1/12/2005
•		1/12/2005
•		1/12/2005
		1/12/2005
		1/18/2005
		1/18/2005
		1/18/2005
• • • • • • • • • • • • • • • • • • • •		1/19/2005
· · · · · · · · · · · · · · · · · · ·		1/19/2005
·		1/19/2005
·		1/19/2005
•		1/19/2005
_		1/19/2005
		1/19/2005
		1/25/2005
, , ,		1/25/2005
•		1/26/2005
		1/26/2005
		1/26/2005
		1/26/2005
_		1/26/2005
		1/26/2005
		1/26/2005
·		1/31/2005
· · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •	1/31/2005
		1/31/2005
——————————————————————————————————————		
		1/31/2005
·		2/2/2005
•		2/2/2005 2/2/2005
•		2/2/2005
•		2/2/2005
		2/2/2005 2/2/2005
	Air Particulate, Iodine Cartridge	Air Particulate, Iodine Cartridge 5F1 Air Particulate, Iodine Cartridge 7D1 Air Particulate, Iodine Cartridge 8S1 Air Particulate, Iodine Cartridge 8S2 Air Particulate, Iodine Cartridge 9S2 Air Particulate, Iodine Cartridge 9S1 Air Particulate, Iodine Cartridge 9S2 Air Particulate, Iodine Cartridge 9S1 Air Particulate, Iodine Cartridge 9S2 Air Particulate, Iodine Cartridge 9S1 Air Particulate, Iodine Cartridge 9S1 Air Particulate, Iodine Cartridge 9S1 Air Particulate, Iodine Cartridge 9S2 Air Particulate, Iodine Cartridge 9S51 Air Particulate, Iodine Cartridge 9S51 Air Particulate, Iodine Cartri



Table B-7 (Continued)

Diablo Canyon Power Plant 2005 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
05B05	Air Particulate, Iodine Cartridge	1S1	2/2/2005
05B06	Vegetative Greens (Broccoli)	5F2	2/1/2005
05B07	Vegetative Greens (Cabbage)	7G1	2/1/2005
05B08	Vegetative Greens (Weeds)	7C1	2/1/2005
05B12	Air Particulate, Iodine Cartridge	MT1	2/9/2005
05B13	Air Particulate, Iodine Cartridge	5F1	2/9/2005
05B14	Air Particulate, Iodine Cartridge	7D1	2/9/2005
05B15	Air Particulate, Iodine Cartridge	8S1	2/9/2005
05B16	Air Particulate, Iodine Cartridge	8S2	2/9/2005
05B17	Air Particulate, Iodine Cartridge	0\$2	2/9/2005
05B18	Air Particulate, Iodine Cartridge	181	2/9/2005
05B19	Market Fish (Rock Cod)	7D3	2/1/2005
05B20	California Mussels	7C2	2/8/2005
05B21	Iridaea	7C2	2/8/2005
05B22	California Mussels	PON	2/8/2005
05B38	Drinking Water	DW1	2/10/2005
05B39	Surface Water, (Seawater)	DCM	2/10/2005
05B40	Surface Water, (Seawater)	7C2	2/10/2005
05B42	Drinking Water	5S2	2/10/2005
05B46	California Mussels	DCM	2/9/2005
05B47	Iridaea	DCM	2/9/2005
05B48	California Mussels	POS	2/9/2005
05B49	Bull Kelp Blade	PON	2/10/2005
05B50	Bull Kelp Pneumatocyst	PON	2/10/2005
05B51	Giant Kelp Blade	DCM	2/10/2005
05B52	Giant Kelp Pneumatocyst	DCM	2/10/2005
05B53	Bull Kelp Blade	POS	2/10/2005
05B54	Bull Kelp Pneumatocyst	POS	2/10/2005
05B55	Bull Kelp Blade	7C2	2/10/2005
05B56	Bull Kelp Pneumatocyst	7C2	2/10/2005
05B59	Milk	5F2	2/16/2005
05B62	Air Particulate, Iodine Cartridge	MT1	2/16/2005
05B63	Air Particulate, Iodine Cartridge	5F1	2/16/2005
05B64	Air Particulate, Iodine Cartridge	7D1	2/16/2005
05B65	Air Particulate, Iodine Cartridge	8S1	2/16/2005
05B66	Air Particulate, Iodine Cartridge	8S2	2/16/2005
05B67	Air Particulate, Iodine Cartridge	0S2 0S2	2/16/2005
05B68	Air Particulate, Iodine Cartridge	181	2/16/2005
05B78	Air Particulate, lodine Cartridge Air Particulate, Iodine Cartridge	MT1	2/23/2005
05B78 05B79	Air Particulate, Iodine Cartridge Air Particulate, Iodine Cartridge	5F1	2/23/2005 2/23/2005
	•		
05B80	Air Particulate, Iodine Cartridge	7D1	2/23/2005
05B81 05B82	Air Particulate, Iodine Cartridge Air Particulate, Iodine Cartridge	8S1 8S2	2/23/2005 2/23/2005



Table B-7 (Continued)

Diablo Canyon Power Plant 2005 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
05B83	Air Particulate, Iodine Cartridge	0S2	2/23/2005
05B84	Air Particulate, Iodine Cartridge	1\$1	2/23/2005
05B87	Surface Water (Outfall)	OUT	3/1/2005
05B88	Vegetative Greens (Weeds)	5F2	3/1/2005
05B89	Vegetative Greens (Cabbage)	7G1	3/1/2005
05B90	Vegetative Greens (Peas and weeds)	7C1	3/1/2005
05B91	Air Particulate, Iodine Cartridge	MT1	3/2/2005
05B92	Air Particulate, Iodine Cartridge	5F1	3/2/2005
05B93	Air Particulate, Iodine Cartridge	7D1	3/2/2005
05B94	Air Particulate, Iodine Cartridge	8S1	3/2/2005
05B95	Air Particulate, Iodine Cartridge	8S2	3/2/2005
05B96	Air Particulate, Iodine Cartridge	0S2	3/2/2005
05B97	Air Particulate, Iodine Cartridge	1S1	3/2/2005
05C03	Air Particulate, Iodine Cartridge	MT1	3/9/2005
05C04	Air Particulate, Iodine Cartridge	5F1	3/9/2005
05C05	Air Particulate, Iodine Cartridge	7D1	3/9/2005
05C06	Air Particulate, Iodine Cartridge	8S1	3/9/2005
05C07	Air Particulate, Iodine Cartridge	8S2	3/9/2005
05C08	Air Particulate, Iodine Cartridge	0\$2	3/9/2005
05C09	Air Particulate, Iodine Cartridge	181	3/9/2005
05C13	Air Particulate, Iodine Cartridge	MT1	3/16/2005
05C14	Air Particulate, Iodine Cartridge	5F1	3/16/2005
05C15	Air Particulate, Iodine Cartridge	7D1	3/16/2005
05C16	Air Particulate, Iodine Cartridge	8S1	3/16/2005
05C17	Air Particulate, Iodine Cartridge	8S2	3/16/2005
05C18	Air Particulate, Iodine Cartridge	0S2	3/16/2005
05C19	Air Particulate, Iodine Cartridge	1S1	3/16/2005
05C20	Perch	PON	2/3/2005
05C21	Rockfish	PON	2/3/2005
05C22	Perch	DCM	2/3/2005
05C23	Rockfish	DCM	2/3/2005
05C24	Perch	POS	2/14/2005
05C25	Rockfish	POS	2/14/2005
05C32	Surface Water (Seawater)	DCM	3/17/2005
05C33	Surface Water (Seawater)	7C2	3/17/2005
05C35	Air Particulate, Iodine Cartridge	MT1	3/23/2005
05C36	Air Particulate, Iodine Cartridge	5F1	3/23/2005
05C37	Air Particulate, Iodine Cartridge	7D1	3/23/2005
05C38	Air Particulate, Iodine Cartridge	8S1	3/23/2005
05C39	Air Particulate, Iodine Cartridge	8S2	3/23/2005
05C40	Air Particulate, Iodine Cartridge	0S2	3/23/2005
05C41	Air Particulate, Iodine Cartridge	151	3/23/2005
05C46	Perch	7C2	3/25/2005



Table B-7 (Continued)

Diablo Canyon Power Plant 2005 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
05C47	Rockfish	7C2	3/25/2005
05C48	Surface Water (Outfall)	OUT	3/29/2005
05C49	Drinking Water	5S2	3/29/2005
05C50	Drinking Water	DW1	3/29/2005
05C51	Milk	5F2	3/29/2005
05C53	Air Particulate, Iodine Cartridge	MT1	3/30/2005
05C54	Air Particulate, Iodine Cartridge	5F1	3/30/2005
05C55	Air Particulate, Iodine Cartridge	7D1	3/30/2005
05C56	Air Particulate, Iodine Cartridge	8S1	3/30/2005
05C57	Air Particulate, Iodine Cartridge	8S2	3/30/2005
05C58	Air Particulate, Iodine Cartridge	0S2	3/30/2005
05C59	Air Particulate, Iodine Cartridge	181	3/30/2005
05C61	Vegetative Greens (Weeds)	6C1	4/4/2005
05C62	Vegetative Greens (Cauliflower)	5F2	4/5/2005
05C63	Vegetative Greens (Cabbage)	7G1	4/4/2005
05C69	Vegetative Greens (peas and leaves)	7C1	4/6/2005
05C71	Air Particulate, Iodine Cartridge	MT1	4/6/2005
05C72	Air Particulate, Iodine Cartridge	5F1	4/6/2005
05C73	Air Particulate, Iodine Cartridge	7D1	4/6/2005
05C74	Air Particulate, Iodine Cartridge	8S1	4/6/2005
05C75	Air Particulate, Iodine Cartridge	8S2	4/6/2005
05C76	Air Particulate, Iodine Cartridge	0S2	4/6/2005
05C77	Air Particulate, Iodine Cartridge	1S1	4/6/2005
05C79	Air Particulate, Iodine Cartridge	MT1	4/13/2005
05C80	Air Particulate, Iodine Cartridge	5F1	4/13/2005
05C81	Air Particulate, Iodine Cartridge	7D1	4/13/2005
05C82	Air Particulate, Iodine Cartridge	8S1	4/13/2005
05C83	Air Particulate, Iodine Cartridge	8S2	4/13/2005
05C84	Air Particulate, Iodine Cartridge	0\$2	4/13/2005
05C85	Air Particulate, Iodine Cartridge	1S1	4/13/2005
05C88	Air Particulate, Iodine Cartridge	MT1	4/20/2005
05C89	Air Particulate, Iodine Cartridge	5F1	4/20/2005
05C90	Air Particulate, Iodine Cartridge	7D1	4/20/2005
05C91	Air Particulate, Iodine Cartridge	8S1	4/20/2005
05C92	Air Particulate, Iodine Cartridge	8S2	4/20/2005
05C93	Air Particulate, Iodine Cartridge	082	4/20/2005
05C94	Air Particulate, Iodine Cartridge	1S1	4/20/2005
05D09	Surface Water (Seawater)	DCM	4/25/2005
05D10	Surface Water (Seawater)	7C2	4/25/2005
05D10	Air Particulate, Iodine Cartridge	MT1	4/27/2005
05D16	Air Particulate, Iodine Cartridge Air Particulate, Iodine Cartridge	5F1	4/27/2005
05D17	Air Particulate, Iodine Cartridge Air Particulate, Iodine Cartridge	7D1	4/27/2005
05D17 05D18	Air Particulate, Iodine Cartridge Air Particulate, Iodine Cartridge	8S1	4/27/2005



Table B-7 (Continued)

Diablo Canyon Power Plant 2005 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
05D19	Air Particulate, Iodine Cartridge	8S2	4/27/2005
05D20	Air Particulate, Iodine Cartridge	0S2	4/27/2005
05D21	Air Particulate, Iodine Cartridge	1S1	4/27/2005
05D22	Surface Water (Outfall)	OUT	4/26/2005
05D23	Drinking Water	5S2	4/26/2005
05D24	Drinking Water	DW1	4/26/2005
05D25	Milk	5F2	4/27/2005
05D26	Bull Kelp Blade	PON	4/25/2005
05D27	Bull Kelp Pneumatocyst	PON	4/25/2005
05D28	Giant Kelp Blade	DCM	4/25/2005
05D29	Giant Kelp Pneumatocyst	DCM	4/25/2005
05D30	Bull Kelp Blade	POS	4/25/2005
05D31	Bull Kelp Pneumatocyst	POS	4/25/2005
05D32	Bull Kelp Blade	7C2	4/25/2005
05D33	Bull Kelp Pneumatocyst	7C2	4/25/2005
05D49	Market Fish (Salmon)	2F1	5/4/2005
05D50	Supplemental sample Well 02 (2nd Qtr '05)		5/4/2005
05D51	Air Particulate, Iodine Cartridge	MT1	5/4/2005
05D52	Air Particulate, Iodine Cartridge	5F1	5/4/2005
05D53	Air Particulate, Iodine Cartridge	7D1	5/4/2005
05D54	Air Particulate, Iodine Cartridge	8S1	5/4/2005
05D55	Air Particulate, Iodine Cartridge	8S2	5/4/2005
05D56	Air Particulate, Iodine Cartridge	0S2	5/4/2005
05D57	Air Particulate, Iodine Cartridge	1S1	5/4/2005
05D62	Air Particulate, Iodine Cartridge	MT1	5/11/2005
05D63	Air Particulate, Iodine Cartridge	5F1	5/11/2005
05D64	Air Particulate, Iodine Cartridge	7D1	5/11/2005
05D65	Air Particulate, Iodine Cartridge	8S1	5/11/2005
05D66	Air Particulate, Iodine Cartridge	8S2	5/11/2005
05D67	Air Particulate, Iodine Cartridge	0S2	5/11/2005
05D68	Air Particulate, Iodine Cartridge	1S1	5/11/2005
05D69	Vegetative Greens (lettuce)	5F2	5/11/2005
05D70	Vegetative Greens (snow peas and vines)	7C1	5/11/2005
05D72	Vegetative Greens (Weeds)	7G1	5/17/2005
05D73	Air Particulate, Iodine Cartridge	MT1	5/18/2005
05D74	Air Particulate, Iodine Cartridge	5F1	5/18/2005
05D75	Air Particulate, Iodine Cartridge	7D1	5/18/2005
05D76	Air Particulate, Iodine Cartridge	8S1	5/18/2005
05D77	Air Particulate, Iodine Cartridge	8S2	5/18/2005
05D78	Air Particulate, Iodine Cartridge	082	5/18/2005
05D79	Air Particulate, Iodine Cartridge	151	5/18/2005
05D70	Surface Water (Seawater)	DCM	5/19/2005
05D82	Surface Water (Seawater)	7C2	5/19/2005



Table B-7 (Continued)

Diablo Canyon Power Plant 2005 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
05D89	Air Particulate, Iodine Cartridge	MT1	5/25/2005
05D90	Air Particulate, Iodine Cartridge	5F1	5/25/2005
05D91	Air Particulate, Iodine Cartridge	7D1	5/25/2005
05D92	Air Particulate, Iodine Cartridge	8S1	5/25/2005
05D93	Air Particulate, Iodine Cartridge	8S2	5/25/2005
05D94	Air Particulate, Iodine Cartridge	0S2	5/25/2005
05D95	Air Particulate, Iodine Cartridge	1S1	5/25/2005
05E01	California Mussels	DCM	5/26/2005
05E02	Iridaea	DCM	5/26/2005
05E03	California Mussels	7C2	5/25/2005
05E04	Iridaea	7C2	5/25/2005
05E05	California Mussels	POS	5/26/2005
05E06	Beef (Blanchard's ranch)		5/25/2005
05E08	Rockfish	PON	5/26/2005
05E09	Perch	DCM	5/26/2005
05E10	Rockfish	DCM	5/26/2005
05E11	Perch	POS	5/27/2005
05E12	Rockfish	POS	5/27/2005
05E13	Drinking Water	DW1	5/31/2005
05E14	Milk	5F2	5/31/2005
05E15	Surface Water (Outfall)	OUT	5/31/2005
05E18	Air Particulate, Iodine Cartridge	MT1	6/1/2005
05E19	Air Particulate, Iodine Cartridge	5F1	6/1/2005
05E20	Air Particulate, Iodine Cartridge	7D1	6/1/2005
05E21	Air Particulate, Iodine Cartridge	8S1	6/1/2005
05E22	Air Particulate, Iodine Cartridge	8S2	6/1/2005
05E23	Air Particulate, Iodine Cartridge	082	6/1/2005
05E24	Air Particulate, Iodine Cartridge	181	6/1/2005
05E25	Perch	7C2	5/29/2005
05E26	Rockfish	7C2	5/29/2005
05E27	Sediment	DCM	5/29/2005
05E28	Sediment	7C2	5/29/2005
05E29	Vegetative Greens (Cauliflower)	5F2	6/1/2005
05E30	Vegetative Greens (Weeds)	7G1	6/1/2005
05E31	Vegetative Greens (Weeds)	7C1	6/2/2005
05E32	Drinking Water	582	6/2/2005
05E55	Air Particulate, Iodine Cartridge	MT1	6/8/2005
05E56	Air Particulate, Iodine Cartridge	5F1	6/8/2005
05E57	Air Particulate, Iodine Cartridge	7D1	6/8/2005
05E58	Air Particulate, Iodine Cartridge	8S1	6/8/2005
05E59	Air Particulate, Iodine Cartridge	8 S 2	6/8/2005
05E60	Air Particulate, Iodine Cartridge	082	6/8/2005
05E61	Air Particulate, Iodine Cartridge Air Particulate, Iodine Cartridge	181	6/8/2005



Table B-7 (Continued)

Diablo Canyon Power Plant 2005 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
05E71	Air Particulate, Iodine Cartridge	MT1	6/15/2005
05E72	Air Particulate, Iodine Cartridge	5F1	6/15/2005
05E73	Air Particulate, Iodine Cartridge	7D1	6/15/2005
05E74	Air Particulate, Iodine Cartridge	8S1	6/15/2005
05E75	Air Particulate, Iodine Cartridge	8S2	6/15/2005
05E76	Air Particulate, Iodine Cartridge	0S2	6/15/2005
05E77	Air Particulate, Iodine Cartridge	1S1	6/15/2005
05E78	Drinking Water	5S2	6/15/2005
05E79	Drinking Water	DW1	6/15/2005
05E80	Milk	5F2	6/15/2005
05E81	Vegetative Greens (Mixed Greens)	6C1	6/15/2005
05E87	Air Particulate, Iodine Cartridge	MT1	6/22/2005
05E88	Air Particulate, Iodine Cartridge	5F1	6/22/2005
05E89	Air Particulate, Iodine Cartridge	7D1	6/22/2005
05E90	Air Particulate, Iodine Cartridge	8S1	6/22/2005
05E91	Air Particulate, Iodine Cartridge	8S2	6/22/2005
05E92	Air Particulate, Iodine Cartridge	0S2	6/22/2005
05E93	Air Particulate, Iodine Cartridge	1S1	6/22/2005
05E94	Perch (resample)	PON	6/16/2005
05E95	Rockfish (resample)	PON	6/16/2005
05E96	Surface Water (Outfall)	OUT	6/23/2005
05E98	Surface Water (Seawater)	DCM	6/27/2005
05E99	Surface Water (Seawater)	7C2	6/27/2005
05F01	Air Particulate, Iodine Cartridge	MT1	6/29/2005
05F02	Air Particulate, Iodine Cartridge	5F1	6/29/2005
05F03	Air Particulate, Iodine Cartridge	7D1	6/29/2005
05F04	Air Particulate, Iodine Cartridge	8S1	6/29/2005
05F05	Air Particulate, Iodine Cartridge	8 S 2	6/29/2005
05F06	Air Particulate, Iodine Cartridge	0S2	6/29/2005
05F07	Air Particulate, Iodine Cartridge	181	6/29/2005
05F42	Air Particulate, Iodine Cartridge	MT1	7/6/2005
05F43	Air Particulate, Iodine Cartridge	5F1	7/6/2005
05F44	Air Particulate, Iodine Cartridge	7D1	7/6/2005
05F45	Air Particulate, Iodine Cartridge	8S1	7/6/2005
05F46	Air Particulate, Iodine Cartridge	8S2	7/6/2005
05F47	Air Particulate, Iodine Cartridge	082	7/6/2005
05F48	Air Particulate, Iodine Cartridge	181	7/6/2005
05F51	Air Particulate, Iodine Cartridge	MT1	7/13/2005
05F52	Air Particulate, Iodine Cartridge	5F1	7/13/2005
05F53	Air Particulate, Iodine Cartridge	7D1	7/13/2005
05F54	Air Particulate, Iodine Cartridge	8S1	7/13/2005
05F55	Air Particulate, Iodine Cartridge	8\$2	7/13/2005
05F56	Air Particulate, Iodine Cartridge	082	7/13/2005



Table B-7 (Continued)

Diablo Canyon Power Plant 2005 Annual Report

List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
05F57	Air Particulate, Iodine Cartridge	181	7/13/2005
05F63	Air Particulate, Iodine Cartridge	MT1	7/20/2005
05F64	Air Particulate, Iodine Cartridge	5F1	7/20/2005
05F65	Air Particulate, Iodine Cartridge	7D1	7/20/2005
05F66	Air Particulate, Iodine Cartridge	8S1	7/20/2005
05F67	Air Particulate, Iodine Cartridge	8S2	7/20/2005
05F68	Air Particulate, Iodine Cartridge	0S2	7/20/2005
05F69	Air Particulate, Iodine Cartridge	1S1	7/20/2005
05F83	Air Particulate, Iodine Cartridge	MT1	7/27/2005
05F84	Air Particulate, Iodine Cartridge	5F1	7/27/2005
05F85	Air Particulate, Iodine Cartridge	7D1	7/27/2005
05F86	Air Particulate, Iodine Cartridge	8S1	7/27/2005
05F87	Air Particulate, Iodine Cartridge	8S2	7/27/2005
05F88	Air Particulate, Iodine Cartridge	0S2	7/27/2005
05F89	Air Particulate, Iodine Cartridge	181	7/27/2005
05F90	Vegetative Greens (Broccolli)	5F2	7/25/2005
05F91	Vegetative Greens (Bok choy)	7G1	7/25/2005
05F92	Vegetative Greens (licorice)	7C1	7/25/2005
05F93	Market Fish (Halibut)	7D3	7/25/2005
05F95	Surface Water (Outfall)	OUT	7/28/2005
05F96	Milk `	5F2	7/28/2005
05F97	Surface Water (Seawater)	DCM	7/28/2005
05F98	Surface Water (Seawater)	7C2	7/28/2005
05G02	Drinking Water	DW1	7/29/2005
05G03	Drinking Water	5S2	7/29/2005
05G05	Air Particulate, Iodine Cartridge	MT1	8/3/2005
05G06	Air Particulate, Iodine Cartridge	5F1	8/3/2005
05G07	Air Particulate, Iodine Cartridge	7D1	8/3/2005
05G08	Air Particulate, Iodine Cartridge	8S1	8/3/2005
05G09	Air Particulate, Iodine Cartridge	8S2	8/3/2005
05G10	Air Particulate, Iodine Cartridge	0S2	8/3/2005
05G11	Air Particulate, Iodine Cartridge	1S1	8/3/2005
05G12	Bull Kelp Blade	PON	7/28/2005
05G13	Bull Kelp Pneumatocyst	PON	7/28/2005
05G14	Giant Kelp Blade	DCM	7/28/2005
05G15	Giant Kelp Pneumatocyst	DCM	7/28/2005
05G16	Bull Kelp Blade	POS	7/28/2005
05G17	Bull Kelp Pneumatocyst	POS	7/28/2005
05G18	Bull Kelp Blade	7C2	7/28/2005
05G19	Bull Kelp Pneumatocyst	7C2	7/28/2005
05G23	California Mussels	DCM	8/5/2005
05G24	Iridaea	DCM	8/5/2005
05G25	California Mussels	7C2	8/5/2005



Table B-7 (Continued)

Diablo Canyon Power Plant 2005 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
05G26	Iridaea	7C2	8/5/2005
05G27	California Mussels	POS	8/5/2005
05G28	Vegetative Greens (corn)	5F2	8/5/2005
05G29	Vegetative Greens (Bok choy)	7G1	8/5/2005
05G30	Vegetative Greens (snow peas and vines)	7C1	8/5/2005
05G31	Drinking Water	5S2	8/8/2005
05G32	Drinking Water	DW1	8/8/2005
05G33	Milk	5F2	8/8/2005
05G34	Surface Water (Outfall)	OUT	8/8/2005
05G35	Air Particulate, Iodine Cartridge	MT1	8/10/2005
05G36	Air Particulate, Iodine Cartridge	5F1	8/10/2005
05G37	Air Particulate, Iodine Cartridge	7D1	8/10/2005
05G38	Air Particulate, Iodine Cartridge	8S1	8/10/2005
05G39	Air Particulate, Iodine Cartridge	8S2	8/10/2005
05G40	Air Particulate, Iodine Cartridge	0\$2	8/10/2005
05G41	Air Particulate, Iodine Cartridge	1S1	8/10/2005
05G43	Air Particulate, Iodine Cartridge	MT1	8/17/2005
05G44	Air Particulate, Iodine Cartridge	5F1	8/17/2005
05G45	Air Particulate, Iodine Cartridge	7D1	8/17/2005
05G46	Air Particulate, Iodine Cartridge	8S1	8/17/2005
05G47	Air Particulate, Iodine Cartridge	8S2	8/17/2005
05G48	Air Particulate, Iodine Cartridge	0S2	8/17/2005
05G49	Air Particulate, Iodine Cartridge	181	8/17/2005
05G62	Air Particulate, Iodine Cartridge	MT1	8/24/2005
05G63	Air Particulate, Iodine Cartridge	5F1	8/24/2005
05G64	Air Particulate, Iodine Cartridge	7D1	8/24/2005
05G65	Air Particulate, Iodine Cartridge	8S1	8/24/2005
05G66	Air Particulate, Iodine Cartridge	8S2	8/24/2005
05G67	Air Particulate, Iodine Cartridge	0\$2	8/24/2005
05G68	Air Particulate, Iodine Cartridge	181	8/24/2005
05G69	Surface Water (Seawater)	DCM	8/25/2005
05G70	Surface Water (Seawater)	7C2	8/25/2005
05G73	Air Particulate, Iodine Cartridge	MT1	8/31/2005
05G74	Air Particulate, Iodine Cartridge	5F1	8/31/2005
05G75	Air Particulate, Iodine Cartridge	7D1	8/31/2005
05G76	Air Particulate, Iodine Cartridge	8S1	8/31/2005
05G77	Air Particulate, Iodine Cartridge	8\$2	8/31/2005
05G78	Air Particulate, Iodine Cartridge	0S2	8/31/2005
05G79	Air Particulate, Iodine Cartridge	181	8/31/2005
05G80	Surface Water (Seawater)	DCM	8/31/2005
05G82	Air Particulate, Iodine Cartridge	MT1	9/7/2005
05G83	Air Particulate, Iodine Cartridge	5F1	9/7 <i>[</i> 2005
05G84	Air Particulate, Iodine Cartridge	7D1	9/7/2005



Table B-7 (Continued)

Diablo Canyon Power Plant 2005 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
05G85	Air Particulate, Iodine Cartridge	8S1	9/7/2005
05G86	Air Particulate, Iodine Cartridge	8S2	9/7/2005
05G87	Air Particulate, Iodine Cartridge	0S2	9/7/2005
05G88	Air Particulate, Iodine Cartridge	181	9/7/2005
05H11	Perch	PON	9/2/2005
05H12	Rockfish	PON	9/2/2005
05H13	Perch	DCM	9/2/2005
05H14	Rockfish	DCM	9/2/2005
05H15	Perch	POS	9/1/2005
05H16	Rockfish	POS	9/1/2005
05H17	Perch	7C2	9/1/2005
05H18	Rockfish	7C2	9/1/2005
05H19	Vegetative Greens (Tomato)	5F2	9/14/2005
05H20	Vegetative Greens (Celery)	7G1	9/14/2005
05H21	Vegetative Greens (weeds)	7C1	9/14/2005
05H22	Air Particulate, Iodine Cartridge	MT1	9/14/2005
05H23	Air Particulate, Iodine Cartridge	5F1	9/14/2005
05H24	Air Particulate, Iodine Cartridge	7D1	9/14/2005
05H25	Air Particulate, Iodine Cartridge	8S1	9/14/2005
05H26	Air Particulate, Iodine Cartridge	8S2	9/14/2005
05H27	Air Particulate, Iodine Cartridge	0\$2	9/14/2005
05H28	Air Particulate, Iodine Cartridge	1S1	9/14/2005
05H30	Surface Water (Outfall)	OUT	9/15/2005
05H31	Drinking Water	582	9/15/2005
05H32	Drinking Water	DW1	9/15/2005
05H33	Milk	5F2	9/15/2005
05H37	Vegetative Greens (Weeds)	6C1	9/18/2005
05H38	Air Particulate, Iodine Cartridge	MT1	9/21/2005
05H39	Air Particulate, Iodine Cartridge	5F1	9/21/2005
05H40	Air Particulate, Iodine Cartridge	7D1	9/21/2005
05H41	Air Particulate, Iodine Cartridge	8S1	9/21/2005
05H42	Air Particulate, Iodine Cartridge	8S2	9/21/2005
05H43	Air Particulate, Iodine Cartridge	0\$2	9/21/2005
05H44	Air Particulate, Iodine Cartridge	1S1	9/21/2005
05H67	Air Particulate, Iodine Cartridge	MT1	9/28/2005
05H68	Air Particulate, Iodine Cartridge	5F1	9/28/2005
05H69	Air Particulate, Iodine Cartridge	7D1	9/28/2005
05H70	Air Particulate, Iodine Cartridge	8S1	9/28/2005
05H71	Air Particulate, Iodine Cartridge	8S2	9/28/2005
05H72	Air Particulate, Iodine Cartridge	0S2	9/28/2005
05H73	Air Particulate, Iodine Cartridge	181	9/28/2005
05H74	Surface Water (Seawater)	DCM	9/28/2005
05H75	Surface Water (Seawater)	7C2	9/28/2005



Table B-7 (Continued)

Diablo Canyon Power Plant 2005 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date	
05H85	Air Particulate, Iodine Cartridge	MT1	10/5/2005	
05H86	Air Particulate, Iodine Cartridge	5F1	10/5/2005	
05H87	Air Particulate, Iodine Cartridge	7D1	10/5/2005	
05H88	Air Particulate, Iodine Cartridge	8 S 1	10/5/2005	
05H89	Air Particulate, Iodine Cartridge	8S2	10/5/2005	
05H90	Air Particulate, Iodine Cartridge	0S2	10/5/2005	
05H91	Air Particulate, Iodine Cartridge	181	10/5/2005	
05H98	Air Particulate, Iodine Cartridge	MT1	10/12/2005	
05H99	Air Particulate, Iodine Cartridge	5F1	10/12/2005	
05100	Air Particulate, Iodine Cartridge	7D1	10/12/2005	
05101	Air Particulate, Iodine Cartridge	8S1	10/12/2005	
05102	Air Particulate, Iodine Cartridge	8S2	10/12/2005	
05103	Air Particulate, Iodine Cartridge	0S2	10/12/2005	
05104	Air Particulate, Iodine Cartridge	1S1	10/12/2005	
05105	Vegetative Greens (Tomatoes)	5F2	10/12/2005	
05106	Vegetative Greens (Cabbage)	7G1	10/12/2005	
05107	Vegetative Greens (Squash)	7C1	10/12/2005	
05110	Air Particulate, Iodine Cartridge	MT1	10/19/2005	
05 11	Air Particulate, Iodine Cartridge	5F1	10/19/2005	
05 12	Air Particulate, Iodine Cartridge	7D1	10/19/2005	
05113	Air Particulate, Iodine Cartridge	8S1	10/19/2005	
05 14	Air Particulate, Iodine Cartridge	8S2	10/19/2005	
05115	Air Particulate, Iodine Cartridge	0S2	10/19/2005	
05 16	Air Particulate, Iodine Cartridge	1S1	10/19/2005	
05119	Surface Water (Outfall)	OUT	10/24/2005	
05120	Drinking Water	5\$2	10/24/2005	
05121	Drinking Water	DW1	10/24/2005	
05122	Milk	5F2	10/24/2005	
05124	Air Particulate, Iodine Cartridge	MT1	10/26/2005	
05125	Air Particulate, Iodine Cartridge	5F1	10/26/2005	
05126	Air Particulate, Iodine Cartridge	7D1	10/26/2005	
05127	Air Particulate, Iodine Cartridge	8S1	10/26/2005	
05128	Air Particulate, Iodine Cartridge	8S2	10/26/2005	
05129	Air Particulate, Iodine Cartridge	0S2	10/26/2005	
05130	Air Particulate, Iodine Cartridge	1S1	10/26/2005	
05139	Surface Water (Seawater)	DCM	10/28/2005	
05140	Surface Water (Seawater)	7C2	10/28/2005	
05142	Air Particulate, Iodine Cartridge	MT1	11/2/2005	
05143	Air Particulate, Iodine Cartridge	5F1	11/2/2005	
05144	Air Particulate, Iodine Cartridge	7D1	11/2/2005	
05145	Air Particulate, Iodine Cartridge	8S1	11/2/2005	
05146	Air Particulate, Iodine Cartridge	8S2	11/2/2005	
05147	Air Particulate, Iodine Cartridge	0\$2	11/2/2005	

Table B-7 (Continued)

Diablo Canyon Power Plant 2005 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
05148	Air Particulate, Iodine Cartridge	1S1	11/2/2005
05153	Vegetative Greens (Mixed Greens)	5F2	11/7/2005
05154	Vegetative Greens (Cabbage)	7G1	11/7/2005
05155	Vegetative Greens (Peas)	7C1	11/7/2005
05156	Drinking Water	582	11/7 <i>[</i> 2005
05157	Drinking Water	DW1	11/7/2005
05158	Milk	5F2	11/7/2005
05159	Surface Water (Outfall)	OUT	11/7/2005
05160	Air Particulate, Iodine Cartridge	MT1	11/9/2005
05161	Air Particulate, Iodine Cartridge	5F1	11/9/2005
05162	Air Particulate, Iodine Cartridge	7D1	11/9/2005
05163	Air Particulate, Iodine Cartridge	8S1	11/9/2005
05164	Air Particulate, Iodine Cartridge	8S2	11/9/2005
05165	Air Particulate, Iodine Cartridge	0S2	11/9/2005
05166	Air Particulate, Iodine Cartridge	1S1	11/9/2005
05182	Air Particulate, Iodine Cartridge	MT1	11/16/2005
05183	Air Particulate, Iodine Cartridge	5F1	11/16/2005
05184	Air Particulate, Iodine Cartridge	7D1	11/16/2005
05185	Air Particulate, Iodine Cartridge	8S1	11/16/2005
05186	Air Particulate, Iodine Cartridge	8S2	11/16/2005
05187	Air Particulate, Iodine Cartridge	0S2	11/16/2005
05188	Air Particulate, Iodine Cartridge	1S1	11/16/2005
05190	Surface Water (Seawater)	DCM	11/18/2005
05191	Surface Water (Seawater)	7C2	11/18/2005
05192	Bull Kelp Blade	PON	11/18/2005
05193	Bull Kelp Pneumatocyst	PON	11/18/2005
05194	Giant Kelp Blade	DCM	11/18/2005
05195	Giant Kelp Pneumatocyst	DCM	11/18/2005
05196	Bull Kelp Blade	POS	11/18/2005
05197	Bull Kelp Pneumatocyst	POS	11/18/2005
05198	Bull Kelp Blade	7C2	11/18/2005
05199	Bull Kelp Pneumatocyst	7C2	11/18/2005
05J22	Air Particulate, Iodine Cartridge	MT1	11/23/2005
05J23	Air Particulate, Iodine Cartridge	5F1	11/23/2005
05J24	Air Particulate, Iodine Cartridge	7D1	11/23/2005
05J25	Air Particulate, Iodine Cartridge	8S1	11/23/2005
05J26	Air Particulate, Iodine Cartridge	8 S2	11/23/2005
05J27	Air Particulate, Iodine Cartridge	0S2	11/23/2005
05J28	Air Particulate, Iodine Cartridge	181	11/23/2005
05J46	Perch	PON	11/21/2005
05J47	Rockfish	PON	11/21/2005
05J48	Perch	DCM	11/23/2005
05J49	Rockfish	DCM	11/23/2005

Table B-7 (Continued)

Diablo Canyon Power Plant 2005 Annual Report
List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
05J50	Perch	POS	11/21/2005
05J51	Rockfish	POS	11/21/2005
05J52	Perch	7C2	11/21/2005
05J53	Rockfish	7C2	11/21/2005
05J54	Market Fish	7D3	11/26/2005
05J55	California Mussels	DCM	11/29/2005
05J56	Iridaea	DCM	11/29/2005
05J57	California Mussels	7C2	11/30/2005
05J58	Iridaea	7C2	11/30/2005
05J59	California Mussels	POS	11/29/2005
05J60	Pismo Beach Sand		11/30/2005
05J61	Montana De Oro Beach Sand		11/30/2005
05J62	Avila Beach Sand		11/30/2005
05J63	Cayucos Beach Sand		11/30/2005
05J64	Cambria Beach Sand		11/30/2005
05J65	Air Particulate, Iodine Cartridge	MT1	11/30/2005
05J66	Air Particulate, Iodine Cartridge	5F1	11/30/2005
05J67	Air Particulate, Iodine Cartridge	7D1	11/30/2005
05J68	Air Particulate, Iodine Cartridge	8S1	11/30/2005
05J69	Air Particulate, Iodine Cartridge	8S2	11/30/2005
05J70	Air Particulate, Iodine Cartridge	082	11/30/2005
05J71	Air Particulate, Iodine Cartridge	1S1	11/30/2005
05J81	Vegetative Greens (Mixed)	6C1	12/1/2005
05J82	Air Particulate, Iodine Cartridge	MT1	12/7/2005
05J83	Air Particulate, Iodine Cartridge	5F1	12/7/2005
05J84	Air Particulate, Iodine Cartridge	7D1	12/7/2005
05J85	Air Particulate, Iodine Cartridge	8S1	12/7/2005
05J86	Air Particulate, Iodine Cartridge	8S2	12/7/2005
05J87	Air Particulate, Iodine Cartridge	0S2	12/7/2005
05J88	Air Particulate, Iodine Cartridge	181	12/7/2005
05J95	Vegetative Greens	5F2	12/8/2005
05J96	Vegetative Greens	7G1	12/8/2005
05J97	Vegetative Greens	7C1	12/8/2005
05J98	Drinking Water	5 S2	12/8/2005
05J99	Drinking Water	DW1	12/8/2005
05K00	Milk	5F2	12/8/2005
05K01	Surface Water (Outfall)	OUT	12/8/2005
05K05	Surface Water (Seawater)	7C2	12/13/2005
05K06	Surface Water (Seawater)	DCM	12/13/2005
05K07	Air Particulate, Iodine Cartridge	MT1	12/14/2005
05K08	Air Particulate, Iodine Cartridge	5F1	12/14/2005
05K09	Air Particulate, Iodine Cartridge	7D1	12/14/2005
05K10	Air Particulate, Iodine Cartridge	8S1	12/14/2005



Table B-7 (Continued)

Diablo Canyon Power Plant 2005 Annual Report

List of Marine and Terrestrial Samples Collected and Analyzed

Sample No.	Description	Station No.	Collection Date
05K11	Air Particulate, Iodine Cartridge	8S2	12/14/2005
05K12	Air Particulate, Iodine Cartridge	082	12/14/2005
05K13	Air Particulate, Iodine Cartridge	181	12/14/2005
05K17	Air Particulate, Iodine Cartridge	MT1	12/21/2005
05K18	Air Particulate, Iodine Cartridge	5F1	12/21/2005
05K19	Air Particulate, Iodine Cartridge	7D1	12/21/2005
05K20	Air Particulate, Iodine Cartridge	· 8S1	12/21/2005
05K21	Air Particulate, Iodine Cartridge	8S2	12/21/2005
05K22	Air Particulate, Iodine Cartridge	082	12/21/2005
05K23	Air Particulate, Iodine Cartridge	181	12/21/2005
05K28	Avila Beach Sand collected by O. Sabi		12/21/2005
05K30	Air Particulate, Iodine Cartridge	MT1	12/28/2005
05K31	Air Particulate, Iodine Cartridge	5F1	12/28/2005
05K32	Air Particulate, Iodine Cartridge	7D1	12/28/2005
05K33	Air Particulate, Iodine Cartridge	8 S1	12/28/2005
05K34	Air Particulate, Iodine Cartridge	8S2	12/28/2005
05K35	Air Particulate, Iodine Cartridge	0S2	12/28/2005
05K36	Air Particulate, Iodine Cartridge	1S1	12/28/2005