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SZALINSKI,P.A.	Pacific Gas & Electric Co.
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77 Beale Street
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415/973-4684
TWX 910-372-6587

James D. Shiffer
Vice President
Nuclear Power Generation

April 28, 1988

PG&E Letter No. DCL-88-111

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

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

Gentlemen:

Enclosed is the 1987 Annual Radiological Environmental Operating Report (Part A) for Diablo Canyon Units 1 and 2, submitted in accordance with Subsection 6.9.1.5 of the Technical Specifications, Appendix A to Facility Operating Licenses Nos. DPR-80 and DPR-82.

Kindly acknowledge receipt of this material on the enclosed copy of this letter and return it in the enclosed addressed envelope.

Sincerely,

J. D. Shiffer

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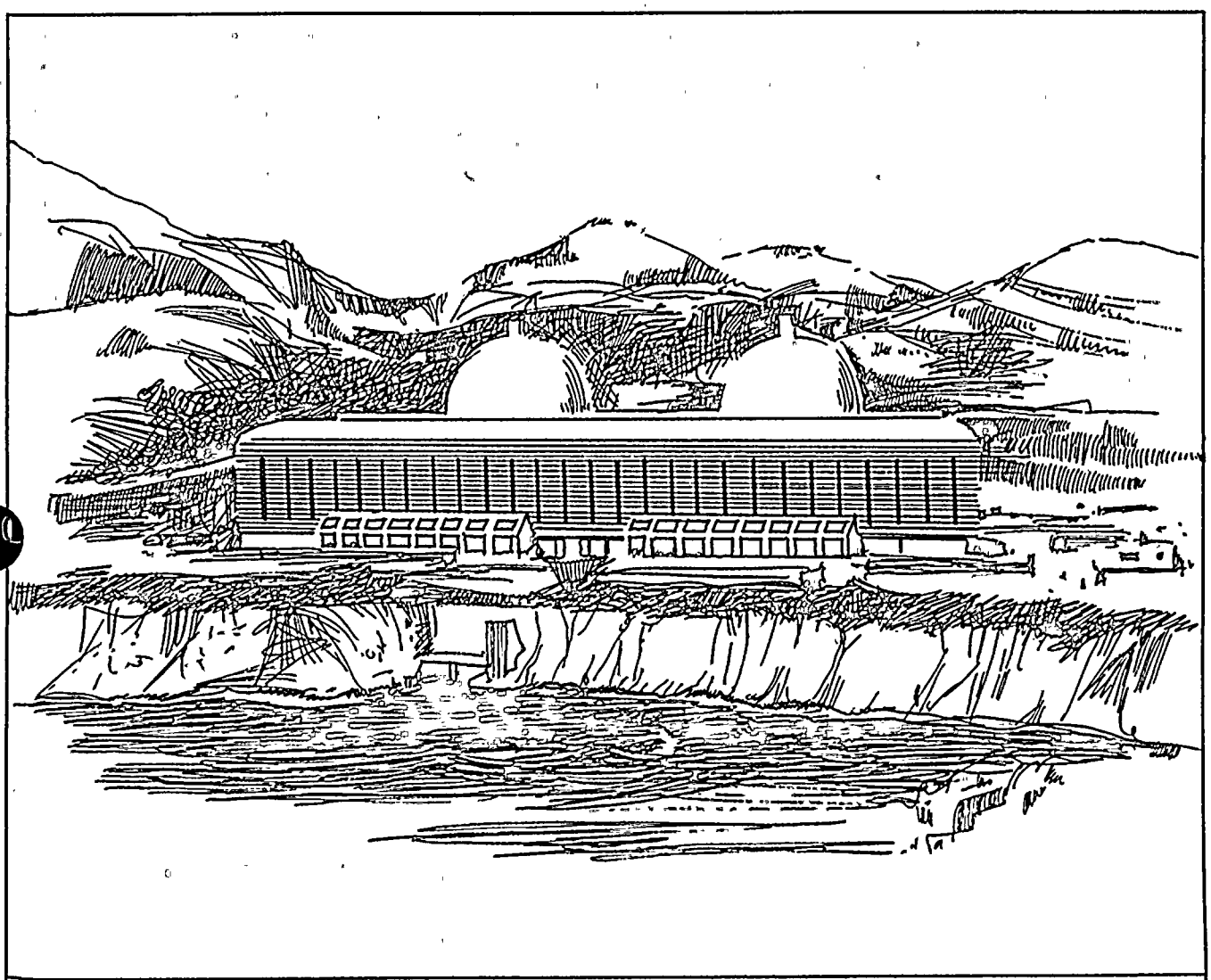
ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

Diablo Canyon Power Plant Units 1 and 2



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Pacific Gas and Electric Company Technical and Ecological Services

Report Issued: APR 20 1988

Report 420DC-88.278

PACIFIC GAS AND ELECTRIC COMPANY
TECHNICAL AND ECOLOGICAL SERVICES

1987 ANNUAL ENVIRONMENTAL OPERATING REPORT PART A, RADIOLOGICAL DIABLO CANYON POWER PLANT

Prepared By:

A. Ong

Reviewed By:

P. A. Szalinski

883254/DJ12

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Prepared By:

Angie Ong
Health Physicist

Reviewed By:

Paul A. Szalinski
Senior Health Physicist

INTRODUCTION

Diablo Canyon Power Plant (DCPP) consists of two Westinghouse pressurized water reactors. Unit 1 (1086 MWe) attained criticality on April 29, 1984 and Unit 2 (1119 MWe) attained criticality on August 20, 1985. This report contains results from the operational Radiological Environmental Monitoring Program for Diablo Canyon Power Plant site compiled for the period January 1, 1987 through December 31, 1987. During this period, 1,998 environmental samples were collected and analyzed to determine radiation levels. They consisted of 78 terrestrial samples, 242 marine samples, 645 air particulates filters, 645 iodine cartridges, and 388 thermoluminescent dosimeter readings. The program is conducted by Pacific Gas and Electric Company's Department of Engineering Research (DER) in San Ramon, California. Also included in this report are the results from DER's participation in the Environmental Protection Agency (EPA) cross-check program, the state cross-check program, and the current land use census of the plant environs.

The results of the 1987 Radiological Environmental Monitoring Program showed that the observed impact of the operation of Diablo Canyon Power Plant had no significant negative radiological impact on the environment.

DCPP Environmental Monitoring Program

The Radiological Environmental Monitoring Program for Diablo Canyon Power Plant was conducted in accordance with section 3/4.12 of DCPP Technical Specifications. This program was designed to identify and quantify ambient radioactivity concentrations in the environs surrounding DCPP and to determine whether there was any significant increase in the concentration of radionuclides, attributable to plant operations, in the critical dose pathways.

The environmental media selected were based on the potential dose pathways of the radionuclides from the environment to man. They included the following: air, direct radiation, non-migratory marine species, algae, seawater, ocean bottom sediment, local agricultural crops, drinking water, surface water, and milk. The environmental samples were collected on a weekly, monthly, quarterly, or annual basis depending on sample type and availability. The frequency of collection of the samples from the different media is summarized in Tables 1 and 2. These samples were collected by DER personnel, PG&E Mission Trail Region personnel, Santa Barbara County personnel, and contractors.

The sampling locations were determined by land use, site meteorology, and local demographics. Indicator stations were selected as those stations with the potential to show effects of plant operations. Special interest stations were selected because of the importance of the dose pathway. Control stations were selected as those locations that were outside the influence of the plant. The table below lists the control and indicator stations for the different sample media:

Sampling Locations

Sampling Medium	Indicator (or Special Interest)	Control
Airborne	MT1,0S2,1S1,8S1,8S2,7D1,5F1 SM, SV, LO	2F2
Direct Radiation	MT1,WN1,0S1,5S1,6S1,8S1,8S2, 5S3,2D1,5F1,1A1,4D1,7D2,7G2, 7C1,7F1,0B1,7D1,4C1,0S2,1S1, 2S1,3S1,4S1,7S1,1C1,5C1,3D1, 6D1,5F3,9S1,SM,SV,LO	2F2
Seawater	DCM,POS,PON	7C2
Surface Water	5S2	
Drinking Water	DW1	
Outfall Water	OUT	

Sampling Locations (cont'd)

Sampling Medium	Indicator (or Special Interest)	Control
Fish & Seafood	DCM,7D3,2F1,PON,POS	7C2
Algae	DCM,PON,POS	7C2
Sediment	DCM	
Food crops	7C1, 7G1	5F2
Milk	8H1	5F2

The distances and directions to the environmental monitoring stations are listed on Table 3. The map on Figure 1 shows the off-site stations. Figure 2 shows the on-site stations, and Figure 3 shows the stations located in Santa Barbara County.

SAMPLING METHOD

Airborne Radioactivity

Air particulate and radioiodine sampling was performed weekly. Constant flow air samplers were used to draw the air through paper filters to collect the air particulates and then through TEDA impregnated charcoal cartridges to collect the radioiodine. The air samplers were set at a flow rate of 1.5 cfm and located one meter above the ground.

At the end of the sampling period, the filter and cartridge were collected. All necessary information regarding the flow rate, run time, sampler time on and off, date of collection, and sampler location was recorded and submitted, along with the samples, to DER for analysis.

Direct Radiation

Direct radiation was measured at 35 stations in the vicinity of Diablo Canyon and Santa Barbara County using Panasonic UD814 thermoluminescent dosimeters (TLDs). The TLDs were exchanged on a monthly basis at 31 stations and on a quarterly basis at four supplemental stations: SM, SV, LO, and 5F3.

The field TLD packets were prepared at DER and transported to Diablo Canyon for exchange. Control dosimeters were carried along with the field dosimeters to differentiate the exposure the dosimeters received in the field from that which they received during transit. The location, date, and time of exchange were recorded on the log sheet which accompanied the field dosimeters.

Water Samples

The water samples: seawater, drinking water, surface water, and outfall water were collected monthly. Two 1-gallon plastic bottles of each water sample type were collected at their respective locations.

Seawater samples were collected offshore at Diablo Cove, Station PON, Station POS, and Rattlesnake Canyon (Station 7C2). The outfall water samples were collected in the plant outfall. Surface water samples were collected from Diablo Creek Weir, Station 5S2, located on site at DCPP. Drinking water samples were collected from the drinking water system on site.

Before collection the plastic bottles were rinsed with the water to be collected. After collection, the samples were securely sealed and labelled with sample type, location, date, time of collection, and the person performing the collection. The samples were then sent to DER for analysis.

Marine Samples

Marine samples collected included, but were not limited to, the following: iridaea, bull kelp, red and black abalone, California mussels, rockfish, surfperch, commercial fish, and ocean bottom sediment. The intertidal samples--iridaea, mussels, and black abalone--were collected quarterly when the tide was at its lowest during the quarter. Bull kelp was harvested monthly from the kelp bed offshore from the plant. Quarterly samples of fish, red abalone, and an annual sample of ocean bottom sediment were collected from the waters offshore from the plant by divers from DER. Fish caught offshore and available commercially were also obtained for analysis. 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 labelled with sample type, location, date, time of collection, and individual performing the collection, before they were sent to DER.

Food Crops

Representative samples of vegetable crops in season were collected monthly from Cal Poly Farm (Station 5F2), Kawaoka Farm in Arroyo Grande (Station 7G1), and Mello Farm (Station 7C1) along the site access road. The samples were harvested by the individual performing the collection, sealed immediately in polyethylene bags, and labelled with sample type, sample location, collection date, time of collection, and the individual performing the collection, and then sent to DER for analysis.

Milk

Milk was collected monthly from Cal Poly Farm (Station 5F2), and from Caroni Diary (Station 8H1), located in Santa Barbara County. Two 1-gallon plastic bottles of milk were collected from each dairy. Forty grams of sodium bisulphite preservative were added to each of the plastic bottles along with the milk sample. The bottles were sealed and shaken thoroughly to mix in the preservative. They were labelled with sample type, sample location, date and time of collection, and the individual performing the collection, and then sent to DER for analysis.

SAMPLE ANALYSES

Samples received at DER were analyzed for radioactivity by standard methods as outlined in the environmental monitoring procedures for DCPP[1]. The results of the analyses were reported at the 95 percent confidence level (2σ). All analyses were performed such that the lower limits of detection (LLDs) listed on Table 4 were achieved under routine conditions. The LLD is an a priori (before the fact) estimate of the activity concentration that can be practically achievable with a given measuring instrument, procedure and type of sample. This value is not intended to be used as an a posteriori (after the fact) criterion for the presence of activity. Background fluctuation, unavoidably small sample size, the presence of interfering nuclides or other uncontrollable circumstances may occasionally render these LLDs unachievable. In such cases the contributing factors are identified and described in this report.

A brief description of the analyses of the different sample types and the general method of counting is discussed below. For quick reference Tables 1 and 2 summarize the type of analyses which were done on the different sample media.

Airborne Radioactivity

The filter papers collected from the field were placed on individual planchets and counted for gross beta activity in a low-background, thin-window gas proportional counter. They were counted at least 72 hours after collection to allow for the decay of radon daughters. Gamma isotopic analysis was then performed on quarterly composites of the filters to determine the activity concentration of gamma emitting isotopes.

Gamma isotopic analysis was 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) thermoluminescent dosimeters were used to measure the ambient radiation level. The dosimeters were annealed and packaged at DER to be sent out in the field. After field exposure the TLDs were read out. Calibration of the TLDs was performed using an NBS-traceable cesium-137 source.

Water Samples

Gamma isotopic analyses were performed on all water sample types (drinking water, surface water, outfall water, and seawater). To determine the activity concentration of gamma emitters present, a known volume of the water sample was analyzed on a gamma spectrometer.

Tritium analysis was also performed on drinking water and surface water. The water samples were distilled prior to analysis, and the distilled samples were analyzed for tritium in a liquid scintillation spectrometer.

Marine Samples

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

For bull kelp, the 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 sample that was collected from Diablo Cove was first oven dried before performing gamma isotopic analysis to determine the activity concentration. The results reported for the sediment sample were based on dry weight.

Food Crops

Whenever possible the leafy portions of the vegetation sample were prepared for analysis. The samples were analyzed to determine the gamma isotopic, including iodine-131, 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. 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 beta-gamma coincidence spectrometer.

QUALITY CONTROL

Routine quality control was performed throughout the year to ensure the accuracy of the equipment and procedure used in determining the results.

The DER radiological laboratory also participates in the EPA Environmental Radioactivity Laboratory Intercomparison Studies Program; the State cross-check program; and the International Intercomparison of Environmental Dosimeters sponsored by the U.S. Department of Energy through the Radiological and Environmental Sciences Laboratory, Idaho Falls, the Environmental Measurements Laboratory, New York, the NRC, and the EPA. In addition, DER also participates in a PG&E intracompany cross-check program.

Table A-9 presents the results of DER's participation in the EPA Environmental Radiological Laboratory Intercomparison Studies Program. Participation included the following determinations (sample medium - radionuclide combination): food and milk samples containing gamma emitters; water samples containing tritium, iodine-131, gamma emitters, strontium-89, strontium-90, alpha and beta emitters; and air particulate samples containing cesium-137, strontium-90, alpha and beta emitters. Three independent analyses were performed on each sample and the values were submitted for intercomparison with other participants. The 1987 results shown in Table A-9 were all within the acceptable range set by the EPA.

The DER results for the 1986 State cross-check were in good agreement with those obtained by the State[5]. The 1987 State cross-check report has not been received yet and therefore will be discussed in next year's report. However, the results of the samples analyzed for the 1987 cross-check program are listed on Table B-1.

LAND USE CENSUS

DER conducted a land use census in the vicinity of Diablo Canyon Power Plant for 1987. The land use census is required by the Nuclear Regulatory Commission, Regulatory Guide 4.8, "Environmental Technical Specifications for Nuclear Power Plants," and by the Diablo Canyon Power Plant Technical Specification 3.12.2. The census is to be conducted at least once per year during the growing season, chosen as between June 1 and October 1 for the Diablo Canyon environs.

The objective of the land use census is to identify the nearest milk animal and the nearest garden greater than 50 square meters (500 square feet), producing broadleaf vegetation, in each of the landward meteorological sectors within a distance of 8 kilometers (5 miles) of the plant. In addition, the Diablo Canyon Technical Specifications require the identification of the nearest residence in each of the landward sectors within a distance of 5 miles.

The land use census was conducted by direct contact with individual landowners or tenants, and property visits. The landowners or tenants were identified from county records and were contacted between June 30 and September 30, 1987.

Results

There were no changes in the land use census for 1987. Contact with the landowners or tenants identified no household gardens greater than 50 square meters (500 square feet). No milk animals were identified within the first 5 miles in any sector. Much of the area surrounding the plant site is used for cattle grazing. The only garden or farm greater than 50 square meters is on the coastal plateau in the east southeast (ESE) sector, along

the site access road. The farm starts at approximately 2 miles from the plant and extends to 4.5 miles from the plant. It produces mainly legumes and cereal grass (grains).

A total of eight permanent residences were identified within the five mile radius of the plant. The nearest residence is 1.55 miles north northwest (NNW) of the plant.

Table B-5 summarizes the results of the land use census and Figure 4 shows the locations of the farm and residences in the vicinity of Diablo Canyon Power Plant.

TABLE 1

MARINE SAMPLING PROGRAM

SAMPLE ITEM	SAMPLING LOCATION	TYPE OF ANALYSIS	MATERIAL ANALYZED	COLLECTION FREQUENCY
Seawater	Diablo Cove Pacific Ocean North Pacific Ocean South Plant Outfall Rattlesnake Canyon	Gamma isotopic	Aliquot	Monthly
Red algae, foliose (*Iridaea* sp.)	Diablo Cove Rattlesnake Canyon	Gamma isotopic	Complete sample	Quarterly if available
Bull kelp (*Nereocystis leutkeana*)	Diablo Cove Pacific Ocean North Pacific Ocean South Rattlesnake Canyon	Gamma isotopic	Pneumatocyst and blade	Monthly if available
Mussels (*Mytilus californianus*)	Diablo Cove Pacific Ocean North Pacific Ocean South Rattlesnake Canyon	Gamma isotopic	Complete sample, less shell	Quarterly if available
Black abalone (*Haliotis cracherodii*)	Diablo Cove Pacific Ocean North Pacific Ocean South Rattlesnake Canyon	Gamma isotopic	Edible muscle	Quarterly if available
Surfperch (*Family Embiotocidae*)	Diablo Cove Pacific Ocean North Pacific Ocean South Rattlesnake Canyon	Gamma isotopic	Edible muscle	Quarterly if available

TABLE 1

MARINE SAMPLING PROGRAM
(Continued)

SAMPLE ITEM	SAMPLING LOCATION	TYPE OF ANALYSIS	MATERIAL ANALYZED	COLLECTION FREQUENCY
Red abalone (*Haliotis rufescens*)	Diablo Cove Pacific Ocean North Pacific Ocean South Rattlesnake Canyon	Gamma isotopic	Edible muscle	Quarterly if available
Rockfish (*Sebastes* sp.)	Diablo Cove Pacific Ocean North Pacific Ocean South Rattlesnake Canyon	Gamma isotopic	Edible muscle	Quarterly if available
Fish (species unspecified)	Commercial landing in Morro Bay* or Avila Pier*	Gamma isotopic	Edible muscle	Quarterly if caught locally**
Salmon (species unspecified)	Commercial landing in Morro Bay* or Avila Pier*	Gamma isotopic	Edible muscle	Quarterly if caught locally**

*Commercial sampling.
**Sampled when in season.

TABLE 2

DIRECT RADIATION, AIRBORNE, AND TERRESTRIAL SAMPLING PROGRAM

Sample Item	Sampling Locations[b]	Type of Analysis	Collection Frequency
Direct radiation[a]	35 stations	Gamma exposure	Monthly[c]
Airborne			
Particulates	11 stations	Gross beta, Gamma isotopic	Weekly[d] Quarterly composite
Iodine	11 stations	Gamma for I-131	Weekly
Surface water	1 station[e]	Gamma isotopic, tritium	Monthly
Vegetative greens	Farm in San Luis Obispo area; farm in Guadalupe area; farm along plant access road	Gamma isotopic (including I-131)	Monthly
Milk	Farm in San Luis Obispo area; farm in Guadalupe area	Gamma isotopic, radioiodine	Monthly
Drinking water	1 station	Gamma isotopic, radioiodine, tritium	Monthly

a/Thermoluminescent dosimeters, three at each station.
b/See Figures 1, 2, and 3 for locations.
c/Except Stations 5F3, SM, SV, and LO which are quarterly.
d/Filters changed weekly or more frequent as required by dust loading; analyzed at least 72 hours after filter change.
e/Diablo Creek above 500 kV switchyard.

TABLE 3

DISTANCES AND DIRECTIONS TO ENVIRONMENTAL MONITORING STATIONS
(Stations are shown on Figures 1, 2, and 3)

Station Code*	Station Name	Radial Direction (True Heading) (Degrees)	Radial Distance from Plant km (Miles)
ØS1	Exclusion Fence-Northwest Corner	320	0.2 (0.1)
ØS2	North Gate	320	.8 (0.5)
1S1	Wastewater Pond	330	.6 (0.4)
2S1	Back Road-300 m North of Plant	0	.3 (0.2)
3S1	Road NW of 230 kV Switchyard	23	.6 (0.4)
4S1	Back Road Between Switchyard	43	.8 (0.5)
5S1	400 kV Switchyard	58	.6 (0.4)
5S2	Diablo Creek Weir	65	1.0 (0.6)
5S3	Microwave Tower Road	70	1.0 (0.6)
6S1	Microwave Tower	94	.8 (0.5)
7S1	Overlook Road	112	0.5 (0.3)
8S1	Target Range	125	.8 (0.5)
8S2	Southwest Site Boundary (Sec. Met Tower)	128	1.8 (1.1)
9S1	South Cove	167	.6 (0.4)
MT1	Meteorological Tower	185	.3 (0.2)
DCM	Diablo Cove	270	.3 (0.2)
WN1	Northwest Guard Shack	290	.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)
7C1	Pecho Creek Ruins	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/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	0	17.4 (10.9)
2F2	Morro Bay Power Plant	358	17.9 (11.2)
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	115	26.9 (16.8)
7G2	Oceano Substation	118	27.7 (17.3)
8H1	Caroni Dairy	141	41.3 (25.8)
SM	Santa Maria	127	47.5 (29.7)
LO	Lompoc	154	71.4 (44.6)
SV	Solvang	144	89.8 (56.1)
OUT	Plant Outfall	270	0.3 (0.2)

883254/dj12(djs)

TABLE 3

DISTANCES AND DIRECTIONS TO ENVIRONMENTAL MONITORING STATIONS
(Stations are shown on Figures 1, 2, and 3)
(Continued)

Station Code*	Station Name	Radial Direction (True Heading) (Degrees)	Radial Distance from Plant km (Miles)
DW1	Drinking Water	In Plant	---
PON	Pacific Ocean North of Diablo Cove	305°	2.4 (1.5)
POS	Pacific Ocean South of Diablo Cove	145	1.3 (0.8)

*Station Code (XYZ):

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

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

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

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

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

*Station Code (LO, SM, SV, DCM, MT1, WN1, PON, POS, OUT, DW1):

The following stations do not follow the coding system: Lompoc (LO), Santa Maria (SM), Solvang (SV), 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).

TABLE 4

MAXIMUM VALUES FOR THE LOWER LIMITS OF DETECTION (LLD)[a/]

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

Table Notation

a/The LLD is the smallest concentration of radioactive material in a sample that will be detected with 95 percent probability with 5 percent probability of falsely concluding that a blank observation represents a "real" signal.

For a particular measurement system (which may include radiochemical separation):

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

TABLE 4

MAXIMUM VALUES FOR THE LOWER LIMITS OF DETECTION (LLD)[a/]
(Continued)

where

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

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

E is the counting efficiency (as counts per transformation)

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

2.22 is the number of transformations per minute per picocurie

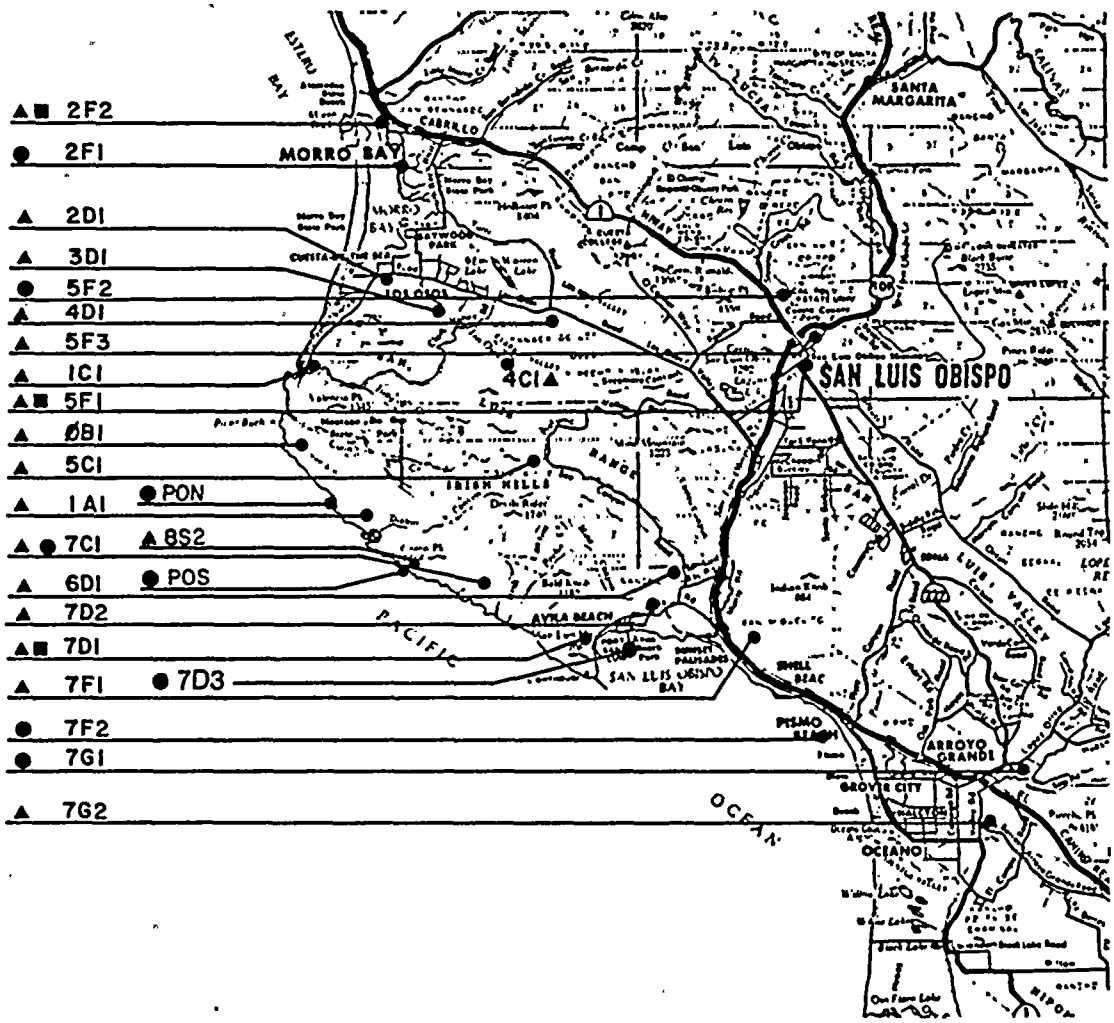
Y is the fractional radiochemical yield (when applicable)

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.



UNITS 1 AND 2
DIABLO CANYON SITE

0 5 10 15
Scale - Miles

LEGEND:

- ▲ Dosimetry Station
- ■ Air Particulate Station
- ● Biological Sampling Station

FIGURE 1. Units 1 and 2 Diablo Canyon Site Off Site Stations

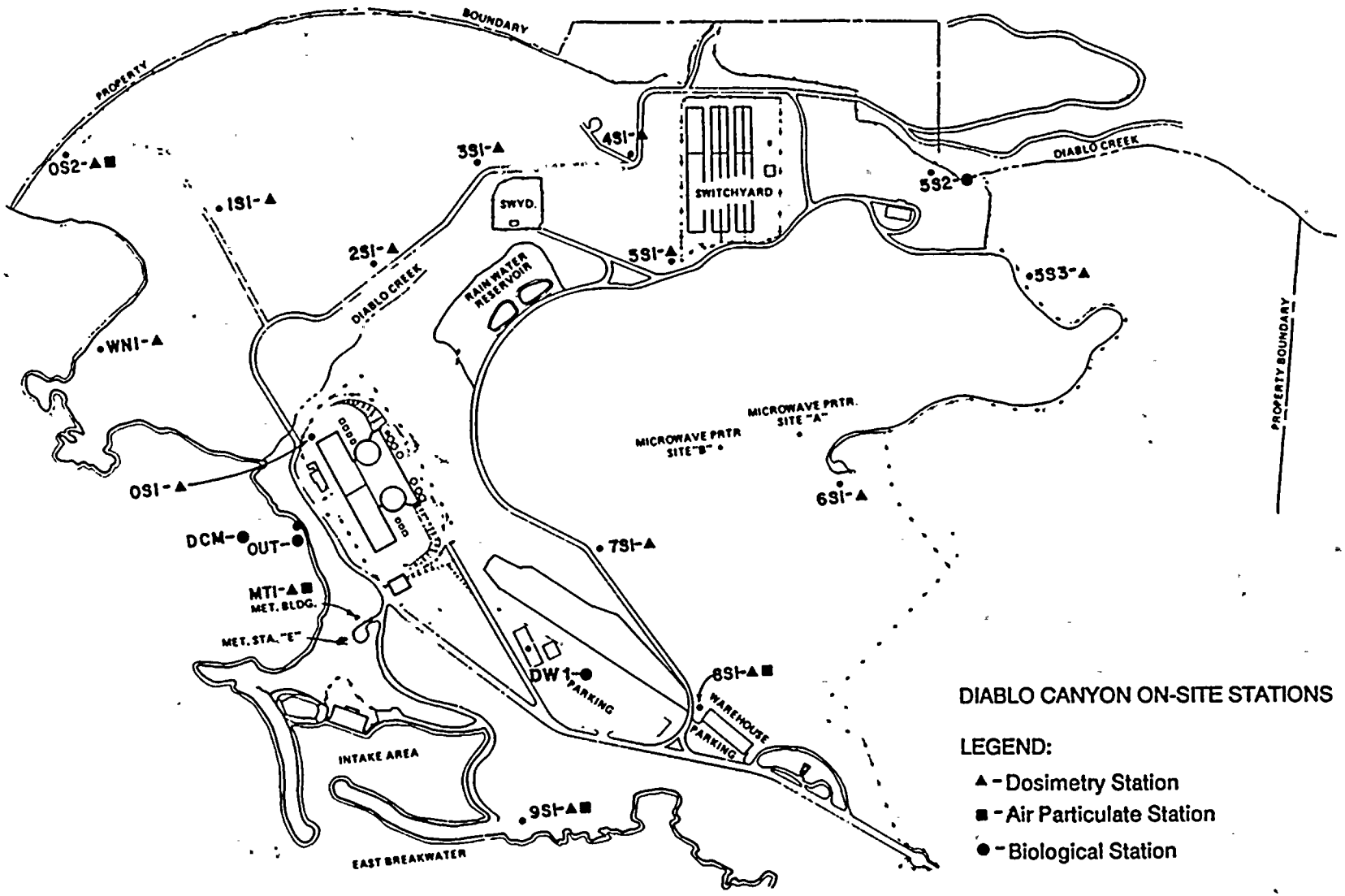
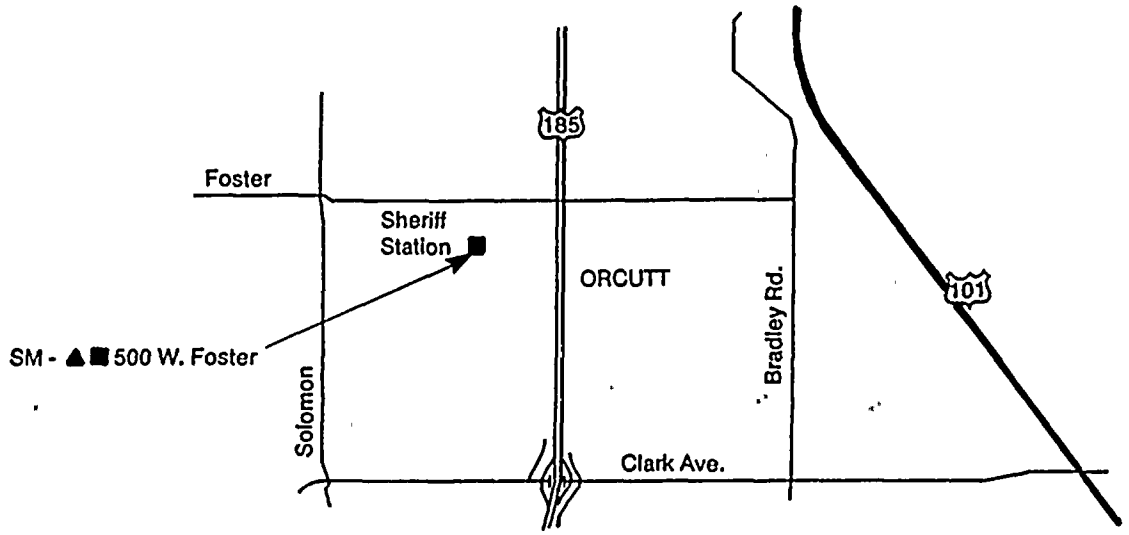
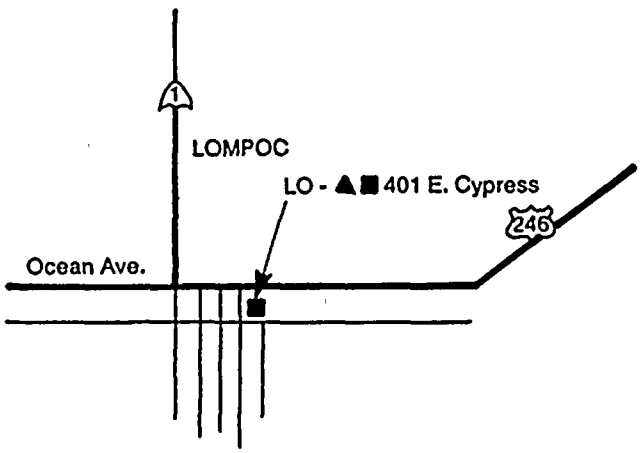


FIGURE 2. Diablo Canyon On-Site Stations





SANTA BARBARA COUNTY STATIONS

LEGEND:

▲ Dosimetry Station

■ Air Particulate Station

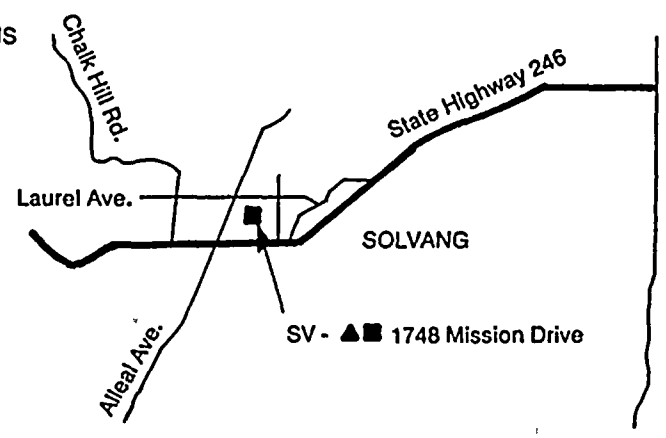


FIGURE 3. Santa Barbara County Stations

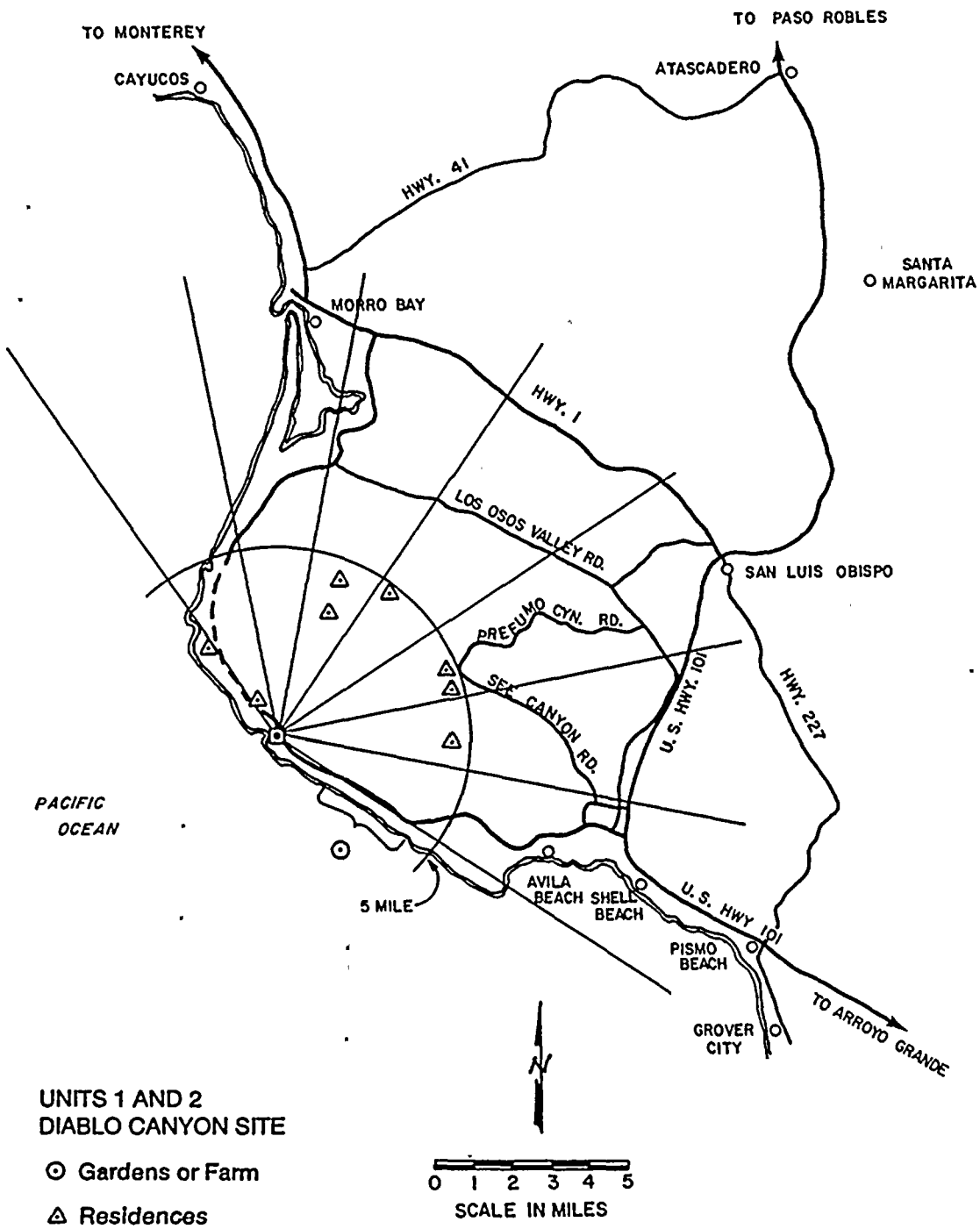


FIGURE 4. Units 1 and 2 Diablo Canyon Site Land Use Census

RESULTS AND DISCUSSION

The results for the DCPP Radiological Environmental Monitoring Program are listed in Appendices A and B. The ± terms listed in the tables in the appendices are the 95 percent confidence level (2σ). The tables in Appendix A present summaries of the results, in accordance with current Nuclear Regulatory Commission (NRC) guidelines[3], and the results of the EPA Laboratory Intercomparison Program. The tables in Appendix B contain the analytical results of the individual samples done for the year 1987 and the state cross-check results.

The lower limits of detection for the radionuclides of interest listed in Table 4 were met for all analyses performed for the DCPP Radiological Environmental Monitoring Program. The results of the analyses for the different sample types are discussed below.

a. Airborne radioactivity

Air particulates and radioiodine samples were collected weekly from six indicator stations: MT1, 0S2, 1S1, 7D1, 8S1, 8S2 in the DCPP environs, and five control or special interest stations: 2F2 (Morro Bay), 5F1 (San Luis Obispo), SM, SV, and LO (Santa Barbara County). A total of 645 air particulate filters and 645 iodine cartridges were collected and analyzed.

Air Particulates

Gross beta activity was detected in every weekly air particulate sample collected from all indicator and control stations. The range for the indicator stations was 0.004 - 0.051 pCi/m^3 with a mean of 0.014 pCi/m^3. The range for control stations was 0.004 - 0.052

pCi/m^3 with a mean of 0.016 pCi/m^3. Comparison of the data showed that the gross beta activities for the indicator stations were commensurate with those obtained from the control stations (see Figure 5).

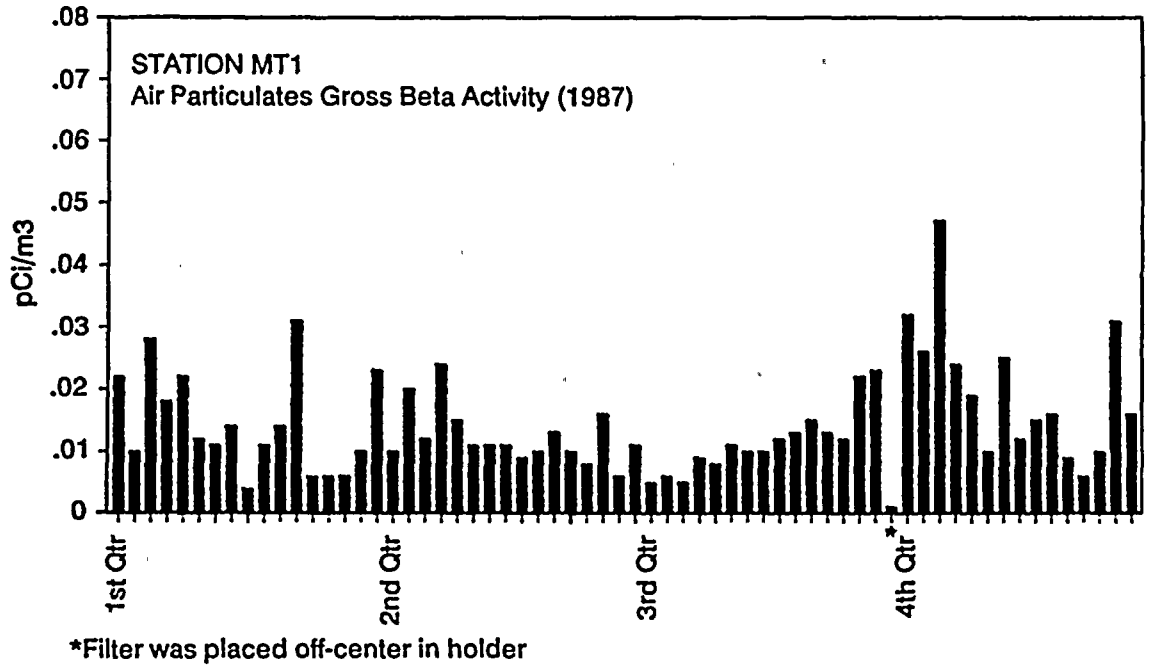
Gamma isotopic analyses were also performed on quarterly composites of the air particulate filters for each station. The second quarterly composite for on-site indicator stations 8S1 and 8S2 showed some plant related gamma activity. Gamma analysis of the individual filters from the second quarter collected from these two stations reveal that for the collection period 5/1/87-5/6/87, Co-58 (0.02 pCi/m^3) and Co-60 (0.004 pCi/m^3) were detected at station 8S2. For the collection period 6/2/87-6/9/87, the following radionuclides were detected at station 8S1: Mn-54 (0.001 pCi/m^3); Co-58 (0.02 pCi/m^3); Co-60 (0.003 pCi/m^3); Zr-95 (0.003 pCi/m^3); and Nb-95 (0.005 pCi/m^3). See Appendix B, Table B-3.

Radioiodine

A total of 645 iodine cartridges were analyzed for iodine-131. Iodine-131 was not detected in any of the cartridges collected from all the indicator and control stations.

b. Direct Radiation

Dosimeters from 31 stations were collected on a monthly basis and processed. A total of 372 monthly TLD readings were collected. The TLD readings from all indicator stations ranged from 42.9 to 94.4 mR/yr with a mean of 69.5 mR/yr. For the control station 2F2 the yearly total was 56.8 mR/yr. A total of 16 quarterly TLD readings were collected from four supplementary stations. Their yearly total ranged from 61.0 to 77.1 mR/yr



*Filter was placed off-center in holder

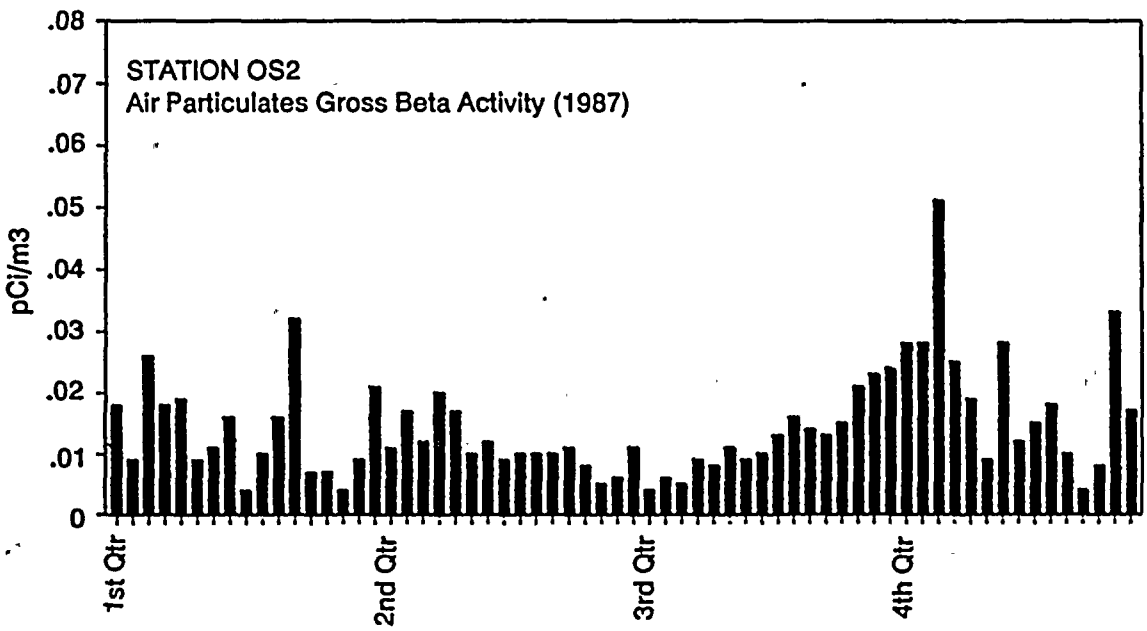
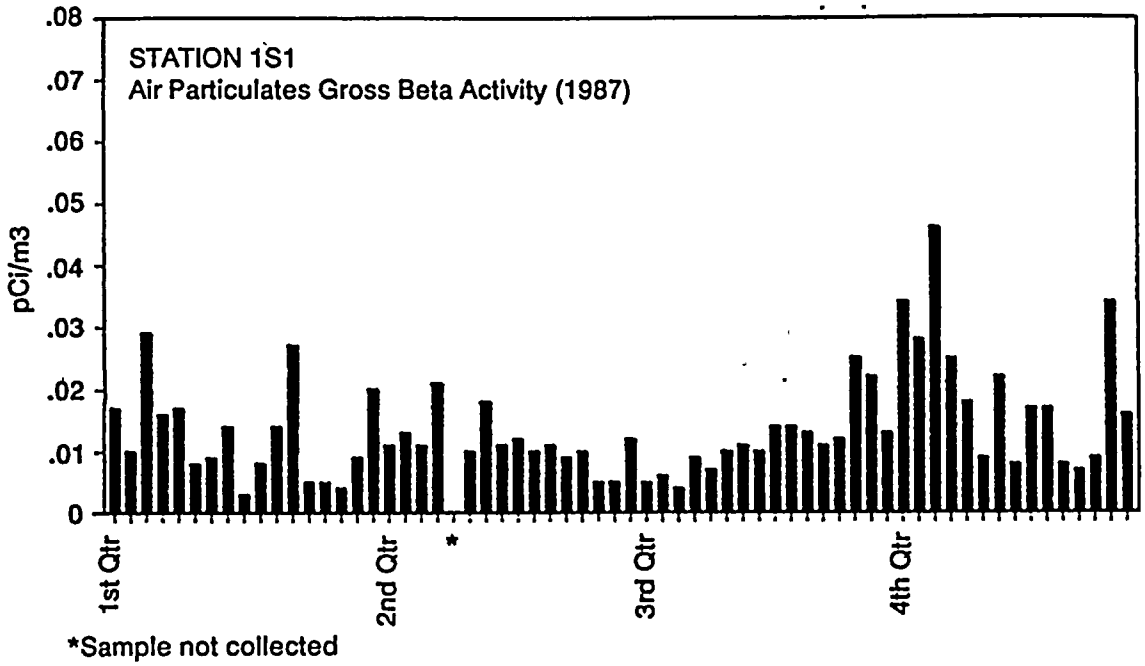


FIGURE 5. Gross Beta Activity - Air Particulates



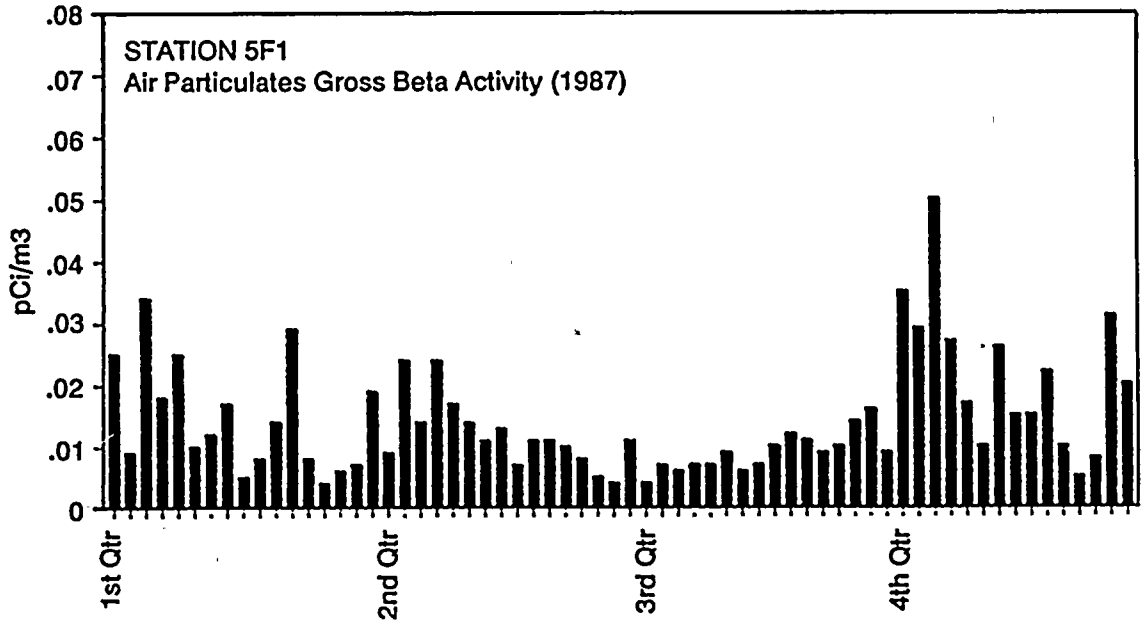
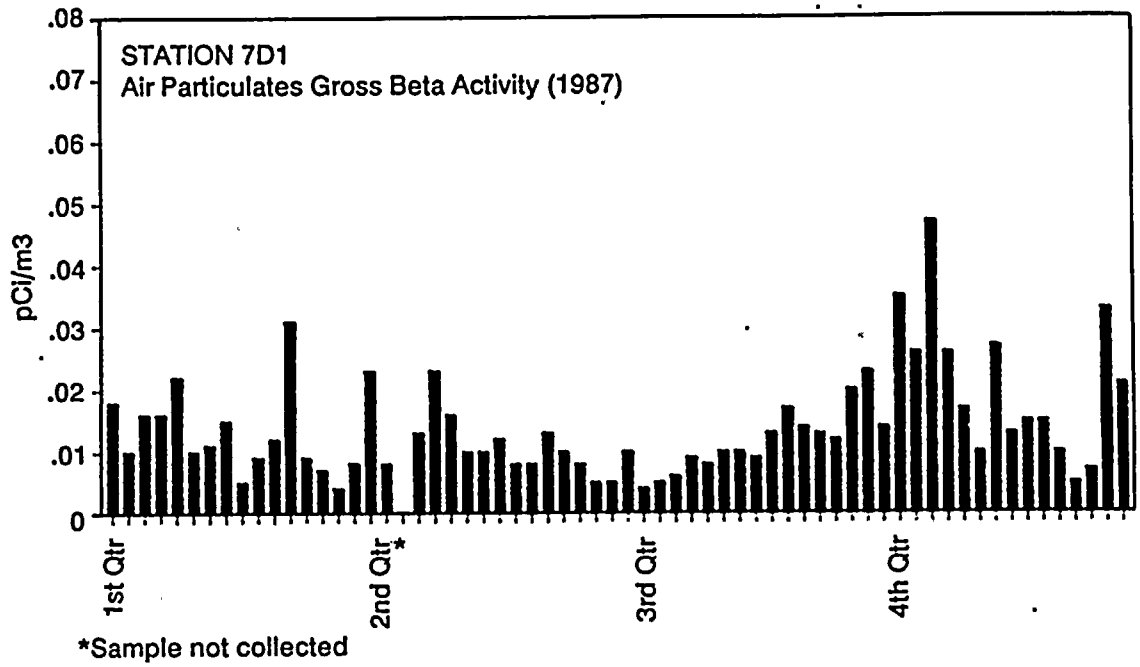


FIGURE 5. (Continued)



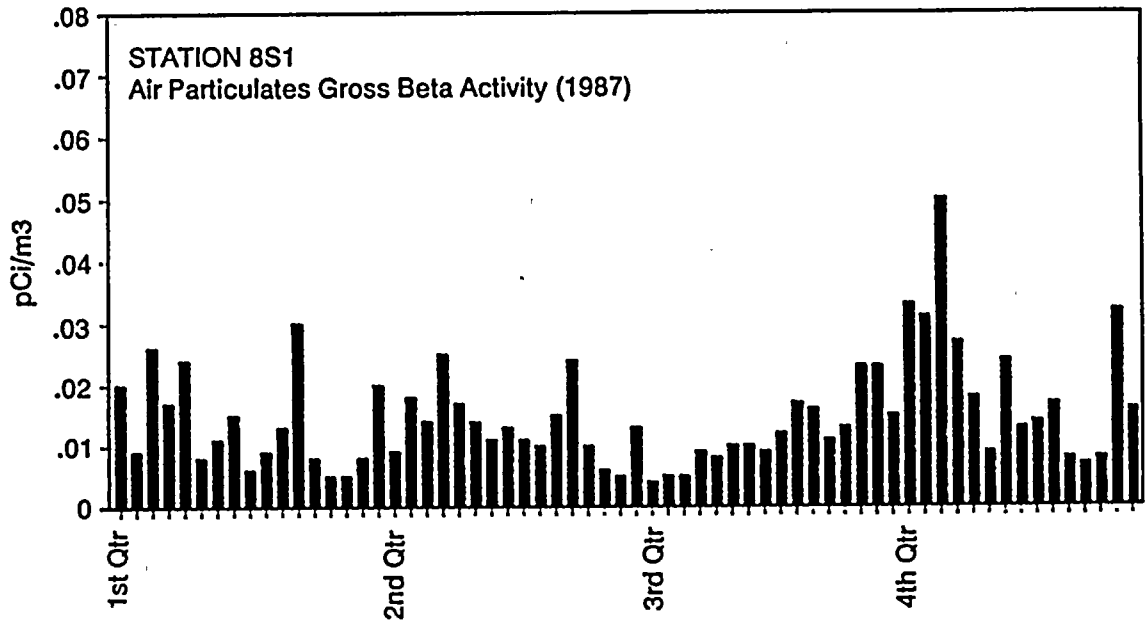
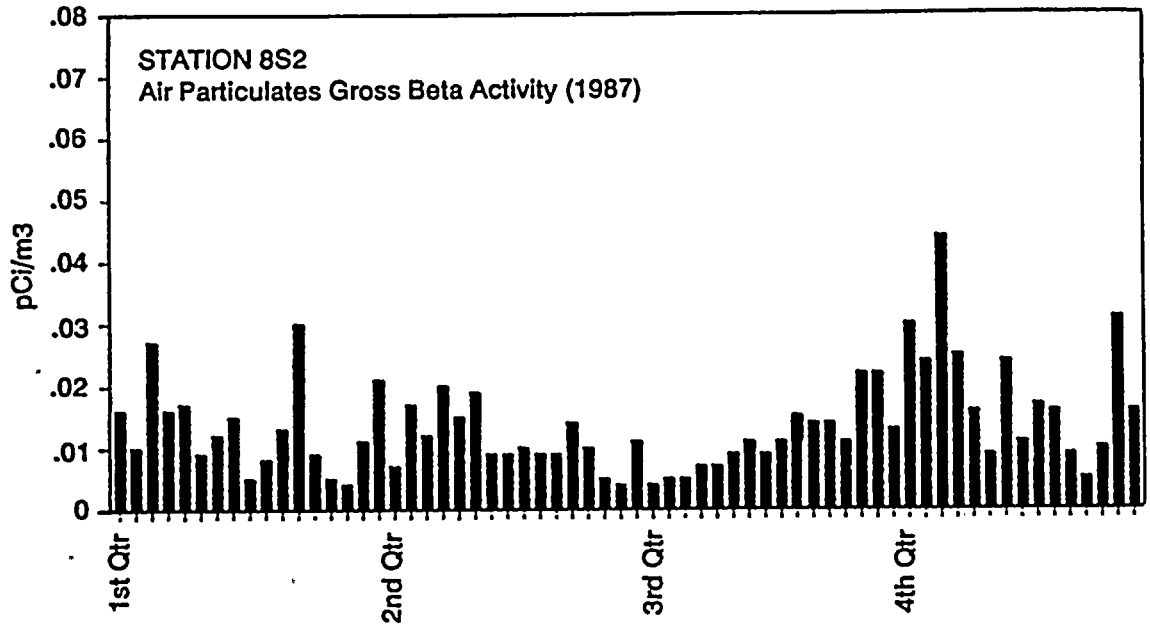


FIGURE 5. (Continued)



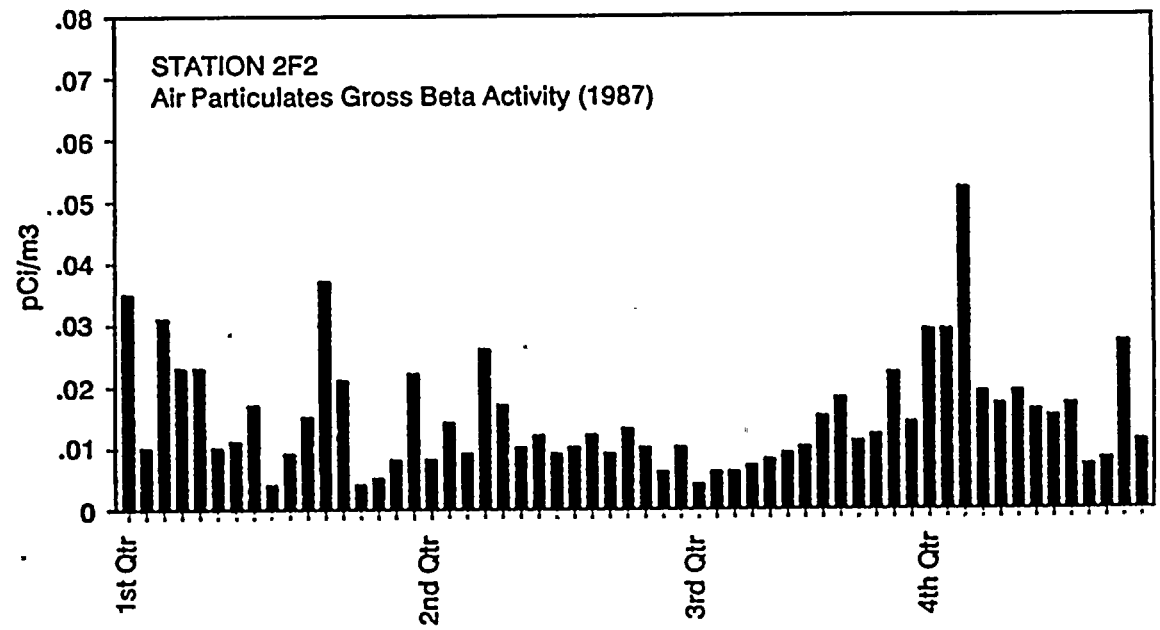
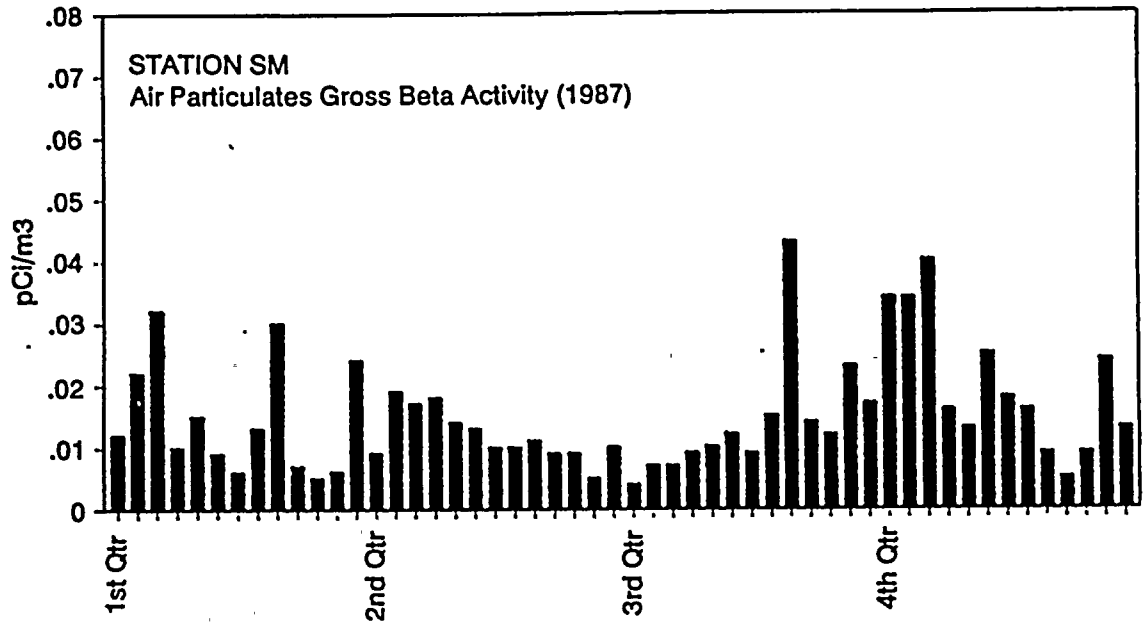


FIGURE 5. (Continued)



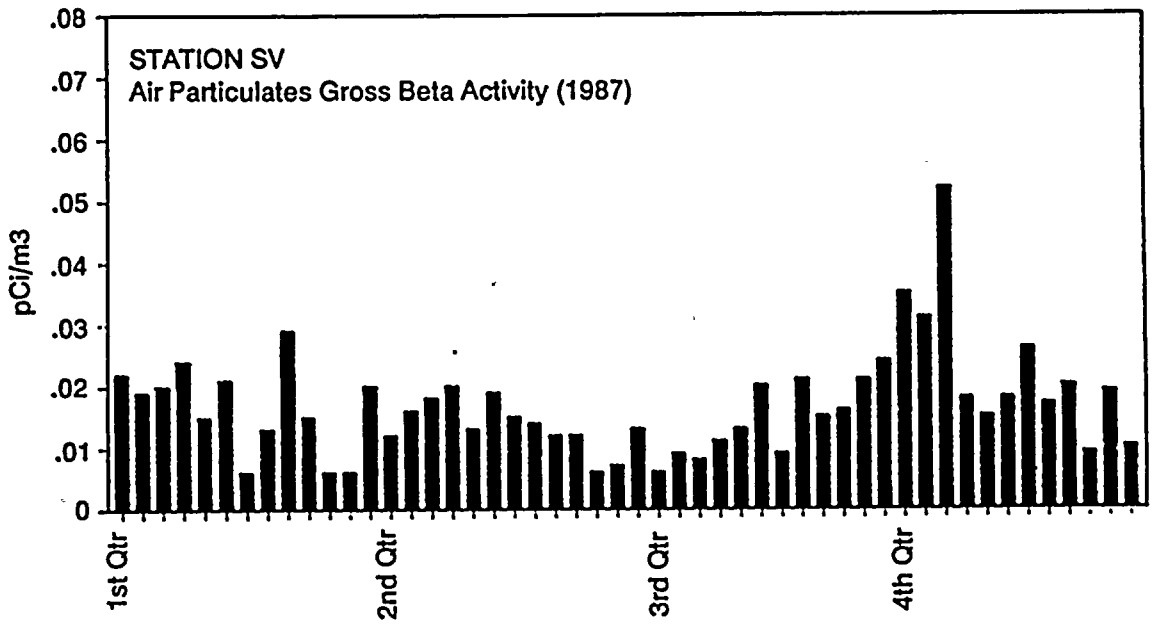


FIGURE 5. (Continued)

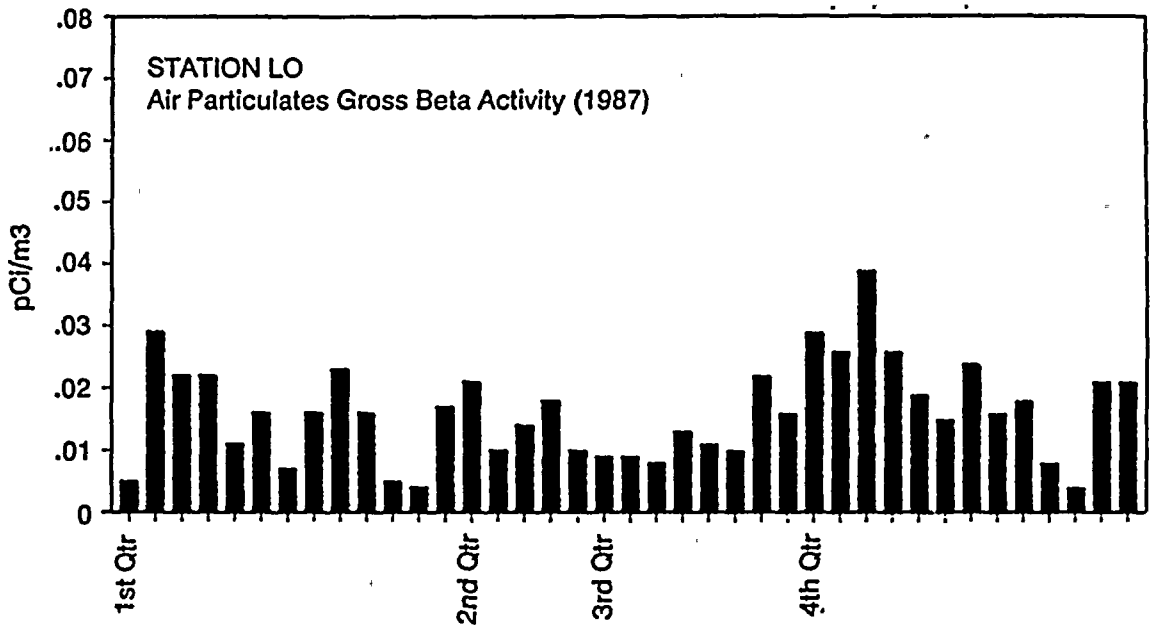


FIGURE 5. (Continued)

with a mean of 70.09 mR/yr. The TLD readings did not differ significantly from the previous year and indicates that the operation of DCPP did not significantly affect the ambient radiation level in the plant environs. See Appendix B, Table B-4 for the TLD data collected for each station; and Appendix A, Table A-8 for the summary of the TLD readings for 1987.

c. Water Samples

A total of 84 water samples--48 seawater samples, 12 drinking water samples, 12 surface water samples and 12 outfall water samples--were collected and analyzed. The results of the water sample analyses are summarized in Appendix A, Tables A-1(a) to (d).

Gamma isotopic analyses were performed on all water samples. The samples showed no detectable radioactivity other than natural radioactivity.

Tritium analysis was performed on all drinking water, surface water and outfall water samples. Only one water sample--an outfall water sample collected in December--contained tritium. The tritium activity concentration was found to be 621 pCi/L. In reviewing the data, it can be concluded that the operation of DCPP had negligible impact on the aquatic medium in the plant environs.

d. Marine Samples

A total of 131 marine samples were collected and analyzed. They included fish, abalone, mussels, algae and ocean bottom sediment. The results are summarized in Tables A-3, A-4, and A-5. Table B-2 lists the individual samples and their detected nuclides.

Abalone

One red abalone sample collected in the first quarter and one black abalone sample collected in the fourth quarter from indicator station DCM contained Co-58 and Co-60. The activity concentration for Co-58 was 26 and 53 pCi/kg, respectively. For Co-60 the activity was 52 and 18 pCi/kg, respectively. No radionuclides other than naturally occurring radionuclides were detected in samples from control station 7C2. Two abalone samples collected from special interest station POS--a red abalone in the second quarter and a black abalone in the fourth quarter--contained Co-60. The activity was 20 and 32 pCi/kg, respectively.

All values for the radioactivity concentration of the detected nuclides were well below reporting levels.

California Mussels

Co-58 and Co-60 were detected in mussels collected at station DCM and special interest stations POS and PON. None were detected in mussel samples from control station 7C2. The activity concentration of Co-58 in samples with positive detected activity from station DCM ranged from 111 to 1100 pCi/kg with a mean of 453 pCi/kg; at stations PON and POS it ranged from 102 to 316 pCi/kg with a mean of 209 pCi/kg. The activity concentration of Co-60 in samples with positive detected activity from station DCM ranged from 56 to 262 pCi/kg with a mean of 142 pCi/kg; at stations PON and POS it ranged from 74 to 297 pCi/kg with a mean of 158 pCi/kg.

All values for the radioactivity concentration of the detected nuclides were well below reporting levels.

Fish

Cs-137 was detected in the fish samples collected at indicator station DCM and also at the control and special interest stations (stations 7C2, 2F1, 7D3, and PON). One fish sample collected at station DCM had an activity concentration of 8 pCi/kg. At control station 7C2 one sample had an activity concentration of 9 pCi/kg. At the special interest stations, the activity concentration range was 10 to 139 pCi/kg with a mean of 33 pCi/kg. These values obtained for Cs-137 concentration in fish were within the range of preoperational measurements and were considered to be due to global fallout.

Co-60 (17 pCi/kg) was detected in one commercial snapper sample collected at station 2F1 and Co-58 (53 pCi/kg) was detected in one rockfish sample collected at station PON.

All values for the radioactivity concentration of the detected nuclides were well below reporting levels.

Algae

A total of 87 algae samples (iridaea and bull kelp) were analyzed. The iridaea samples collected from station DCM contained Co-58, Co-60, and Mn-54 with mean activity concentration levels of 357, 92, and 35 pCi/kg respectively. These radionuclides were not detected in the iridaea samples collected at control station 7C2. However, Cs-137 (4 pCi/kg) was detected in one of the samples from station 7C2.

At station DCM, no bull kelp was available for collection for the months of January through May, and from November through December. In September, only the pneumatocyst was available for collection. At station 7C2, bull kelp was unavailable for collection for the month of

June. Gamma analysis of the samples collected at station DCM indicated the samples contained the following: Co-58, Mn-54 and I-131 with activity concentration averaging (average of positive values only) 16, 11, and 58 pCi/kg respectively. In addition, one of the samples from station DCM contained 11 pCi/kg Nb-95. At the control station 7C2, one bull kelp sample was found to contain I-131. Its activity concentration was 7 pCi/kg. No gamma activity was detected in samples from special interest station PON. However, at special interest station POS, Co-58 (11 pCi/kg) was detected in one sample collected in April. In August I-131 (21 pCi/kg) was detected in another sample at this same station.

All values for the radioactivity concentration of the detected nuclides were well below reporting levels.

Sediment

An annual sample of ocean bottom sediment was collected from station DCM in December. Gamma analysis of the sample showed that the sample contained 20 pCi/kg of Co-58, 33 pCi/kg of Co-60 and 23 pCi/kg of Cs-137 (based on dry weight). The radionuclides Co-58 and Co-60 detected were plant-related. However, the Cs-137 activity was attributed to global fallout because its value was within the preoperational range.

e. Food Crops

A total of 30 vegetation samples were collected from 3 sampling locations - Cal Poly Farm (station 5F2), Kawaoka Farm (station 7G1), and Mello Farm (station 7C1). The samples analyzed contained only naturally

occurring radioactivity. It can, therefore, be concluded that the operation of DCPP had no impact on this environmental medium.

f. Milk

A total of 24 monthly milk samples were collected from Cal Poly Farm (station 5F2) and Caroni Dairy (station 8H1). Cs-137 was detected in one sample from Caroni Dairy in February. Its activity concentration, 2 pCi/L, was within preoperational range and was not attributable to plant operation. The operation of the plant did not impact this dose pathway to man.

COMPARISON OF PREOPERATIONAL AND OPERATIONAL DATA

Diablo Canyon Power Plant began commercial operation in 1985. Data from the preoperational years, 1981 to 1984, will be used for comparison with the data from the operational years.

Airborne Radioactivity

Air Particulates:

Gross Beta Analysis

Year	All Indicator Stations Mean (range) pCi/m^3	All Control Stations Mean (range) pCi/m^3
1981	0.189 (0.004-0.766)	0.162 (0.008-0.635)
1982	0.016 (0.004-0.045)	0.016 (0.004-0.044)
1983	0.011 (0.003-0.037)	0.012 (0.003-0.039)
1984	0.012 (0.004-0.033)	0.010 (0.005-0.033)
1985	0.016 (0.003-0.057)	0.017 (0.003-0.069)
1986	0.040 (0.002-0.671)	0.042 (0.001-0.654)
1987	0.014 (0.004-0.051)	0.016 (0.004-0.052)

Comparing the preoperational (1981-1984) and the operational (1985-1987) data for gross beta activity for air particulates(2), it can be seen that the gross beta activity in 1985 and 1987 for all stations was within the pre-operational range. However, for 1986 the mean for all stations was higher than that for 1985 and 1987. This was as expected because of the fallout from the Chernobyl accident in the USSR. This was not due to plant operations. It was also observed that the range seen in 1986 was similar to those seen in 1981. The high gross beta activity in 1981 was due to fallout from Chinese atmospheric nuclear weapons testing.

Radioiodine:

Iodine-131 was not detected in 1981 through 1983. However, in 1984, I-131 was detected in three iodine cartridges from Lompoc (in Santa Barbara County). The mean activity concentration and range were 0.108 and 0.014 to 0.159 pCi/m^3 respectively. Despite a thorough investigation no explanation could be found for the source of the I-131 (see the 1985 Annual Environmental Radiological Report, Diablo Canyon Power Plant). No I-131 was detected in all the other stations for that year.

In 1985 no radioiodine was detected, but in 1986, due to the Chernobyl fallout, I-131 was detected in the second quarter at all stations. In 1987 no radioiodine was detected in the iodine cartridges collected from all control and indicator stations.

Direct Radiation

Environmental TLD data (mR/yr)

Year	All indicator stations mean (range)	All control stations mean (range)
1981	74.2 (47.3-98.2)	57.8 (53.5-62.1)
1982	71.9 (48.6-95.7)	57.8 (52.3-61.7)
1983	61.2 (40.7-84.9)	50.0 (46.1-53.9)
1984	77.2 (49.6-106.9)	62.0 (57.8-66.1)
1985	75.3 (48.7-96.8)	59.8 (54.9-64.7)
1986	73.0 (47.7-97.5)	61.7 (1 station only)
1987	69.5 (42.9-94.4)	56.8 (1 station only)

Comparing the TLD data in Table 5 for the preoperational years (1981-1984) and the operational years, it can be seen that the data collected for 1987 fell within the preoperational range.

TABLE 5

COMPARISON OF PREOPERATIONAL AND OPERATIONAL TLD DATA

Stations	Preoperational $\bar{x}$ (μR/hr)*	1986 $\bar{x}$ (μR/hr)*	1987 $\bar{x}$ (μR/hr)*
WN1	6.1 ± 2.5	6.6 ± 0.8	6.4 ± 2.6
1A1	5.9 ± 2.4	6.1 ± 1.4	6.3 ± 2.6
ØB1	5.2 ± 2.3	5.4 ± 0.8	4.8 ± 0.5
1C1	6.5 ± 2.5	6.6 ± 1.4	6.0 ± 0.8
4C1	5.7 ± 2.4	5.8 ± 1.0	5.3 ± 0.9
5C1	8.3 ± 2.9	9.0 ± 1.2	7.8 ± 0.6
7C1	8.2 ± 2.9	8.7 ± 1.8	8.0 ± 0.7
2D1	5.6 ± 2.4	6.2 ± 1.0	6.2 ± 1.4
3D1	6.5 ± 2.6	7.0 ± 1.0	6.0 ± 0.5
4D1	5.8 ± 2.4	6.3 ± 1.2	8.1 ± 3.3
6D1	7.7 ± 2.8	7.8 ± 1.2	8.4 ± 2.9
7D1	5.5 ± 2.3	6.0 ± 1.0	5.8 ± 0.6
7D2	8.6 ± 2.9	9.0 ± 1.3	7.9 ± 1.2
2F2	6.7 ± 2.6	7.0 ± 1.2	6.3 ± 0.7
5F1	8.0 ± 2.8	8.3 ± 1.2	8.9 ± 0.9
7F1	7.7 ± 2.8	7.9 ± 1.4	7.3 ± 0.6
7G2	8.5 ± 2.9	8.9 ± 0.8	9.2 ± 2.9
ØS1	9.4 ± 3.1	10.2 ± 1.4	9.5 ± 3.0
ØS2	8.0 ± 2.8	8.4 ± 1.4	7.7 ± 0.8
1S1	6.7 ± 2.6	8.1 ± 1.4	7.4 ± 0.6
2S1	8.0 ± 2.8	8.0 ± 1.2	7.6 ± 0.6
3S1	10.7 ± 3.3	9.7 ± 2.2	9.1 ± 0.8
4S1	9.2 ± 3.0	9.5 ± 2.4	8.5 ± 0.5
5S1	9.5 ± 3.1	11.0 ± 1.0	10.5 ± 3.1
5S3	9.9 ± 3.2	9.3 ± 1.2	8.9 ± 2.8
6S1	6.8 ± 2.6	7.3 ± 1.2	6.9 ± 2.8
7S1	8.8 ± 3.0	8.9 ± 1.4	8.8 ± 2.7
8S1	7.5 ± 2.7	7.9 ± 1.0	7.2 ± 0.8
8S2	9.6 ± 3.1	10.1 ± 1.6	8.8 ± 0.9
9S1	10.3 ± 3.2	10.7 ± 1.2	9.5 ± 0.6
MT1	9.6 ± 3.1	10.1 ± 1.6	8.7 ± 0.6
5F3	9.0 ± 3.0	8.5 ± 1.4	8.7 ± 0.9
SM	9.4 ± 3.1	8.7 ± 1.6	10.9 ± 4.5
SV	9.0 ± 3.0	8.9 ± 2.2	7.9 ± 1.4
LO	9.3 ± 3.0	8.7 ± 1.6	6.9 ± 0.6

* Data has been converted from milliRoentgens per month (mR/mo) to microRoentgens per hour (μR/hr) to normalize the time units for comparison of data from month to month. This is, to compensate for the different numbers of day in months. The conversion was done by dividing the monthly reading by the number of hours the dosimeters were in the field.

Water Samples

Seawater:

Only naturally occurring radioactivity was detected in seawater samples during the preoperational period. For 1987, no radioactivity other than naturally occurring radioactivity was detected in the monthly samples collected at the indicator control stations. The operation of the plant had no impact on the seawater in the Diablo Canyon environs.

Surface Water:

During the preoperational period, no tritium was detected in any of the surface water samples. However, Zirconium-95 (11.3 pCi/L), Nb-95 (15.2 pCi/L), and Ru-103 (5.3 pCi/L) were detected in one sample during this period. The presence of these radionuclides was attributed to global fallout from Chinese nuclear weapons testing. For the rest of the preoperational period only naturally occurring radioactivity was detected. For 1987, only naturally occurring radionuclides were detected. The operation of the plant had no impact on the surface water in the Diablo Canyon environs.

Drinking Water:

In 1981, Nb-95 (1.84 pCi/L) was detected in one sample. The presence of this radionuclide was attributable to global fallout. Only naturally occurring nuclides were detected in all other samples collected during the preoperational period. The results for 1987 were found to be within preoperational range and did not contain any plant-related nuclides. The operation of the plant had no impact on the drinking water at Diablo Canyon.

Outfall Water:

Only naturally occurring radionuclides were detected during the preoperational years. However, in 1987, tritium (621 pCi/L) was detected in one outfall water sample. The level detected did not significantly impact the plant environs.

Fish and Seafood

Fish:

The principal radionuclide detected in fish samples was Cs-137. This nuclide is present in the environment due to global fallout from weapons testing and the Chernobyl incident and, having a long half-life, it was detected as part of the environmental background in fish samples. The Cs-137 content in fish samples collected for DCPP environmental monitoring program from 1981 to 1987 is as follows:

Year	All indicator stations Mean (range) pCi/kg	All control stations Mean (range) pCi/kg
1981	11.8 (8.4-16.1)	24.6 (17.5-38.2)
1982	11.4 (10.5-12.3)	17.8 (10.7-30.4)
1983	11.0 (one sample)	15.9 (8 - 26)
1984	None detected	16.4 (7 - 23)
1985	23.8 (20 - 28)	19.6 (11 - 19)
1986	None detected	19.0 (13 - 25)
1987	8.0 (one sample)	9.0 (one sample)

Comparing the 1987 sample data with the preoperational data it can be seen that the activity concentration of Cs-137 was within the

preoperational range. At the special interest stations the Cs-137 range was 10 to 139 pCi/kg with a mean of 33 pCi/kg.

Abalone:

Only naturally occurring radionuclides were detected in samples collected during the preoperational period. However, in the operational years 1985-1987 some plant-related nuclides were also detected in the samples. They were as follows:

Year		All indicator stations Mean (range) pCi/kg	All control stations Mean (range) pCi/kg
1985	Co-58	81 (one sample)	24 (one sample)
1986	Co-58	154 (37-230)	None detected
	Co-60	33 (18-47)	None detected
1987	Co-58	40 (26-53)	None detected
	Co-60	35 (18-52)	None detected

All activity concentrations detected were below the reporting levels listed in the Technical Specifications for DCPP[4].

Mussels:

All samples collected during the preoperational period contained only naturally occurring radionuclides. Besides naturally occurring radioactivity, samples collected in 1985, 1986 and 1987 contained nuclides that were plant-related as listed below.

Year		All indicator stations Mean (range) pCi/kg	All control stations Mean (range) pCi/kg
1985	Co-58	483 (245 - 853)	66 (21 - 109)
	Co-60	138 (106 - 170)	None detected

1986	Co-58	852 (208 - 1710)	284 (159 - 508)
	Co-60	158 (52 - 218)	78 (50 - 11)
	Mn-54	34 (one sample)*	
	Nb-95	43 (one sample)*	
1987	Co-58	453 (111-1100)	None detected
	Co-60	142 (56- 262)	None detected

* contained in same sample.

Algae

Algae samples analyzed during the preoperational period contained only natural radioactivity. However the samples collected in 1985, 1986 and 1987 did contain the following isotopes:

Year		All indicator stations Mean (range) pCi/kg	All control stations Mean (range) pCi/kg
1985	Co-58	179 (9 - 431)	53 (29 - 98)
	Co-60	190 (24 - 881)	None detected
	Mn-54	79 (11 - 349)	14 (one sample)
	Cs-137	None detected	22 (one sample)
1986	Co-58	298 (44 - 624)	48 (14 - 109)
	Co-60	70 (13 - 172)	6 (one sample)
	Mn-54	24 (15 - 35)	None detected
	I-131	396 (31 - 1180)	18 (8 - 28)
	Fe-59	285 (one sample)*	None detected
	Cr-51	322 (one sample)*	None detected
1987	Co-58	131 (5 - 591)	None detected
	Co-60	92 (27 - 129)	None detected
	Mn-54	26 (9 - 65)	None detected
	I-131	57 (33 - 91)	7 (one sample)
	Cs-137	None detected	4 (one sample)
	Nb-95	11 (one sample)	None detected

* contained in the same sample

However, the algae were not harvested for commercial use and therefore did not impact the dose pathway from the environment to man.

Sediment

Sediment samples collected during the preoperational and operational years from the environs of DCPP did contain Cs-137 attributed to global fallout from previous nuclear weapons testing. Their activity concentrations are summarized below.

Year		All indicator stations Mean (range) pCi/kg (dry)	All control stations Mean (range) pCi/kg (dry)
1981	Cs-137	28 (17.8 - 34.3)	None detected
1982	Cs-137	40 (30 - 50)	25.7 (24 - 27)
1983	Cs-137	21 (10.6 - 30.5)	65.6 (37.6 - 93.6)
1984	Cs-137	None detected	83 (one sample)
1985	Cs-137	25 (17 - 39)	36 (one sample)
1986	Cs-137	None detected	None detected
1987	Cs-137	23 (one sample)	None detected

The data in the table above shows that Cs-137 activity concentration found in the 1987 sediment sample was within the preoperational range.

Besides Cs-137, Mn-54 and Fe-59 were detected in the samples collected at Diablo Cove (DCM) in 1985; Co-58, Co-60, and Mn-54 in the samples collected in 1986. In 1987, Co-58 and Co-60 were also detected; however, their activity concentration was significantly reduced as compared to that of 1986.

Year		Station DCM Mean(range) pCi/kg (dry)
1985	Mn-54	51 (37 - 64)
	Fe-59	119(66 - 148) 1986
1986	Mn-54	55 (one sample)*
	Co-58	277(one sample)*
	Co-60	109(one sample)*
1987	Co-58	20 (one sample)*
	Co-60	33 (one sample)*

* contained in the same sample

Food Crops

During the preoperational period, Cs-137 was detected in vegetable samples in 1981. The mean and range of the activity concentration was 48 (2.6-136) pCi/kg. It was not detected in subsequent years until 1986. Here the activity concentration was found to be 9 pCi/kg in one sample only.

Also in June 1986 I-131, Cs-134, and Ru-103 (see table below) were detected in vegetable samples from indicator stations and I-131 was detected at a control station. Their presence were not attributed to the operation of DCPP but to global fallout due to the Chernobyl accident.

Year		All indicator stations Mean (range)pCi/kg wet	All control stations Mean (range)pCi/kg wet
1986	I-131	27 (4 - 49)	90 (one sample)
	Cs-134	4 (one sample)	none detected
	Ru-103	9 (one sample)	none detected
	Cs-137	9 (one sample)	none detected

In 1987, the samples collected from indicator and control stations were found to contain only natural radioactivity.

Milk

During the preoperational period, Cs-137 was detected only in samples collected in 1981; the mean and range at indicator and control stations were 1.59 (1.11-2.06) and 1.73 (1.35-2.29) pCi/L respectively. Cs-137 was not detected in any of the milk samples from 1982 to 1986. However, in 1987, it was detected in 1 sample from station 8H1. The activity concentration was 2 pCi/L.

Iodine-131 which was never detected in preoperational years was detected in the milk samples from Cal Poly and Caroni dairies. Their values ranged from 2 to 89 pCi/L. The presence of I-131 was due to global fallout

during the Chernobyl accident. I-131 was not detected in milk samples collected in 1987.

PROGRAM VARIANCE

The air samplers at station 0S2 and 1S1 were out of service from 0730 to 0745 hours and again from 1505 to 1522 hours because of a power outage during the maintenance of the 12 kV electrical distribution system on 1/22/87. No sample was collected at station 1S1 for the collection period 04/24/87 to 05/01/87 because the cartridge and filter were not placed in the holder in the last exchange due to the oversight of the technician performing the collection. To prevent a reoccurrence of this incident, the collection procedure was revised to improve the method of collection. No sample was collected at station 7D1 for the collection period 04/08/87 to 04/14/87 because the air sampler was not turned on after the last exchange. At station MT1, for the collection period 9/25/87 - 10/1/87, the filter paper used for the collection of air particulates was placed off-center in the holder. The technicians responsible were retrained on sample collection to prevent a reoccurrence of these incidents. On 10/13/87 the air sampler at station 5F1 was down for 2.5 hours due to equipment failure. On these occasions when the air samplers were out of service, the data collected from stations in the vicinity of these air samplers on those particular dates in question were reviewed. No activity above background was detected at these stations. Therefore, it was determined that these variances were not significant.

Snow peas were unavailable for collection at station 7C1 from April through June and also in August due to seasonal unavailability. Vegetative greens were also unavailable for collection at station 2F2 for the month of April and June due to seasonal unavailability.

Every possible effort was made to collect the marine samples. However, the rockfish, perch and abalone samples from station 7C2 were not collected in the fourth quarter because of hazardous weather conditions. Also, there were no abalone available for collection at station 7C2 in August. In February, a rockfish sample from station 7C2 was lost in the mail. An attempt was made to recollect this sample but it was unsuccessful. A review of the data for the other samples collected during these periods indicated that these variances did not significantly impact the monitoring program.

SUMMARY

A review of the results for 1987 showed that all positive results detected were below the reporting levels, and none of the LLDs were exceeded.

The airborne radioactivity concentrations around DCPP were consistent with preoperational background measurements except for air particulate filters collected in the second quarter for stations 8S1 and 8S2. The mean percent availability for all air samplers was 98.9 percent for 1987. The ambient direct radiation levels in the environs surrounding DCPP did not change and were also within the preoperational range. Water samples analyzed confirmed that the operation of DCPP had no significant impact on the aquatic medium in the plant environs. Vegetable crops harvested during their growing season also showed no significant impact from plant operation. Some marine samples were found to contain plant-related nuclides. Their activity concentrations were well below reporting levels and did not have any significant impact on the critical dose pathway to man.

The results of the 1987 Radiological Environmental Monitoring Program showed that the operation of Diablo Canyon Power Plant had no significant negative radiological impact on the environment.

REFERENCES

1. Environmental Radiological Monitoring Procedure - DCPP (Normal Operations), Pacific Gas and Electric Co. Planning and Research Department, Quality Control Manual, Volume V-A.

2. 1981, 1982, 1983, 1984, 1985, and 1986 Annual Environmental Radiological Reports, Diablo Canyon Power Plant. Pacific Gas and Electric Co.

3. NRC Branch Technical Position on Environmental Monitoring, Revision 1, November 1979.

4. Environmental Monitoring Program for Diablo Canyon Units 1 and 2 Technical Specifications, Section 3/4.12.

5. 1986 Annual State Radiological Cross Check Program, Report from Larry Carter, California Department of Health services to Frank Wenslawski, Radiologic Safety Branch, Nuclear Regulatory Commission, Region V, September 3, 1987.

APPENDIX A

TABL[illegible]a

ENVIRONMENTAL RADIOLOGICAL MONITORING PROGRAM SUMMARY

Name of Facility Diablo Canyon Power Plant
Location of Facility San Luis Obispo, California
(County, State)

Docket No. 50-275 and 50-323
Report Period 1/1/87-12/31/87

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection(a) (LLD)	Indicator Location with Highest Annual Mean: Name, Distance and Direction	Indicator Location with Highest Annual Mean: Mean(1)(b) Range(b)	All Indicator Locations Mean(1)(b) Range(b)	All Control Locations Mean(1)(b) Range(b)	Number of Reportable Occurrences
Seawater ($pCi.L^{-1}$)							
	Gamma Isotopic (48)						0
	54Mn				None detected	None detected	
	59Fe				None detected	None detected	
	58Co				None detected	None detected	
	60Co				None detected	None detected	
	65Zn				None detected	None detected	
	95Zr				None detected	None detected	
	95Nb				None detected	None detected	
	131I				None detected	None detected	
	134Cs				None detected	None detected	
	137Cs				None detected	None detected	
	140Ba				None detected	None detected	
	140Ba				None detected	None detected	

(a)Unless specified, all required LLDs were met in accordance with Table 4.
(b)Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis (1); e.g., (10/12) means 10 samples out of 12 collected showed activity.

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Surface water ($pCi.L^{-1}$)	Tritium (12)		Sta. 5S2 0.6 mi. 65°	None detected	0
	Gamma Isotopic (12)				0
	54Mn			None detected	
	59Fe			None detected	
	58Co			None detected	
	60Co			None detected	
	65Zn			None detected	
	95Zr			None detected	
	95Nb			None detected	
	131I			None detected	
	134Cs			None detected	
	137Cs			None detected	
	140Ba			None detected	
	140La			None detected	

(a)Unless specified, all required LLDs were met in accordance with Table 4.
(b)Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis (1); e.g., (10/12) means 10 samples out of 12 collected showed activity.
(c)Only one station location for this sample type; therefore, no control stations are listed.

TABLE

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Drinking water ($pCi.L^{-1}$)	Tritium (12)		Sta. DW1 0.0 mi, in plant	None detected	0
	Gamma Isotopic (12)				0
	54Mn			None detected	
	59Fe			None detected	
	58Co			None detected	
	60Co			None detected	
	65Zn			None detected	
	95Zr			None detected	
	95Nb			None detected	
	131I			None detected	
	134Cs			None detected	
	137Cs			None detected	
	140Ba			None detected	
	140La			None detected	

(a)Unless specified, all required LLDs were met in accordance with Table 4.
(b)Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis (1); e.g., (10/12) means 10 samples out of 12 collected showed activity.
(c)Only one station location for this sample type; therefore, no control stations are listed.

TABLE [illegible]d

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Outfall water ($pCi.L^{-1}$)	Tritium (12)		Sta. OUT 0.2 mi, 270°	621 (1/12) (0-621)	0
	Gamma Isotopic (12)				0
	54Mn			None detected	
	59Fe			None detected	
	58Co			None detected	
	60Co			None detected	
	65Zn			None detected	
	95Zr			None detected	
	95Nb			None detected	
	131I			None detected	
	134Cs			None detected	
	137Cs			None detected.	
	140Ba			None detected	
	140La			None detected	

(a)Unless specified, all required LLDs were met in accordance with Table 4.
(b)Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis (1); e.g., (10/12) means 10 samples out of 12 collected showed activity.
(c)Only one station location for this sample type; therefore, no control stations are listed.

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Airborne ($pCi.m^{-3}$)	131I (645)				None detected	None detected	0
	Gross Beta (645)		Sta. 8S1 0.5 mi, 125°	0.015 0.004-0.050	0.014(446/446) 0.004-0.051	0.016(199/199) 0.004-0.052	0
	Gamma Isotopic (645)						0
	54Mn		Sta. 8S1 0.5 mi, 125°	0.001 0-0.001	0.001(1/446) (0-0.001)	None detected	
	58Cs		Sta. 8S1	0.023 0-0.023	0.019(2/446) 0.016-0.023	None detected	
	60Co		Sta. 8S2 1.1 mi, 128°	0.004 0-0.004	0.004(2/446) 0.003-0.004	None detected	
	95Zr		Sta. 8S1	0.003 0-0.003	0.003(1/446) (0-0.003)	None detected	
	95Nb		Sta. 8S1	0.005 0-0.005	0.005(1/446) (0-0.005)	None detected	

(a)Unless specified, all required LLDs were met in accordance with Table 4.
(b)Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis (1); e.g., (10/12) means 10 samples out of 12 collected showed activity.

TABL

ENVIRONMENTAL RADIOLOGICAL MONITORING PROGRAM SUMMARY

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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 Location Mean(1)(b) Range(b)	All Control Locations Mean(1)(b) Range(b)	Number of Reportable Occurrences
Fish and seafood ($pCi.kg^{-1}$ wet)	Gamma Isotopic (33)		Sta. DCM 0.2 mi, 270°	Sta. DCM	Sta. 7C2	0
	54Mn			None detected	None detected	
	59Fe			None detected	None detected	
	58Co			288(5/20) 26-1100	None detected	
	60Co			107(6/20) 18-262	None detected	
	65Zn			None detected	None detected	
	134Cs			None detected	None detected	
	137Cs			8(1/20) 0-8	9(1/13) 0-13	
	131I			None detected	None detected	

(a)Unless specified, all required LLDs were met in accordance with Table 4.
(b)Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis (1); e.g., (10/12) means 10 samples out of 12 collected showed activity.
(c)Only one indicator location for this sample type.

TABLE 4

ENVIRONMENTAL RADIOLOGICAL MONITORING PROGRAM SUMMARY

Name of Facility Diablo Canyon Power Plant
Location of Facility San Luis Obispo, California
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Report Period 1/1/87-12/31/87

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Algae	Gamma Isotopic (39)		Sta. DCM 0.2 mi, 270°	Sta. DCM	Sta. 7C2	0
($pCi.kg^{-1}$ wet)						
	54Mn			26(5/13) 9-65	None detected	
	59Fe			None detected	None detected	
	58Co			131(9/13) 5-591	None detected	
	60Co			92(4/13) 27-129	None detected	

(a)Unless specified, all required LLDs were met in accordance with Table 4.
(b)Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis (1); e.g., (10/12) means 10 samples out of 12 collected showed activity.
(c)Only one indicator location for this sample type.

TABLE A-[illegible]nt.)

ENVIRONMENTAL RADIOLOGICAL MONITORING PROGRAM SUMMARY

Name of Facility Diablo Canyon Power Plant — Docket No. 50-275 and 50-323
Location of Facility San Luis Obispo, California (County, State) — Report Period 1/1/87-12/31/87

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 Location Mean(1)(b) Range(b)	All Control Locations Mean(1)(b) Range(b)	Number of Reportable Occurrences
Algae (cont'd)						
($pCi.kg^{-1}$ wet)	65Zn			None detected	None detected	
	131I			57(6/13) 33-91	7(1/39) 0-7	
	134Cs			None detected	None detected	
	137Cs			None detected	4(1/39) 0-4	
	95Nb			11(1/13) 0-11	None detected	

(a)Unless specified, all required LLDs were met in accordance with Table 4.
(b)Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis (1); e.g., (10/12) means 10 samples out of 12 collected showed activity.
(c)Only one indicator location for this sample type.

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Sediment ($pCi.kg^{-1}$ dry)	Gamma Isotopic (1)		Sta. DCM 0.2 mi, 270°	Sta. DCM	---	0
	54Mn			None detected	---	
	59Fe			None detected	---	
	58Co			20(1/1)	---	
	60Co			33(1/1)	---	
	65Zn			None detected	---	
	134Cs			None detected	---	
	137Cs			23(1/1)	---	

(a)Unless specified, all required LLDs were met in accordance with Table 4.
(b)Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis (1); e.g., (10/12) means 10 samples out of 12 collected showed activity.
(c)Only one indicator location for this sample type.

TABL

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Milk ($pCi.L^{-1}$)	131I (24)				None detected	None detected	0
	Gamma Isotopic (24)		-	-			
	134Cs				None detected	None detected	
	137Cs		Sta. 8H1 25.8 mi, 141°	2(1/12) (0-2)	2(1/12) (0-2)	None detected	
	140Ba				None detected	None detected	
	140La				None detected	None detected	

(a)Unless specified, all required LLDs were met in accordance with Table 4.
(b)Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis (1); e.g., (10/12) means 10 samples out of 12 collected showed activity.

TABLE

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(County, State)

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection(a) (LLD)	Indicator Location with Highest Annual Mean: Name, Distance and Direction	Indicator Location with Highest Annual Mean: Mean(1)(b) Range(b)	All Indicator Locations Mean(1)(b) Range(b)	All Control Locations Mean(1)(b) Range(b)	Number of Reportable Occurrences
Food crops ($pCi.kg^{-1}$ wet)	Gamma Isotopic (30)		-	-	Sta. 7C1, 7G1	Sta. 5F2	0
	131I				None detected	None detected	
	134Cs				None detected	None detected	
	137Cs				None detected	None detected	

(a)Unless specified, all required LLDs were met in accordance with Table 4.
(b)Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis (1); e.g., (10/12) means 10 samples out of 12 collected showed activity.

TABLE 3

ENVIRONMENTAL RADIOLOGICAL MONITORING PROGRAM SUMMARY

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(County, State)

Docket No. 50-275 and 50-323
Report Period 1/1/87-12/31/87

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection(a) (LLD)	Indicator Location with Highest Annual Mean: Name, Distance and Direction	Indicator Location with Highest Annual Mean: Mean(1)(b) Range(b)	All Indicator Locations Mean(1)(b) Range(b)	All Control Locations Mean(1)(b) Range(b)	Number of Reportable Occurrences
Direct radiation (mR)	TLD Packets (372)	1 mR/mo	Sta. 5S1 0.4 mi, 48°	7.9(12/12) 5.9-14.3mR/mo 94.4mR/yr	69.5(360/360) 42.9-94.4 mR/yr	Sta. 2F2 4.7 (12/12) 3.7-6.2mR/mo 56.8 mR/yr	0

(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 (1); e.g., (10/12) means 10 samples out of 12 collected showed activity.

TABLE A-9

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT(1)
EPA ENVIRONMENTAL RADIOLOGICAL LABORATORY INTERCOMPARISON STUDIES PROGRAM

Sample Type	Radionuclide	Month	DER	EPA	ALL(2)	DER/EPA	DER/ALL
Air Filter	Gross Alpha	Apr.	15.00	14.00	15.49	1.07	0.97
		Sep.	10.00	10.00	10.47	1.00	0.96
	Gross Beta	Apr.	48.33	43.00	45.31	1.12	1.07
		Sep.	32.67	30.00	30.31	1.09	1.08
	Cs-137	Apr.	6.67	8.00	9.27	0.83	0.72
		Sep.	8.33	10.00	10.66	0.83	0.78
	Sr-90	Apr.	19.66	17.00	17.52	1.16	1.12
		Sep.	10.33	10.0	9.55	1.03	1.08
Food	I-131	Jan.	90.33	78.00	80.90	1.16	1.12
		Jul.	85.67	80.00	81.11	1.07	1.06
	Cs-137	Jan.	10.13	8.40	87.86	1.21	0.12
		Jul.	56.33	50.00	52.07	1.13	1.08
	K-40	Jan.	10.34	9.80	9.84	1.06	1.05
		Jul.	17.43	16.80	17.30	1.04	1.01
Milk(3)	I-131	Feb.	11.00	9.00	8.58	1.22	1.28
		Jun.	68.33	59.00	61.98	1.16	1.10
		Oct.	----	----	----		
	Cs-137	Jun.	83.33	74.00	75.22	1.13	1.11
		Oct.	----	----	----		
	K-40	Jun.	15.73	15.25	15.77	1.03	1.00
		Oct.	----	----	----		
	Sr-89	Jun.	88.69	69.00	63.67	1.29	1.39
		Oct.	----	----	----		
	Sr-90	Jun.	34.00	35.00	34.29	0.97	0.99
		Oct.	----	----	----		
Water	H-3	Feb.	47.20	42.09	41.56	1.12	1.14
		Jun.	24.53	28.95	27.85	0.85	0.88
		Oct.	44.97	44.92	43.86	1.00	1.03
	Sr-89	Jan.	22.66	25.00	23.28	0.91	0.97
		May	43.00	41.00	38.96	1.05	1.10
	Sr-90	Jan.	19.66	25.00	23.33	0.79	0.84
		May	19.00	20.00	19.57	0.95	0.97
	I-131	Apr.	7.33	7.00	7.26	1.05	1.01
		Aug.	59.00	48.00	47.19	1.23	1.25
		Dec.	26.33	26.00	26.61	1.01	0.99
	Cr-51	Feb.	----	----	----		
		Jun.	33.00	41.00	39.25	0.80	0.84
		Oct.	62.00	70.00	68.82	0.89	0.90
	Co-60	Feb.	47.33	50.00	50.40	0.95	0.94
		Jun.	60.67	64.00	64.80	0.95	0.94
		Oct.	15.00	15.00	16.39	1.00	0.92

TABLE A-9

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT(1)
EPA ENVIRONMENTAL RADIOLOGICAL LABORATORY INTERCOMPARISON STUDIES PROGRAM
(Continued)

Sample Type	Radionuclide	Month	DER	EPA	ALL(2)	DER/EPA	DER/ALL
	Zn-65	Feb.	91.00	91.00	54.77	1.00	0.97
		Jun.	9.67	10.00	36.71	0.97	0.88
		Oct.	46.33	46.00	24.44	1.01	0.98
	Ru-106	Feb.	32.00	10.00	87.31	0.84	0.88
		Jun.	29.66	75.00	79.59	0.88	0.91
		Oct.	18.00	61.00	51.78	0.90	0.91
	Cs-134	Feb.	51.00	59.00	10.15	0.86	0.93
		Jun.	34.33	40.00	3.91	0.86	0.94
		Oct.	23.33	25.00	9.70	0.93	0.95
	Cs-137	Feb.	85.67	87.00	4.71	0.98	0.98
		Jun.	76.00	80.00	3.85	0.95	0.95
		Oct.	51.00	51.00	6.34	1.00	0.98
	Gross Alpha	Jan.	13.66	11.00	10.15	1.24	1.35
		Mar.	4.00	3.00	3.91	1.33	1.02
		May	10.00	11.00	9.70	0.91	1.03
		Jul.	4.00	5.00	4.71	0.80	0.85
		Sep.	5.00	4.00	3.85	1.25	1.30
		Nov.	5.00	7.00	6.34	0.71	0.79
	Gross Beta	Jan.	10.00	10.00	11.19	1.00	0.89
		Mar.	12.33	13.00	12.83	0.95	0.96
		May	7.00	7.00	7.89	1.00	0.89
		Jul.	5.00	5.00	6.05	1.00	0.83
		Sep.	13.33	12.00	12.00	1.11	1.11
		Nov.	18.33	19.00	18.55	0.96	0.99

(1)All of the values shown are relative therefore, the total activity or concentration levels are not indicated.
(2)The "All" designation refers to all participating laboratories which performed similar analyses. Those values considered by EPA to be statistical outliers are excluded.
(3)October "MILK" sample was cancelled by EPA.

APPENDIX B

TABLE

1987 STATE CROSS-CHECK RESULTS

SAMPLE	STATION	SAMPLE NO.	COLLECTION DATE	GAMMA ACTIVITY $pCi.L^{-1}$ ORIGINAL	K-40 ACTIVITY $pCi.L^{-1}$ or $pCi.Kg^{-1}$ ORIGINAL	H-3 ACTIVITY $pCi.L^{-1}$	I-131 ACTIVITY $pCi.L^{-1}$ or $pCi.kg^{-1}$
Drinking Water	DW1	87A49	01/13/87	ND	--	ND	-
		87B82	02/17/87	ND	-	ND	-
		87C73	03/11/87	ND	-	ND	-
		87E53	04/14/87	ND	-	ND	-
		87F72	05/11/87	ND	-	ND	-
		87H46	06/24/87	ND	-	ND	-
		87I54	07/20/87	ND	-	ND	-
		87J37	08/18/87	ND	-	ND	-
		87L72	09/29/87	ND	-	ND	-
		87M30	10/16/87	ND	-	ND	-
		87N44	11/12/87	ND	-	ND	-
		87Q30	12/17/87	ND	-	ND	-
Milk	8H1	87A75	01/19/87	ND	1520	-	ND
		87C14	02/23/87	Cs-137: 2.4±1.0	1520	-	ND
		87D26	03/23/87	ND	1500	-	ND
		87E72	04/20/87	ND	1540	-	ND
		87F85	05/15/87	ND	1500	-	ND
		87H29	06/22/87	ND	1580	-	ND
		87I56	07/20/87	ND	1530	-	ND
		87J79	08/24/87	ND	1490	-	ND
		87L36	09/21/87	ND	1510	-	ND
		87M41	10/19/87	ND	1520	-	ND
		87N58	11/23/87	ND	1540	-	ND
		87Q32	12/21/87	ND	1330	-	ND

TABLE

1987 STATE CROSS-CHECK RESULTS
(Continued)

SAMPLE	STATION	SAMPLE NO.	COLLECTION DATE	GAMMA ACTIVITY $pCi.L^{-1}$ ORIGINAL	K-40 ACTIVITY $pCi.L^{-1}$ or $pCi.kg^{-1}$ ORIGINAL	H-3 ACTIVITY $pCi.L^{-1}$	I-131 ACTIVITY $pCi:L^{-1}$ or $pCi.kg^{-1}$
Milk	5F2	87C13	02/23/87	ND	1530	-	ND
		87F84	05/15/87	ND	1360	-	ND
		87J78	08/24/87	ND	1370	-	ND
		87N57	11/23/87	ND	1330	-	ND
Outfall Water	OUT	87E21	01/09-03/11/87	ND	-	ND	-
		87H34	04/08-06/03/87	ND	-	ND	-
		87K64	07/10-09/04/87	ND	-	ND	-
		87Q73	10/07-12/08/87	ND	-	ND	-
Surface Water	5S2	87B33	02/05/87	ND	-	ND	-
		87F21	05/06/87	ND	-	ND	-
		87I97	08/04/87	ND	-	ND	-
		87M98	11/06/87	ND	-	ND	-

TABLE

1987 STATE CROSS-CHECK RESULTS
(Continued)

SAMPLE	STATION	SAMPLE NO.	COLLECTION DATE	GAMMA ACTIVITY $pCi.kg^{-1}$ ORIGINAL	K-40 ACTIVITY $pCi.L^{-1}$ or $pCi.kg^{-1}$ ORIGINAL	H-3 ACTIVITY $pCi.L^{-1}$	I-131 ACTIVITY $pCi.L^{-1}$ or $pCi.kg^{-1}$
Abalone Meat	DCM	87D46	03/24/87	ND	2540	-	-
		87F97	05/15/87	ND	4260	-	-
		87J47	08/11/87	ND	5650	-	-
		87N40	11/12/87	ND	9240	-	-
Bull Kelp Blade	DCM	87J43	08/11/87	Co-58: 11.8±3.3 Mn-54: 12.6±3.4	4720	-	56.2±6.5
Iridaea	DCM	87F93	05/15/87	Co-58: 591±25 Co-60: 97.7±10.8 Mn-54: 28.6±8.4	2890	-	ND

TABL[illegible]

1987 STATE CROSS-CHECK RESULTS
(Continued)

SAMPLE	STATION	SAMPLE NO.	COLLECTION DATE	GAMMA ACTIVITY $pCi.kg^{-1}$ ORIGINAL	K-40 ACTIVITY $pCi.L^{-1}$ or $pCi.kg^{-1}$ ORIGINAL	H-3 ACTIVITY $pCi.L^{-1}$	I-131 ACTIVITY $pCi.L^{-1}$ or $pCi.kg^{-1}$
Vegetable Greens	7G1	87B36	02/05/87	ND	5480	-	-
		87F22	05/06/87	ND	6120	-	-
		87I98	08/04/87	ND	3510	-	-
		87N33	11/06/87	ND	7480	-	-
Sediment	DCM	87N37	11/17/87	*Co-58: 20.3±7.2 *Co-66: 33.2±8.2 *Cs-137: 23.3±6.1	*9110		

* pCi/kg dry.

ND Means radionuclides of interest (related to power plant operations) other than naturally occurring were not detected.

TABLE B-2
DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
MARINE AND TERRESTRIAL SAMPLE DATA
DETECTED NUCLIDES (NONNATURALLY OCCURRING) - pCi/kg ORIGINAL

SAMPLE	STA. NO.	COLLECTION DATE	SAM. NO.	58Co	60Co	54Mn	131I	134Cs	137Cs	OTHER
RED ABALONE MEAT	DCM	02/27/87	87C34	53.4±24.3	52.3±95.0					
RED ABALONE MEAT	POS	05/12/87	87G02		19.9±10.7					
BLACK ABALONE MEAT	DCM	08/11/87	87J15	25.6±12.5	18.2±9.8					
BLACK ABALONE MEAT	POS	08/11/87	87J21		31.5±13.1					
IRIDAEA	DCM	03/24/87	87D44	173 ±24.1	129 ±19.6	65.3±15.2				
IRIDAEA	DCM	05/15/87	87F93	591 ±25.0	97.7±10.8	28.6±8.4				
IRIDAEA	DCM	08/11/87	87J16	308 ±16.2	115 ±13.0	12.0±5.8				
IRIDAEA	DCM	11/20/87	87P03		27.1±9.5					
IRIDAEA	7C2	11/20/87	87P06						4.0 ±2.4	
BULL KELP BLADE	POS	04/14/87	87E48	11.0±2.7						
BULL KELP BLADE	DCM	06/24/87	87H39	48.7±10.1			69.1±8.9			
BULL KELP BLADE	DCM	07/13/87	87I37	14.5±6.5						
BULL KELP BLADE	DCM	08/11/87	87J43	11.8±3.3		12.6±3.4	56.2±6.5			
BULL KELP BLADE	DCM	10/13/87	87M21			9.0 ±3.9	41.6±5.5			
BULL KELP PNEUMATOCYST	DCM	06/25/87	87H40				54.2±15.9			
BULL KELP PNEUMATOCYST	DCM	07/13/87	87I38	10.1±3.9			32.5±8.6			
BULL KELP PNEUMATOCYST	DCM	08/11/87	87J44	14.3±3.7			90.6±9.0			
BULL KELP PNEUMATOCYST	POS	08/11/87	87J54				21.3±11.0			
BULL KELP PNEUMATOCYST	DCM	09/17/87	87L06	4.6 ±2.5						95Nb= 11.0±3.6
BULL KELP PNEUMATOCYST	7C2	09/17/87	87L15				7.7 ±4.5			
COMMERCIAL COD	2F1	03/27/87	87D76						10.4±6.0	
COMMERCIAL COD	2F1	03/27/87	87D77						14.4±6.2	
COMMERCIAL COD	7D3	03/27/87	87D79						17.8±6.1	
COMMERCIAL COD	2F1	05/28/87	87G40						12.3±4.7	
COMMERCIAL COD	7D3	05/28/87	87G43						26.8±9.7	
COMMERCIAL SALMON	2F1	12/02/87	87P13						139 ±28.5	
COMMERCIAL SNAPPER	2F1	12/02/87	87P15		16.7±12.0					
ROCKFISH	7C2	05/12/87	87G05						8.9 ±2.6	
ROCKFISH	PON	08/11/87	87J51	53.3±13.7						
ROCKFISH	DCM	11/12/87	87N38						8.3 ±2.6	
ROCKFISH	PON	11/12/87	87N34						11.2±4.5	

TABLE B-2

DIABLO CANYON POWER PLANT 1986 ANNUAL REPORT
MARINE AND TERRESTRIAL SAMPLE DATA
DETECTED NUCLIDES (NONNATURALLY OCCURRING) - pCi/kg ORIGINAL
(Continued)

SAMPLE	STA. NO.	COLLECTION DATE	SAM. NO.	58Co	60Co	54Mn	131I	137Cs	134Cs	OTHER
CALIFORNIA MUSSELS	DCM	03/24/87	87D45	149 ±31.7	105 ±28.1					
CALIFORNIA MUSSELS	PON	03/24/87	87D47	316 ±70.3	297 ±62.8					
CALIFORNIA MUSSELS	DCM	05/15/87	87F98	1100±73.5	262 ±46.0					
CALIFORNIA MUSSELS	PON	05/15/87	87F92	102 ±29.8	73.9±26.1					
CALIFORNIA MUSSELS	DCM	08/11/87	87J17	111 ±23.8	146 ±28.3					
CALIFORNIA MUSSELS	DCM	11/20/87	87P04		55.6±20.4					
CALIFORNIA MUSSELS	POS	11/20/87	87P10		154 ±36.0					
CALIFORNIA MUSSELS	PON	11/20/87	87P12		107 ±22.9					
MILK	8H1	02/23/87	87C14						2.4 ±1.0	
SEDIMENT	DCM	11/17/87	87N37	20.3±7.2	33.2±8.2				23.3±6.1	
OUTFALL WATER	OUT	12/08/87	87P49							3H- 621±332

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION MT1(pCi.m-3)1ST QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
12/29/86-01/05/87	428.9	01/11/87	0.022	0.002	
01/05 - 01/09/87	240.9	01/18/87	0.010	0.002	
01/09 - 01/13/87	258.8	01/17/87	0.028	0.003	
01/13 - 01/19/87	352.3	01/23/87	0.018	0.002	
01/19 - 01/26/87	434.0	01/29/87	0.022	0.002	
01/26 - 01/30/87	253.9	02/06/87	0.012	0.002	
01/30 - 02/05/87	354.8	02/09/87	0.011	0.002	
02/05 - 02/11/87	366.3	02/16/87	0.014	0.002	
02/11 - 02/17/87	363.0	02/24/87	0.004	0.001	
02/17 - 02/23/87	366.5	03/01/87	0.011	0.002	
02/23 - 02/27/87	244.5	03/10/87	0.014	0.002	
02/27 - 03/05/87	368.8	03/13/87	0.031	0.003	
03/05 - 03/11/87	372.9	03/18/87	0.006	0.001	
03/11 - 03/17/87	359.1	03/23/87	0.006	0.001	
03/17 - 03/23/87	383.1	03/26/87	0.006	0.001	
03/23 - 03/27/87	233.3	03/31/87	0.010	0.002	
03/27 - 04/02/87	377.0	04/07/87	0.023	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITES

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
12/29/86-04/02/87	05/04/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION MT1(pCi.m-3)2ND QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
04/02 - 04/08/87	363.2	04/14/87	0.010	0.002	
04/08 - 04/14/87	363.5	04/17/87	0.020	0.002	
04/14 - 04/20/87	365.5	04/24/87	0.012	0.002	
04/20 - 04/24/87	233.8	04/29/87	0.024	0.003	
04/24 - 05/01/87	431.7	05/04/87	0.015	0.002	
05/01 - 05/06/87	307.4	05/10/87	0.011	0.002	
05/06 - 05/11/87	306.4	05/18/87	0.011	0.002	
05/11 - 05/15/87	254.2	05/20/87	0.011	0.002	
05/15 - 05/21/87	361.9	05/29/87	0.009	0.001	
05/21 - 05/28/87	422.3	06/01/87	0.010	0.001	
05/28 - 06/02/87	312.5	06/13/87	0.013	0.002	
06/02 - 06/09/87	414.7	06/14/87	0.010	0.001	
06/09 - 06/16/87	427.9	06/22/87	0.008	0.001	
06/16 - 06/22/87	371.4	06/26/87	0.016	0.002	
06/22 - 06/26/87	240.4	07/01/87	0.006	0.001	
06/26 - 07/01/87	317.1	07/07/87	0.011	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
04/02 - 07/01/87	07/21/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION MT1(pCi.m-3)3RD QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
07/01 - 07/08/87	421.3	07/16/87	0.005	0.001	
07/08 - 07/14/87	359.9	07/23/87	0.006	0.001	
07/14 - 07/20/87	371.9	07/29/87	0.005	0.001	
07/20 - 07/27/87	427.6	08/03/87	0.009	0.001	
07/27 - 08/03/87	444.5	08/12/87	0.008	0.001	
08/03 - 08/10/87	425.6	08/17/87	0.011	0.001	
08/10 - 08/14/87	241.5	08/21/87	0.010	0.002	
08/14 - 08/21/87	413.9	08/29/87	0.010	0.001	
08/21 - 08/24/87	200.2	09/01/87	0.012	0.002	
08/24 - 08/31/87	413.6	09/05/87	0.013	0.002	
08/31 - 09/04/87	248.6	09/10/87	0.015	0.002	
09/04 - 09/10/87	361.7	09/17/87	0.013	0.002	
09/10 - 09/17/87	435.3	09/24/87	0.012	0.001	
09/17 - 09/21/87	234.6	09/29/87	0.022	0.003	
09/21 - 09/25/87	249.4	09/30/87	0.023	0.003	
09/25 - 10/01/87	366.8	10/05/87	0.001*	0.001	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
07/01 - 10/01/87	10/12/87	ND	

* Filter was not centered properly in holder

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION MT1(pCi.m-3)4TH QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
10/01 - 10/07/87	369.6	10/11/87	0.032	0.003	
10/07 - 10/13/87	371.1	10/24/87	0.026	0.003	
10/13 - 10/19/87	360.2	10/27/87	0.047	0.005	
10/19 - 10/26/87	439.1	10/30/87	0.024	0.002	
10/26 - 11/02/87	418.0	11/11/87	0.019	0.002	
11/02 - 11/06/87	243.8	11/14/87	0.010	0.002	
11/06 - 11/12/87	378.2	11/17/87	0.025	0.003	
11/12 - 11/18/87	365.7	12/08/87	0.012	0.002	
11/18 - 11/23/87	307.7	12/11/87	0.015	0.002	
11/23 - 11/30/87	415.9	12/09/87	0.016	0.002	
11/30 - 12/07/87	427.6	12/16/87	0.009	0.001	
12/07 - 12/11/87	245.0	12/22/87	0.006	0.002	
12/11 - 12/17/87	378.5	12/23/87	0.010	0.001	
12/17 - 12/21/87	227.2	01/01/88	0.031	0.003	
12/21 - 12/28/87	428.7	01/06/88	0.016	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
10/01 - 12/28/87	01/19/88	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 0S2(pCi.m-3)1ST QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
12/29/86-01/05/87	429.2	01/10/87	0.018	0.002	
01/05 - 01/09/87	241.2	01/17/87	0.009	0.002	
01/09 - 01/13/87	258.3	01/17/87	0.026	0.003	
01/13 - 01/19/87	352.8	01/23/87	0.018	0.002	
01/19 - 01/26/87	431.2	01/30/87	0.019	0.002	
01/26 - 01/30/87	253.9	02/06/87	0.009	0.002	
01/30 - 02/05/87	354.5	02/10/87	0.011	0.002	
02/05 - 02/11/87	366.0	02/17/87	0.016	0.002	
02/11 - 02/17/87	366.5	02/24/87	0.004	0.001	
02/17 - 02/23/87	366.8	03/01/87	0.010	0.002	
02/23 - 02/27/87	244.8	03/11/87	0.016	0.002	
02/27 - 03/05/87	368.6	03/12/87	0.032	0.003	
03/05 - 03/11/87	373.6	03/18/87	0.007	0.001	
03/11 - 03/17/87	358.6	03/24/87	0.007	0.001	
03/17 - 03/23/87	383.1	03/27/87	0.004	0.001	
03/23 - 03/27/87	232.5	04/01/87	0.009	0.002	
03/27 - 04/02/87	378.7	04/07/87	0.021	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITES

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
12/29/86-04/02/87	05/05/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION OS2(pCi.m-3)2ND QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
04/02 - 04/08/87	364.2	04/15/87	0.011	0.002	
04/08 - 04/14/87	361.4	04/17/87	0.017	0.002	
04/14 - 04/20/87	365.5	04/25/87	0.012	0.002	
04/20 - 04/24/87	233.8	04/30/87	0.020	0.003	
04/24 - 05/01/87	432.7	05/05/87	0.017	0.002	
05/01 - 05/06/87	304.6	05/11/87	0.010	0.002	
05/06 - 05/11/87	305.1	05/18/87	0.012	0.002	
05/11 - 05/15/87	253.4	05/20/87	0.009	0.002	
05/15 - 05/21/87	361.9	05/28/87	0.010	0.001	
05/21 - 05/28/87	422.8	06/02/87	0.010	0.001	
05/28 - 06/02/87	312.5	06/13/87	0.010	0.001	
06/02 - 06/09/87	413.6	06/14/87	0.011	0.001	
06/09 - 06/16/87	428.4	06/23/87	0.008	0.001	
06/16 - 06/22/87	371.4	06/26/87	0.005	0.001	
06/22 - 06/26/87	240.4	07/02/87	0.006	0.001	
06/26 - 07/01/87	316.8	07/07/87	0.011	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
04/02 - 07/01/87	07/24/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION OS2(pCi.m-3)3RD QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
07/01 - 07/08/87	420.5	07/17/87	0.004	0.001	
07/08 - 07/14/87	360.9	07/23/87	0.006	0.001	
07/14 - 07/20/87	372.4	07/30/87	0.005	0.001	
07/20 - 07/27/87	427.9	08/04/87	0.009	0.001	
07/27 - 08/03/87	444.5	08/12/87	0.008	0.001	
08/03 - 08/10/87	424.1	08/18/87	0.011	0.001	
08/10 - 08/14/87	241.7	08/23/87	0.009	0.002	
08/14 - 08/21/87	413.9	08/28/87	0.010	0.001	
08/21 - 08/24/87	200.9	09/02/87	0.013	0.002	
08/24 - 08/31/87	415.4	09/05/87	0.016	0.002	
08/31 - 09/04/87	241.9	09/11/87	0.014	0.002	
09/04 - 09/10/87	367.0	09/17/87	0.013	0.002	
09/10 - 09/17/87	387.1	09/25/87	0.015	0.002	
09/17 - 09/21/87	235.9	09/29/87	0.021	0.003	
09/21 - 09/25/87	247.1	09/30/87	0.023	0.003	
09/25 - 10/01/87	36.4 3/	10/05/87	0.024	0.009	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
07/01 - 10/01/87	10/14/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
3/ Power outage occurred during collection period.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION OS2(pCi.m-3)4TH QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
10/01 - 10/07/87	368.0	10/11/87	0.028	0.003	
10/07 - 10/13/87	369.1	10/24/87	0.028	0.003	
10/13 - 10/19/87	360.2	10/27/87	0.051	0.005	
10/19 - 10/26/87	440.4	10/31/87	0.025	0.003	
10/26 - 11/02/87	415.7	11/11/87	0.019	0.002	
11/02 - 11/06/87	244.8	11/14/87	0.009	0.002	
11/06 - 11/12/87	381.0	11/17/87	0.028	0.003	
11/12 - 11/18/87	351.7	12/08/87	0.012	0.002	
11/18 - 11/23/87	307.7	12/09/87	0.015	0.002	
11/23 - 11/30/87	416.9	12/10/87	0.018	0.002	
11/30 - 12/07/87	426.9	12/17/87	0.01	0.001	
12/07 - 12/11/87	189.5	12/23/87	0.004	0.002	
12/11 - 12/17/87	377.7	12/24/87	0.008	0.001	
12/17 - 12/21/87	228.0	01/01/88	0.033	0.004	
12/21 - 12/28/87	428.2	01/06/88	0.017	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
10/01 - 12/28/87	01/27/88	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 1S1(pCi.m-3)1ST QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
12/29/86-01/05/87	429.2	01/10/87	0.017	0.002	
01/05 - 01/09/87	240.9	01/17/87	0.010	0.002	
01/09 - 01/13/87	258.3	01/17/87	0.029	0.003	
01/13 - 01/19/87	352.5	01/24/87	0.016	0.002	
01/19 - 01/26/87	431.0	01/30/87	0.017	0.002	
01/26 - 01/30/87	253.9	02/06/87	0.008	0.001	
01/30 - 02/05/87	354.5	02/10/87	0.009	0.001	
02/05 - 02/11/87	366.0	02/17/87	0.014	0.002	
02/11 - 02/17/87	366.5	02/24/87	0.003	0.001	
02/17 - 02/23/87	366.5	03/01/87	0.008	0.001	
02/23 - 02/27/87	244.8	03/11/87	0.014	0.002	
02/27 - 03/05/87	368.3	03/12/87	0.027	0.003	
03/05 - 03/11/87	373.4	03/18/87	0.005	0.001	
03/11 - 03/17/87	358.6	03/24/87	0.005	0.001	
03/17 - 03/23/87	382.8	03/27/87	0.004	0.001	
03/23 - 03/27/87	232.3	04/01/87	0.009	0.002	
03/27 - 04/02/87	378.5	04/07/87	0.020	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITES

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
12/29/86-04/02/87	05/06/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 1S1(pCi.m-3)2ND QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
04/02 - 04/08/87	365.2	04/15/87	0.011	0.002	
04/08 - 04/14/87	361.2	04/17/87	0.013	0.002	
04/14 - 04/20/87	365.7	04/25/87	0.011	0.001	
04/20 - 04/24/87	232.5	04/30/87	0.021	0.003	
04/24 - 05/01/87	2/				
05/01 - 05/06/87	304.6	05/11/87	0.010	0.001	
05/06 - 05/11/87	305.4	05/18/87	0.018	0.002	
05/11 - 05/15/87	253.4	05/22/87	0.011	0.002	
05/15 - 05/21/87	361.4	05/28/87	0.012	0.002	
05/21 - 05/28/87	423.1	06/02/87	0.010	0.001	
05/28 - 06/02/87	312.3	06/13/87	0.011	0.002	
06/02 - 06/09/87	413.1	06/14/87	0.009	0.001	
06/09 - 06/16/87	428.4	06/23/87	0.010	0.001	
06/16 - 06/22/87	371.4	06/26/87	0.005	0.001	
06/22 - 06/26/87	240.4	07/02/87	0.005	0.001	
06/26 - 07/01/87	317.4	07/08/87	0.012	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
04/02 - 07/01/87	07/24/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected because the cartridge and filter were not placed in holder on last exchange.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 1S1(pCi.m-3)3RD QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
07/01 - 07/08/87	420.8	07/17/87	0.005	0.001	
07/08 - 07/14/87	360.9	07/23/87	0.006	0.001	
07/14 - 07/20/87	371.9	07/30/87	0.004	0.001	
07/20 - 07/27/87	427.9	08/04/87	0.009	0.001	
07/27 - 08/03/87	444.5	08/12/87	0.007	0.001	
08/03 - 08/10/87	424.8	08/18/87	0.010	0.001	
08/10 - 08/14/87	241.5	08/23/87	0.011	0.002	
08/14 - 08/21/87	413.9	08/28/87	0.010	0.001	
08/21 - 08/24/87	200.9	09/02/87	0.014	0.002	
08/24 - 08/31/87	415.4	09/05/87	0.014	0.002	
08/31 - 09/04/87	241.7	09/11/87	0.013	0.002	
09/04 - 09/10/87	367.5	09/18/87	0.011	0.002	
09/10 - 09/17/87	433.8	09/24/87	0.012	0.001	
09/17 - 09/21/87	235.1	10/01/87	0.025	0.003	
09/21 - 09/25/87	247.6	09/30/87	0.022	0.003	
09/25 - 10/01/87	369.1	10/05/87	0.013	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
07/01 - 10/01/87	10/15/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 1S1(pCi.m-3)4TH QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
10/01 - 10/07/87	369.3	10/11/87	0.034	0.003	
10/07 - 10/13/87	368.8	10/24/87	0.028	0.003	
10/13 - 10/19/87	360.2	10/27/87	0.046	0.005	
10/19 - 10/26/87	439.9	10/30/87	0.025	0.003	
10/26 - 11/02/87	415.9	11/11/87	0.018	0.002	
11/02 - 11/06/87	244.5	11/14/87	0.009	0.002	
11/06 - 11/12/87	375.7	11/17/87	0.022	0.002	
11/12 - 11/18/87	351.5	12/09/87	0.008	0.001	
11/18 - 11/23/87	307.4	12/09/87	0.017	0.002	
11/23 - 11/30/87	417.9	12/10/87	0.017	0.002	
11/30 - 12/07/87	425.6	12/17/87	0.008	0.001	
12/07 - 12/11/87	190.8	12/23/87	0.007	0.002	
12/11 - 12/17/87	377.5	12/24/87	0.009	0.001	
12/17 - 12/21/87	227.7	01/01/88	0.034	0.004	
12/21 - 12/28/87	427.9	01/06/88	0.016	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
10/01 - 12/28/87	01/27/88	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 5F1(pCi.m-3)1ST QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
12/29/86-01/05/87	426.1	01/10/87	0.025	0.003	
01/05 - 01/09/87	242.9	01/17/87	0.009	0.002	
01/09 - 01/13/87	260.0	01/19/87	0.034	0.003	
01/13 - 01/19/87	351.7	01/23/87	0.018	0.002	
01/19 - 01/26/87	429.4	01/29/87	0.025	0.003	
01/26 - 01/30/87	257.5	02/06/87	0.010	0.002	
01/30 - 02/05/87	355.1	02/09/87	0.012	0.002	
02/05 - 02/11/87	366.3	02/16/87	0.017	0.002	
02/11 - 02/17/87	367.0	02/24/87	0.005	0.001	
02/17 - 02/23/87	366.5	03/01/87	0.008	0.001	
02/23 - 02/27/87	243.2	03/10/87	0.014	0.002	
02/27 - 03/05/87	373.4	03/12/87	0.029	0.003	
03/05 - 03/11/87	379.0	03/19/87	0.008	0.001	
03/11 - 03/17/87	347.9	03/23/87	0.004	0.001	
03/17 - 03/23/87	387.9	03/26/87	0.006	0.001	
03/23 - 03/27/87	219.6	03/31/87	0.007	0.002	
03/27 - 04/02/87	370.6	04/07/87	0.019	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITES

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
12/29/86-04/02/87	05/04/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 5F1(pCi.m-3)2ND QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
04/02 - 04/08/87	378.2	04/15/87	0.009	0.001	
04/08 - 04/14/87	371.9	04/17/87	0.024	0.002	
04/14 - 04/20/87	361.9	04/24/87	0.014	0.002	
04/20 - 04/24/87	221.3	04/29/87	0.024	0.003	
04/24 - 05/01/87	431.2	05/04/87	0.017	0.002	
05/01 - 05/06/87	312.3	05/10/87	0.014	0.002	
05/06 - 05/11/87	296.0	05/19/87	0.011	0.002	
05/11 - 05/15/87	260.6	05/20/87	0.013	0.002	
05/15 - 05/21/87	339.5	05/28/87	0.007	0.001	
05/21 - 05/28/87	436.6	06/01/87	0.011	0.002	
05/28 - 06/02/87	305.6	06/13/87	0.011	0.001	
06/02 - 06/09/87	430.4	06/14/87	0.010	0.001	
06/09 - 06/16/87	421.5	06/23/87	0.008	0.001	
06/16 - 06/22/87	368.8	06/26/87	0.005	0.001	
06/22 - 06/26/87	244.0	07/02/87	0.004	0.001	
06/26 - 07/01/87	304.6	07/08/87	0.011	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
04/02 - 07/01/87	07/21/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 5F1(pCi.m-3)3RD QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
07/01 - 07/08/87	433.0	07/17/87	0.004	0.001	
07/08 - 07/14/87	360.4	07/24/87	0.007	0.001	
07/14 - 07/20/87	371.4	07/29/87	0.006	0.001	
07/20 - 07/27/87	427.6	08/03/87	0.007	0.001	
07/27 - 08/03/87	429.2	08/12/87	0.007	0.001	
08/03 - 08/10/87	444.9	08/17/87	0.009	0.001	
08/10 - 08/14/87	241.2	08/21/87	0.006	0.001	
08/14 - 08/21/87	414.9	08/28/87	0.007	0.001	
08/21 - 08/24/87	195.1	09/02/87	0.010	0.002	
08/24 - 08/31/87	411.9	09/05/87	0.012	0.002	
08/31 - 09/04/87	263.1	09/10/87	0.011	0.002	
09/04 - 09/10/87	350.0	09/17/87	0.009	0.002	
09/10 - 09/17/87	426.6	09/24/87	0.010	0.001	
09/17 - 09/21/87	230.2	09/29/87	0.014	0.002	
09/21 - 09/25/87	253.2	09/30/87	0.016	0.002	
09/25 - 10/01/87	360.4	10/05/87	0.009	0.001	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
07/01 - 10/01/87	10/12/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 5F1(pCi.m-3)4TH QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
10/01 - 10/07/87	368.0	10/11/87	0.035	0.003	
10/07 - 10/13/87	382.1	10/24/87	0.029	0.003	
10/13 - 10/19/87	345.6	10/27/87	0.050	0.005	
10/19 - 10/26/87	438.9	10/30/87	0.027	0.003	
10/26 - 11/02/87	436.1	11/11/87	0.017	0.002	
11/02 - 11/06/87	237.4	11/14/87	0.010	0.002	
11/06 - 11/12/87	366.0	11/17/87	0.026	0.003	
11/12 - 11/18/87	370.1	12/08/87	0.015	0.002	
11/18 - 11/23/87	290.6	12/11/87	0.015	0.002	
11/23 - 11/30/87	420.3	12/13/87	0.022	0.002	
11/30 - 12/07/87	407.5	12/16/87	0.010	0.001	
12/07 - 12/11/87	246.0	12/22/87	0.005	0.001	
12/11 - 12/17/87	373.9	12/23/87	0.008	0.001	
12/17 - 12/21/87	226.9	01/01/88	0.031	0.003	
12/21 - 12/28/87	427.6	01/06/88	0.020	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
10/01 - 12/28/87	01/19/88	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 7D1(pCi.m-3)1ST QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
12/29/86-01/05/87	429.2	01/10/87	0.018	0.002	
01/05 - 01/09/87	240.9	01/17/87	0.010	0.002	
01/09 - 01/13/87	259.0	01/17/87	0.016	0.002	
01/13 - 01/19/87	351.9	01/23/87	0.016	0.002	
01/19 - 01/26/87	434.0	01/29/87	0.022	0.002	
01/26 - 01/30/87	252.9	02/06/87	0.010	0.002	
01/30 - 02/05/87	355.1	02/10/87	0.011	0.002	
02/05 - 02/11/87	366.3	02/16/87	0.015	0.002	
02/11 - 02/17/87	366.0	02/24/87	0.005	0.001	
02/17 - 02/23/87	366.5	03/01/87	0.009	0.001	
02/23 - 02/27/87	244.3	03/11/87	0.012	0.002	
02/27 - 03/05/87	368.6	03/12/87	0.031	0.003	
03/05 - 03/11/87	373.1	03/18/87	0.009	0.001	
03/11 - 03/17/87	359.6	03/25/87	0.007	0.001	
03/17 - 03/23/87	382.8	03/26/87	0.004	0.001	
03/23 - 03/27/87	224.1	04/01/87	0.008	0.002	
03/27 - 04/02/87	385.1	04/07/87	0.023	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITES

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
12/29/86-04/02/87	05/04/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 7D1(pCi.m-3)2ND QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
04/02 - 04/08/87	371.4	04/15/87	0.008	0.001	
04/08 - 04/14/87	2/				
04/14 - 04/20/87	365.7	04/24/87	0.013	0.002	
04/20 - 04/24/87	230.3	04/30/87	0.023	0.003	
04/24 - 05/01/87	436.3	05/04/87	0.016	0.002	
05/01 - 05/06/87	305.1	05/10/87	0.010	0.002	
05/06 - 05/11/87	303.4	05/19/87	0.010	0.002	
05/11 - 05/15/87	257.2	05/20/87	0.012	0.002	
05/15 - 05/21/87	340.0	05/28/87	0.008	0.001	
05/21 - 05/28/87	444.7	06/01/87	0.008	0.001	
05/28 - 06/02/87	314.3	06/14/87	0.013	0.002	
06/02 - 06/09/87	411.9	06/14/87	0.010	0.001	
06/09 - 06/16/87	426.1	06/23/87	0.008	0.001	
06/16 - 06/22/87	369.8	06/26/87	0.005	0.001	
06/22 - 06/26/87	241.5	07/02/87	0.005	0.001	
06/26 - 07/01/87	315.6	07/07/87	0.010	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
04/02 - 07/01/87	07/21/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ Sampler not turned on after exchange on 4/8/87
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 7D1(pCi.m-3)3RD QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
07/01 - 07/08/87	421.8	07/17/87	0.004	0.001	
07/08 - 07/14/87	360.9	07/23/87	0.005	0.001	
07/14 - 07/20/87	371.6	07/29/87	0.006	0.001	
07/20 - 07/27/87	427.4	08/03/87	0.009	0.001	
07/27 - 08/03/87	444.2	08/12/87	0.008	0.001	
08/03 - 08/10/87	428.2	08/17/87	0.010	0.001	
08/10 - 08/14/87	241.2	08/21/87	0.010	0.002	
08/14 - 08/21/87	414.4	08/28/87	0.009	0.001	
08/21 - 08/24/87	197.4	09/01/87	0.013	0.002	
08/24 - 08/31/87	411.1	09/05/87	0.017	0.002	
08/31 - 09/04/87	257.8	09/10/87	0.014	0.002	
09/04 - 09/10/87	355.3	09/17/87	0.013	0.002	
09/10 - 09/17/87	436.6	09/24/87	0.012	0.001	
09/17 - 09/21/87	232.0	09/29/87	0.020	0.003	
09/21 - 09/25/87	250.6	09/30/87	0.023	0.003	
09/25 - 10/01/87	362.4	10/05/87	0.014	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
07/01 - 10/01/87	10/13/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 7D1(pCi.m-3)4TH QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
10/01 - 10/07/87	367.5	10/11/87	0.035	0.003	
10/07 - 10/13/87	378.0	10/24/87	0.026	0.003	
10/13 - 10/19/87	356.1	10/27/87	0.047	0.005	
10/19 - 10/26/87	440.4	10/30/87	0.026	0.003	
10/26 - 11/02/87	421.0	11/11/87	0.017	0.002	
11/02 - 11/06/87	244.8	11/14/87	0.010	0.002	
11/06 - 11/12/87	373.9	11/17/87	0.027	0.003	
11/12 - 11/18/87	368.0	12/08/87	0.013	0.002	
11/18 - 11/23/87	304.4	12/09/87	0.015	0.002	
11/23 - 11/30/87	414.9	12/09/87	0.015	0.002	
11/30 - 12/07/87	425.4	12/16/87	0.010	0.001	
12/07 - 12/11/87	245.8	12/22/87	0.005	0.001	
12/11 - 12/17/87	367.0	12/23/87	0.007	0.001	
12/17 - 12/21/87	223.9	01/01/88	0.033	0.004	
12/21 - 12/28/87	427.6	01/06/88	0.021	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
10/01 - 12/28/87	01/25/88	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 8S1(pCi.m-3)1ST QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
12/29/86-01/05/87	428.9	01/10/87	0.020	0.002	
01/05 - 01/09/87	240.9	01/17/87	0.009	0.002	
01/09 - 01/13/87	258.8	01/17/87	0.026	0.003	
01/13 - 01/19/87	351.9	01/23/87	0.017	0.002	
01/19 - 01/26/87	433.8	01/30/87	0.024	0.002	
01/26 - 01/30/87	253.9	02/06/87	0.008	0.001	
01/30 - 02/05/87	354.3	02/10/87	0.011	0.001	
02/05 - 02/11/87	366.3	02/17/87	0.015	0.002	
02/11 - 02/17/87	366.5	02/24/87	0.006	0.001	
02/17 - 02/23/87	366.5	03/01/87	0.009	0.001	
02/23 - 02/27/87	244.3	03/11/87	0.013	0.002	
02/27 - 03/05/87	368.8	03/12/87	0.030	0.003	
03/05 - 03/11/87	372.9	03/18/87	0.008	0.001	
03/11 - 03/17/87	359.1	03/24/87	0.005	0.001	
03/17 - 03/23/87	383.1	03/27/87	0.005	0.001	
03/23 - 03/27/87	232.5	04/01/87	0.008	0.002	
03/27 - 04/02/87	380.8	04/07/87	0.020	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITES

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
12/29/86-04/02/87	05/05/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 8S1(pCi.m-3)2ND QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
04/02 - 04/08/87	364.7	04/15/87	0.009	0.001	
04/08 - 04/14/87	360.2	04/17/87	0.018	0.002	
04/14 - 04/20/87	365.7	04/25/87	0.014	0.002	
04/20 - 04/24/87	232.3	04/29/87	0.025	0.003	
04/24 - 05/01/87	434.5	05/04/87	0.017	0.002	
05/01 - 05/06/87	303.6	05/10/87	0.014	0.002	
05/06 - 05/11/87	303.9	05/19/87	0.011	0.002	
05/11 - 05/15/87	254.9	05/20/87	0.013	0.002	
05/15 - 05/21/87	360.4	05/28/87	0.011	0.002	
05/21 - 05/28/87	423.8	06/02/87	0.010	0.001	
05/28 - 06/02/87	313.3	06/13/87	0.015	0.002	
06/02 - 06/09/87	412.4	06/15/87	0.024	0.002	
06/09 - 06/16/87	425.1	06/23/87	0.010	0.001	
06/16 - 06/22/87	371.1	06/26/87	0.006	0.001	
06/22 - 06/26/87	240.2	07/02/87	0.005	0.001	
06/26 - 07/01/87	319.9	07/07/87	0.013	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)	
04/02 - 07/01/87	07/23/87	58Co	1.70E-3 ±	6.68E-4

GAMMA ACTIVITY ON INDIVIDUAL FILTER

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)	
06/02 - 06/09/87	06/16/87	54Mn	1.46E-3 ±	8.65E-4
		58Co	2.25E-2 ±	2.12E-3
		60Co	3.17E-3 ±	1.11E-3
		95Zr	3.23E-3 ±	1.71E-3
		95Nb	4.58E-3 ±	1.38E-3

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE.B3/dj12

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 8S1(pCi.m-3)3RD QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
07/01 - 07/08/87	418.0	07/17/87	0.004	0.001	
07/08 - 07/14/87	360.4	07/23/87	0.005	0.001	
07/14 - 07/20/87	371.9	07/29/87	0.005	0.001	
07/20 - 07/27/87	420.0	08/03/87	0.009	0.001	
07/27 - 08/03/87	444.2	08/12/87	0.008	0.001	
08/03 - 08/10/87	426.4	08/18/87	0.010	0.001	
08/10 - 08/14/87	241.2	08/22/87	0.010	0.002	
08/14 - 08/21/87	414.1	08/28/87	0.009	0.001	
08/21 - 08/24/87	199.9	09/01/87	0.012	0.002	
08/24 - 08/31/87	411.1	09/05/87	0.017	0.002	
08/31 - 09/04/87	251.9	09/11/87	0.016	0.002	
09/04 - 09/10/87	361.2	09/17/87	0.011	0.002	
09/10 - 09/17/87	436.0	09/24/87	0.013	0.002	
09/17 - 09/21/87	233.8	09/29/87	0.023	0.003	
09/21 - 09/25/87	248.8	09/30/87	0.023	0.003	
09/25 - 10/01/87	365.5	10/05/87	0.015	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
07/01 - 10/01/87	10/13/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 8S1(pCi.m-3)4TH QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
10/01 - 10/07/87	369.8	10/11/87	0.033	0.003	
10/07 - 10/13/87	372.6	10/24/87	0.031	0.003	
10/13 - 10/19/87	357.6	10/27/87	0.050	0.005	
10/19 - 10/26/87	440.4	10/30/87	0.027	0.003	
10/26 - 11/02/87	418.7	11/10/87	0.018	0.002	
11/02 - 11/06/87	245.0	11/14/87	0.009	0.002	
11/06 - 11/12/87	377.0	11/17/87	0.024	0.003	
11/12 - 11/18/87	366.0	12/08/87	0.013	0.002	
11/18 - 11/23/87	306.4	12/09/87	0.014	0.002	
11/23 - 11/30/87	415.4	12/09/87	0.017	0.002	
11/30 - 12/07/87	427.9	12/16/87	0.008	0.001	
12/07 - 12/11/87	238.9	12/26/87	0.007	0.001	
12/11 - 12/17/87	380.0	12/23/87	0.008	0.001	
12/17 - 12/21/87	225.7	01/01/88	0.032	0.003	
12/21 - 12/28/87	427.9	01/06/88	0.016	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
10/01 - 12/28/87	01/25/88	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 8S2(pCi.m-3)1ST QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN[1]/ I-131
12/29/86-01/05/87	428.9	01/10/87	0.016	0.002	
01/05 - 01/09/87	240.9	01/17/87	0.010	0.002	
01/09 - 01/13/87	259.0	01/17/87	0.027	0.003	
01/13 - 01/19/87	351.9	01/23/87	0.016	0.002	
01/19 - 01/26/87	434.0	01/30/87	0.017	0.002	
01/26 - 01/30/87	253.9	02/06/87	0.009	0.002	
01/30 - 02/05/87	354.3	02/10/87	0.012	0.002	
02/05 - 02/11/87	366.3	02/17/87	0.015	0.002	
02/11 - 02/17/87	366.8	02/24/87	0.005	0.001	
02/17 - 02/23/87	366.5	03/01/87	0.008	0.001	
02/23 - 02/27/87	244.5	03/11/87	0.013	0.002	
02/27 - 03/05/87	368.8	03/12/87	0.030	0.003	
03/05 - 03/11/87	373.1	03/18/87	0.009	0.001	
03/11 - 03/17/87	359.1	03/24/87	0.005	0.001	
03/17 - 03/23/87	384.9	03/27/87	0.004	0.001	
03/23 - 03/27/87	231.0	04/02/87	0.011	0.002	
03/27 - 04/02/87	377.0	04/07/87	0.021	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITES

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
12/29/86-04/02/87	05/05/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 8S2(pCi.m-3)2ND QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
04/02 - 04/08/87	369.3	04/15/87	0.007	0.001	
04/08 - 04/14/87	360.2	04/17/87	0.017	0.002	
04/14 - 04/20/87	365.7	04/25/87	0.012	0.002	
04/20 - 04/24/87	231.8	04/29/87	0.020	0.003	
04/24 - 05/01/87	435.0	05/05/87	0.015	0.002	
05/01 - 05/06/87	305.4	05/10/87	0.019	0.002	
05/06 - 05/11/87	301.6	05/19/87	0.009	0.002	
05/11 - 05/15/87	255.7	05/20/87	0.009	0.002	
05/15 - 05/21/87	359.9	05/28/87	0.010	0.002	
05/21 - 05/28/87	424.6	06/02/87	0.009	0.001	
05/28 - 06/02/87	313.5	06/13/87	0.009	0.001	
06/02 - 06/09/87	412.4	06/14/87	0.014	0.002	
06/09 - 06/16/87	427.6	06/22/87	0.010	0.001	
06/16 - 06/22/87	373.4	07/16/87	0.005	0.001	
06/22 - 06/26/87	238.4	07/02/87	0.004	0.001	
06/26 - 07/01/87	316.1	07/07/87	0.011	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)	
04/02 - 07/01/87	07/23/87	58Co	8.92E-4 +	2.81E-4

GAMMA ACTIVITY ON INDIVIDUAL FILTER

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)	
05/01 - 05/06/87	05/13/87	58Co	1.59E-2 ±	2.29E-3
		60Co	3.94E-3 ±	1.93E-3

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 8S2(pCi.m-3)3RD QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
07/01 - 07/08/87	422.0	07/17/87	0.004	0.001	
07/08 - 07/14/87	360.4	07/23/87	0.005	0.001	
07/14 - 07/20/87	371.9	07/30/87	0.005	0.001	
07/20 - 07/27/87	427.6	08/04/87	0.007	0.001	
07/27 - 08/03/87	444.5	08/14/87	0.007	0.001	
08/03 - 08/10/87	426.6	08/18/87	0.009	0.001	
08/10 - 08/14/87	241.5	08/22/87	0.011	0.002	
08/14 - 08/21/87	414.4	08/28/87	0.009	0.001	
08/21 - 08/24/87	198.9	09/02/87	0.011	0.002	
08/24 - 08/31/87	411.1	09/05/87	0.015	0.002	
08/31 - 09/04/87	252.4	09/10/87	0.014	0.002	
09/04 - 09/10/87	360.7	09/19/87	0.014	0.002	
09/10 - 09/17/87	436.6	09/24/87	0.011	0.001	
09/17 - 09/21/87	233.3	09/29/87	0.022	0.003	
09/21 - 09/25/87	248.1	09/30/87	0.022	0.003	
09/25 - 10/01/87	364.7	10/05/87	0.013	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
07/01 - 10/01/87	10/14/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 8S2(pCi.m-3)4TH QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
10/01 - 10/07/87	370.3	10/11/87	0.030	0.003	
10/07 - 10/13/87	373.4	10/24/87	0.024	0.003	
10/13 - 10/19/87	357.6	10/27/87	0.044	0.004	
10/19 - 10/26/87	440.4	10/30/87	0.025	0.003	
10/26 - 11/02/87	419.8	11/11/87	0.016	0.002	
11/02 - 11/06/87	244.5	11/14/87	0.009	0.002	
11/06 - 11/12/87	376.5	11/17/87	0.024	0.003	
11/12 - 11/18/87	366.5	12/08/87	0.011	0.002	
11/18 - 11/23/87	306.2	12/09/87	0.017	0.002	
11/23 - 11/30/87	415.4	12/10/87	0.016	0.002	
11/30 - 12/07/87	427.9	12/16/87	0.009	0.001	
12/07 - 12/11/87	238.9	12/23/87	0.005	0.002	
12/11 - 12/17/87	380.8	12/27/87	0.010	0.001	
12/17 - 12/21/87	225.2	01/01/88	0.031	0.003	
12/21 - 12/28/87	427.9	01/06/88	0.016	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
10/01 - 12/28/87	01/26/88	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 2F2(pCi.m-3)1ST QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
12/29/86-01/02/87	244.5	01/10/87	0.035	0.004	
01/02 - 01/08/87	366.3	01/17/87	0.010	0.002	
01/08 - 01/14/87	366.5	01/19/87	0.031	0.003	
01/14 - 01/20/87	370.6	01/24/87	0.023	0.003	
01/20 - 01/26/87	363.5	01/29/87	0.023	0.003	
01/26 - 01/30/87	244.5	02/03/87	0.010	0.002	
01/30 - 02/05/87	366.5	02/09/87	0.011	0.002	
02/05 - 02/11/87	366.0	02/16/87	0.017	0.002	
02/11 - 02/17/87	367.5	02/23/87	0.004	0.001	
02/17 - 02/23/87	366.5	03/01/87	0.009	0.002	
02/23 - 02/27/87	244.5	03/10/87	0.015	0.002	
02/27 - 03/05/87	366.8	03/12/87	0.037	0.004	
03/05 - 03/11/87	368.0	03/13/87	0.021	0.002	
03/11 - 03/17/87	365.5	03/23/87	0.004	0.001	
03/17 - 03/23/87	367.3	03/26/87	0.005	0.001	
03/23 - 03/27/87	244.0	03/31/87	0.008	0.002	
03/27 - 04/02/87	366.8	04/07/87	0.022	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITES

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
12/29/86-04/02/87	05/04/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 2F2(pCi.m-3)2ND QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
04/02 - 04/08/87	364.7	04/14/87	0.008	0.001	
04/08 - 04/14/87	366.8	04/17/87	0.014	0.002	
04/14 - 04/20/87	366.8	04/25/87	0.009	0.001	
04/20 - 04/24/87	244.3	04/29/87	0.026	0.003	
04/24 - 04/30/87	366.8	05/04/87	0.017	0.002	
04/30 - 05/06/87	367.0	05/11/87	0.010	0.001	
05/06 - 05/12/87	367.0	05/18/87	0.012	0.002	
05/12 - 05/18/87	365.0	05/27/87	0.009	0.001	
05/18 - 05/22/87	245.8	05/28/87	0.010	0.002	
05/22 - 05/28/87	367.0	06/02/87	0.012	0.002	
05/28 - 06/03/87	366.8	06/13/87	0.009	0.001	
06/03 - 06/10/87	428.2	06/14/87	0.013	0.001	
06/10 - 06/17/87	429.9	06/23/87	0.010	0.001	
06/17 - 06/24/87	426.4	06/29/87	0.006	0.001	
06/24 - 07/01/87	427.9	07/07/87	0.010	0.001	

GAMMA ACTIVITY ON FILTER COMPOSITES

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
04/02 - 07/01/87	07/21/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 2F2(pCi.m-3)3RD QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
07/01 - 07/08/87	427.6	07/16/87	0.004	0.001	
07/08 - 07/15/87	427.1	07/23/87	0.006	0.001	
07/15 - 07/22/87	427.9	07/30/87	0.006	0.001	
07/22 - 07/29/87	427.9	08/04/87	0.007	0.001	
07/29 - 08/05/87	429.2	08/12/87	0.008	0.001	
08/05 - 08/12/87	427.6	08/18/87	0.009	0.001	
08/12 - 08/19/87	428.1	08/27/87	0.010	0.001	
08/19 - 08/26/87	428.2	09/02/87	0.015	0.002	
08/26 - 09/02/87	428.7	09/05/87	0.018	0.002	
09/02 - 09/09/87	427.4	09/17/87	0.011	0.002	
09/09 - 09/16/87	428.2	09/23/87	0.012	0.001	
09/16 - 09/23/87	427.1	09/30/87	0.022	0.002	
09/23 - 09/30/87	429.2	10/05/87	0.014	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
07/01 - 09/30/87	10/12/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION 2F2(pCi.m-3)4TH QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
09/30 - 10/07/87	445.7	10/11/87	0.029	0.003	
10/07 - 10/14/87	410.1	10/24/87	0.029	0.003	
10/14 - 10/21/87	428.7	10/27/87	0.052	0.005	
10/21 - 10/28/87	427.1	10/31/87	0.019	0.002	
10/28 - 11/04/87	428.7	11/11/87	0.017	0.002	
11/04 - 11/11/87	441.7	11/17/87	0.019	0.002	
11/11 - 11/18/87	413.4	11/22/87	0.016	0.002	
11/18 - 11/25/87	429.2	12/09/87	0.015	0.002	
11/25 - 12/02/87	426.9	12/10/87	0.017	0.002	
12/02 - 12/09/87	427.9	12/17/87	0.007	0.001	
12/09 - 12/16/87	428.4	12/23/87	0.008	0.001	
12/16 - 12/23/87	427.6	01/01/88	0.027	0.003	
12/23 - 12/30/87	430.2	01/06/88	0.011	0.001	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
09/30 - 12/30/87	01/19/88	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION SM (pCi.m-3)1ST QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
01/02 - 01/09/87	427.6	01/16/87	0.012	0.002	
01/09 - 01/20/87	674.5	01/24/87	0.022	0.002	
01/20 - 01/23/87	181.1	01/29/87	0.032	0.004	
01/23 - 01/30/87	427.9	02/04/87	0.010	0.001	
01/30 - 02/06/87	428.2	02/16/87	0.015	0.002	
02/06 - 02/17/87	671.6	02/23/87	0.009	0.001	
02/17 - 02/20/87	183.4	02/28/87	0.006	0.002	
02/20 - 02/27/87	427.9	03/11/87	0.013	0.002	
02/27 - 03/06/87	428.4	03/12/87	0.030	0.003	
03/06 - 03/12/87	389.7	03/17/87	0.007	0.001	
03/12 - 03/20/87	467.4	03/26/87	0.005	0.001	
03/20 - 03/27/87	426.6	04/01/87	0.006	0.001	
03/27 - 04/03/87	430.4	04/07/87	0.024	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITES

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
01/02 - 04/03/87	05/06/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION SM (pCi.m-3)2ND QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN[1]/ I-131
04/03 - 04/10/87	425.4	04/15/87	0.009	0.001	
04/10 - 04/17/87	427.9	04/24/87	0.019	0.002	
04/17 - 04/24/87	427.9	04/30/87	0.017	0.002	
04/24 - 05/01/87	427.9	05/05/87	0.018	0.002	
05/01 - 05/08/87	427.9	05/18/87	0.014	0.002	
05/08 - 05/15/87	427.4	05/21/87	0.013	0.002	
05/15 - 05/22/87	427.9	05/28/87	0.010	0.001	
05/22 - 05/29/87	427.9	06/02/87	0.010	0.001	
05/29 - 06/05/87	427.9	06/14/87	0.011	0.001	
06/05 - 06/12/87	427.9	07/17/87	0.009	0.001	
06/12 - 06/19/87	429.9	07/15/87	0.009	0.001	
06/19 - 06/26/87	426.1	07/02/87	0.005	0.001	
06/26 - 07/06/87	611.5	07/09/87	0.010	0.001	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
04/03 - 07/06/87	07/27/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION SM (pCi.m-3)3RD QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN[1]/ I-131
07/06 - 07/10/87	244.5	07/18/87	0.004	0.001	
07/10 - 07/17/87	427.1	07/30/87	0.007	0.001	
07/17 - 07/24/87	426.6	08/03/87	0.007	0.001	
07/24 - 07/31/87	430.4	08/11/87	0.009	0.001	
07/31 - 08/07/87	431.2	08/17/87	0.010	0.001	
08/07 - 08/14/87	421.8	08/27/87	0.012	0.002	
08/14 - 08/21/87	431.7	08/27/87	0.009	0.001	
08/21 - 08/28/87	444.5	09/18/87	0.015	0.002	
08/28 - 09/04/87	420.3	09/18/87	0.043	0.004	
09/04 - 09/11/87	417.5	09/18/87	0.014	0.002	
09/11 - 09/18/87	427.9	09/24/87	0.012	0.001	
09/18 - 09/25/87	427.9	09/30/87	0.023	0.002	
09/25 - 10/02/87	427.9	10/05/87	0.017	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
07/06 - 10/02/87	10/16/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION SM (pCi.m-3)4TH QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
10/02 - 10/09/87	428.2	10/14/87	0.034	0.003	
10/09 - 10/16/87	428.7	10/27/87	0.034	0.003	
10/16 - 10/23/87	427.9	10/27/87	0.040	0.004	
10/23 - 10/30/87	427.9	11/11/87	0.016	0.002	
10/30 - 11/06/87	427.4	11/12/87	0.013	0.002	
11/06 - 11/13/87	427.9	11/18/87	0.025	0.003	
11/13 - 11/20/87	426.6	12/09/87	0.018	0.002	
11/20 - 12/01/87	682.9	12/10/87	0.016	0.002	
12/01 - 12/04/87	233.8	12/10/87	0.009	0.002	
12/04 - 12/10/87	367.3	12/17/87	0.005	0.001	
12/10 - 12/18/87	500.5	12/24/87	0.009	0.001	
12/18 - 12/24/87	360.9	01/01/88	0.024	0.003	
12/24 - 12/31/87	427.1	01/14/88	0.013	0.001	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
10/02 - 12/31/87	02/01/88	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION SV (pCi.m-3)1ST QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
12/30/86-01/06/87	432.9	01/16/87	0.022	0.002	
01/06 - 01/13/87	422.8	01/24/87	0.019	0.002	
01/13 - 01/20/87	430.4	01/29/87	0.020	0.002	
01/20 - 01/27/87	420.3	02/04/87	0.024	0.003	
01/27 - 02/04/87	491.6	02/16/87	0.015	0.002	
02/04 - 02/10/87	369.3	02/23/87	0.021	0.002	
02/10 - 02/17/87	415.2	02/28/87	0.006	0.001	
02/17 - 02/24/87	435.5	03/11/87	0.013	0.002	
02/24 - 03/03/87	420.3	03/12/87	0.029	0.003	
03/03 - 03/10/87	427.9	03/18/87	0.015	0.002	
03/10 - 03/18/87	483.9	03/26/87	0.006	0.001	
03/18 - 03/24/87	369.3	04/01/87	0.006	0.001	
03/24 - 03/31/87	427.9	04/07/87	0.020	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITES

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
12/30/86-03/31/87	05/08/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION SV (pCi.m-3)2ND QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
03/31 - 04/07/87	422.8	04/15/87	0.012	0.002	
04/07 - 04/14/87	417.7	04/24/87	0.016	0.002	
04/14 - 04/21/87	430.4	04/30/87	0.018	0.002	
04/21 - 04/30/87	545.1	05/05/87	0.020	0.002	
04/30 - 05/05/87	298.0	05/18/87	0.013	0.002	
05/05 - 05/12/87	428.4	05/21/87	0.019	0.002	
05/12 - 05/19/87	427.9	05/28/87	0.015	0.002	
05/19 - 05/26/87	427.9	06/02/87	0.014	0.002	
05/26 - 06/04/87	555.3	06/14/87	0.012	0.001	
06/04 - 06/08/87	221.6	07/18/87	0.012	0.002	
06/08 - 06/16/87	494.1	06/26/87	0.006	0.001	
06/16 - 06/23/87	425.4	07/02/87	0.007	0.001	
06/23 - 06/30/87	417.7	07/09/87	0.013	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
03/31 - 06/30/87	07/27/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION SV (pCi.m-3)3RD QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
06/30 - 07/07/87	435.5	07/18/87	0.006	0.001	
07/07 - 07/14/87	420.3	07/30/87	0.009	0.001	
07/14 - 07/20/87	427.9	08/12/87	0.008	0.001	
07/20 - 07/28/87	433.0	08/12/87	0.011	0.001	
07/28 - 08/04/87	420.3	08/17/87	0.013	0.002	
08/04 - 08/14/87	433.5	08/27/87	0.020	0.002	
08/14 - 08/18/87	239.4	08/27/87	0.009	0.002	
08/18 - 09/03/87	854.5	09/18/87	0.021	0.002	
09/03 - 09/08/87	297.2	09/18/87	0.015	0.002	
09/08 - 09/15/87	427.9	09/24/87	0.016	0.002	
09/15 - 09/22/87	430.4	09/30/87	0.021	0.002	
09/22 - 09/29/87	425.4	10/05/87	0.024	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
06/30 - 09/29/87	10/16/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION SV (pCi.m-3)4TH QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN 1/ I-131
09/29 - 10/06/87	425.4	10/14/87	0.035	0.004	
10/06 - 10/13/87	430.4	10/27/87	0.031	0.003	
10/13 - 10/20/87	422.8	10/27/87	0.052	0.005	
10/20 - 10/28/87	491.6	11/11/87	0.018	0.002	
10/28 - 11/03/87	364.2	11/12/87	0.015	0.002	
11/03 - 11/10/87	427.9	11/18/87	0.018	0.002	
11/10 - 11/17/87	427.9	12/09/87	0.026	0.003	
11/17 - 11/24/87	427.9	12/10/87	0.017	0.002	
11/24 - 12/01/87	427.9	12/10/87	0.020	0.002	
12/01 - 12/08/87	425.4	12/17/87	0.009	0.001	
12/08 - 12/22/87	840.5	01/14/88	0.019	0.002	
12/22 - 12/29/87	427.9	01/14/88	0.010	0.001	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
09/29 - 12/29/87	02/01/88	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION LO (pCi.m-3)1ST QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
12/29/86-01/05/87	424.8	01/16/87	0.005	0.001	
01/05 - 01/12/87	426.1	01/24/87	0.029	0.003	
01/12 - 01/20/87	496.9	01/29/87	0.022	0.002	
01/20 - 01/26/87	364.2	02/04/87	0.022	0.002	
01/26 - 02/02/87	420.3	02/16/87	0.011	0.001	
02/02 - 02/09/87	436.8	02/23/87	0.016	0.002	
02/09 - 02/17/87	483.2	03/01/87	0.007	0.001	
02/17 - 02/23/87	366.8	03/11/87	0.016	0.002	
02/23 - 03/02/87	426.1	03/12/87	0.023	0.002	
03/02 - 03/09/87	431.0	03/18/87	0.016	0.002	
03/09 - 03/16/87	433.0	03/26/87	0.005	0.001	
03/16 - 03/23/87	423.6	04/01/87	0.004	0.001	
03/23 - 03/31/87	426.6	04/07/87	0.017	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITES

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
12/29/86-03/31/87	05/08/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION LO (pCi.m-3)2ND QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
03/31 - 04/03/87	183.4	04/15/87	0.021	0.003	
04/06 - 04/13/87	427.1	04/24/87	0.010	0.001	
04/13 - 04/20/87	435.5	04/30/87	0.014	0.002	
04/20 - 04/27/87	412.6	05/05/87	0.018	0.002	
04/27 - 05/04/87 2/	430.4	05/18/87	0.010	0.001	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
03/31 - 05/04/87	07/27/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure from 05/04/87 to 07/29/87.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION LO (pCi.m-3)3RD QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
07/29 - 08/12/87	846.9	08/27/87	0.009	0.001	
08/12 - 08/18/87	441.4	08/27/87	0.009	0.001	
08/18 - 08/24/87	359.1	09/18/87	0.008	0.001	
08/24 - 09/01/87	488.5	09/18/87	0.013	0:002	
09/01 - 09/08/87	425.3	09/18/87	0.011	0.002	
09/08 - 09/16/87	497.9	09/24/87	0.010	0.001	
09/16 - 09/23/87	427.9	09/30/87	0.022	0.002	
09/23 - 09/28/87	314.6	10/05/87	0.016	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
07/29 - 09/28/87	10/19/87	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-3

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
AIRBORNE RADIOACTIVITY
STATION LO (pCi.m-3)4TH QUARTER

COLLECTION PERIOD	VOLUME (m3)	COUNTING DATE	GROSS BETA ACTIVITY	2SIGMA	GAMMA SCAN1/ I-131
09/28 - 10/05/87	424.1	10/14/87	0.029	0.003	
10/05 - 10/12/87	424.1	10/27/87	0.026	0.003	
10/12 - 10/19/87	434.3	10/27/87	0.039	0.004	
10/19 - 10/26/87	429.2	11/11/87	0.026	0.003	
10/26 - 11/02/87	430.4	11/12/87	0.019	0.002	
11/02 - 11/09/87	421.5	11/18/87	0.015	0.002	
11/09 - 11/16/87	431.7	12/09/87	0.024	0.003	
11/16 - 11/23/87	427.9	12/10/87	0.016	0.002	
11/23 - 11/30/87	430.4	12/10/87	0.018	0.002	
11/30 - 12/07/87	430.4	12/17/87	0.008	0.001	
12/07 - 12/14/87	423.6	12/24/87	0.004	0.001	
12/14 - 12/21/87	423.3	01/01/88	0.021	0.002	
12/21 - 12/28/87	427.6	01/14/88	0.021	0.002	

GAMMA ACTIVITY ON FILTER COMPOSITE

COLLECTION PERIOD	COUNTING DATE	NUCLIDE	CONCENTRATION (pCi.m-3)
09/28 - 12/28/87	02/02/88	ND	

1/ Unless specified, Iodine-131 was not detected.
2/ No sample collected due to equipment failure.
ND Radionuclides of interest other than naturally occurring were not detected.

TABLE B-4

DIABLO CANYON POWER PLANT 1987
ENVIRONMENTAL DOSIMETRY

STATION	QUARTERLY TOTALS (mR) 1ST QTR	2ND QTR	3RD QTR	4TH QTR	ANNUAL TOTAL (mR)	MONTHLY AVERAGE (mR)	±2σ%2/
MT1	20.11	18.61	19.27	20.29	78.28	6.52	21
WN1	13.41	12.01	18.39	13.51	57.32	4.78	78
ØS1	21.16	18.73	25.52	20.05	85.46	7.12	60
5S1	23.40	20.38	27.68	22.95	94.41	7.87	57
6S1	14.67	13.52	19.29	14.80	62.28	5.19	79
8S1	16.87	14.87	15.89	17.62	65.25	5.44	30
8S2	20.55	19.07	19.57	20.19	79.38	6.62	25
5S3	19.24	16.93	24.27	19.33	79.77	6.65	61
2F2	15.39	12.64	13.14	15.66	56.83	4.74	32
2D1	13.59	14.11	15.16	12.94	55.80	4.65	42
4D1	20.84	14.93	20.81	16.05	72.63	6.05	80
5F1	22.46	18.45	18.36	20.49	79.76	6.65	25
1A1	12.84	12.04	17.84	13.58	56.30	4.69	80
7D2	20.10	15.94	16.57	18.66	71.27	5.94	46
7G2	27.68	19.61	17.54	18.71	83.54	6.96	78
7C1	18.22	16.60	18.14	19.00	71.96	6.00	29
7F1	16.60	15.53	16.49	17.39	66.01	5.50	27
ØB1	11.14	9.72	10.20	11.80	42.86	3.57	34
7D1	13.61	12.06	12.66	14.13	52.46	4.37	34
4C1	11.92	12.31	10.66	12.76	47.65	3.97	46
ØS2	18.34	15.44	16.64	18.70	69.12	5.76	33
1S1	17.08	15.89	16.72	17.57	67.26	5.61	30
2S1	17.93	15.95	16.46	17.78	68.12	5.68	26
3S1	21.39	19.15	19.95	21.20	81.69	6.81	30
4S1	18.79	19.07	18.90	19.67	76.43	6.39	25
7S1	18.49	17.41	18.03	26.09	80.02	6.67	80
9S1	21.75	21.16	20.82	21.98	85.71	7.14	23
1C1	14.69	12.57	12.30	14.23	53.79	4.48	37
5C1	17.67	17.04	17.53	18.55	70.79	5.90	23
3D1	13.80	12.72	12.91	14.23	53.66	4.47	26
6D1	16.27	19.33	21.52	17.31	74.43	6.24	66
SM	18.19	18.60	35.61	-----3/	72.40	24.13 1/	82
SV	18.34	18.23	19.86	13.46	69.89	17.47	32
LO	15.97	15.10	16.01	13.91	60.99	15.25	13
5F3	20.60	19.81	19.67	17.00	77.08	19.27	16

1/ Quarterly average in mR/qtr; quarterly stations are not included in the Summary Sheets since this data is used as supplemental data to the Environmental Technical Specifications.

2/ The ± 2σ value given is in percentage of the monthly (or quarterly) average value.

3/ No sample collected.

TABLE B-5

LAND USE CENSUS

DISTANCE IN MILES FROM THE UNIT 1 CENTER LINE TO THE NEAREST MILK ANIMAL, RESIDENCE, VEGETABLE GARDEN

22-1/2 Degree[1/] Radial Sector	Nearest Milk Animal	Nearest Residence km (mi)	Residence Azimuth Degree	Nearest Vegetable Garden km (mi)
NW	None	5.95 (3.7)	326	None
NNW	None	2.50 (1.55)	333	None
N	None	None	---	None
NNE	None	5.30 (3.3)	018.5	None
NE	None	8.15 (5.06)	037	None
ENE	None	7.15 (4.44)	062.5	None
E	None	7.25 (4.5)	096.5	None
ESE	None	None	---	3.3 (2)[2/]
SE	None	None	---	None

1/Sectors not shown contain no land beyond the site boundary, other than islets not used for the purposes indicated in this table.
2/The vegetable garden indicated is the farm along the site access road.

TABLE B-6

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
LIST OF ALL MARINE AND TERRESTRIAL SAMPLES
COLLECTED AND ANALYZED

SAMPLE NO.	DESCRIPTION	STATION NO.	COLLECTION DATE
87A37	LETTUCE	7G1	01/09/87
87A38	SNOW PEAS	7C1	01/09/87
87A39	LETTUCE	5F2	01/09/87
87A40	OUTFALL WATER	OUT	01/09/87
87A41	SURFACE WATER	5S2	01/09/87
87E21	OUTFALL WATER COMPOSITE	OUT	01/09/87
87A42	SEAWATER	7C2	01/13/87
87A43	SEAWATER	POS	01/13/87
87A44	SEAWATER	DCM	01/13/87
87A45	BULL KELP BLADE	PON	01/13/87
87A46	BULL KELP PNEUMATOCYST	PON	01/13/87
87A47	BULL KELP BLADE	POS	01/13/87
87A48	BULL KELP PNEUMATOCYST	POS	01/13/87
87A49	DRINKING WATER	DW1	01/13/87
87A50	BULL KELP BLADE	7C2	01/13/87
87A51	BULL KELP PNEUMATOCYST	7C2	01/13/87
87A64	SEAWATER	PON	01/13/87
87A74	MILK	5F2	01/19/87
87A75	MILK	8H1	01/19/87
87B32	OUTFALL WATER	OUT	02/05/87
87B33	SURFACE WATER	5S2	02/05/87
87B34	LETTUCE	5F2	02/05/87
87B35	SNOW PEAS	7C1	02/05/87
87B36	LETTUCE	7G1	02/05/87
87B72	SEAWATER	PON	02/17/87
87B73	BULL KELP BLADE	PON	02/17/87
87B74	BULL KELP PNEUMATOCYST	PON	02/17/87
87B75	SEAWATER	DCM	02/17/87
87B76	SEAWATER	POS	02/17/87
87B77	BULL KELP BLADE	POS	02/17/87
87B78	BULL KELP PNEUMATOCYST	POS	02/17/87
87B79	SEAWATER	7C2	02/17/87
87B80	BULL KELP BLADE	7C2	02/17/87
87B81	BULL KELP PNEUMATOCYST	7C2	02/17/87
87B82	DRINKING WATER	DW1	02/17/87
87C13	MILK	5F2	02/23/87
*87C14	MILK	8H1	02/23/87
87C33	RED ABALONE MEAT	PON	02/27/87
*87C34	RED ABALONE MEAT	DCM	02/27/87
87C35	RED ABALONE MEAT	POS	02/27/87
87C36	PERCH	PON	02/27/87
87C37	PERCH	DCM	02/27/87

*samples with detected nuclides other than naturally occurring radionuclides

TABLE B-6 (Cont.)

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
LIST OF ALL MARINE AND TERRESTRIAL SAMPLES
COLLECTED AND ANALYZED

SAMPLE NO.	DESCRIPTION	STATION NO.	COLLECTION DATE
87C38	PERCH	POS	02/27/87
87C39	RED ABALONE MEAT	7C2	02/27/87
87C40	PERCH	7C2	02/27/87
87C41	ROCKFISH	PON	02/27/87
87C42	ROCKFISH	DCM	02/27/87
87C43	ROCKFISH	POS	02/27/87
87C68	SURFACE WATER	5S2	03/11/87
87C69	LETTUCE	7G1	03/11/87
87C70	SNOW PEAS	7C1	03/11/87
87C71	CAULIFLOWER	5F2	03/11/87
87C72	OUTFALL WATER	OUT	03/11/87
87C73	DRINKING WATER	DW1	03/11/87
87D08	SEAWATER	7C2	03/18/87
87D09	BULL KELP BLADE	7C2	03/18/87
87D10	BULL KELP PHEUMATOCYST	7C2	03/18/87
87D11	SEAWATER	POS	03/18/87
87D12	BULL KELP BLADE	POS	03/18/87
87D13	BULL KELP PNEUMATOCYST	POS	03/18/87
87D14	SEAWATER	DCM	03/18/87
87D15	SEAWATER	PON	03/18/87
87D16	BULL KELP BLADE	PON	03/18/87
87D17	BULL KELP PNEUMATOCYST	PON	03/18/87
87D25	MILK	5F2	03/23/87
87D26	MILK	8H1	03/23/87
*87D44	IRIDAEA	DCM	03/24/87
*87D45	CALIFORNIA MUSSELS	DCM	03/24/87
87D46	BLACK ABALONE MEAT	DCM	03/24/87
*87D47	CALIFORNIA MUSSELS	PON	03/24/87
87D48	BLACK ABALONE MEAT	PON	03/24/87
87D41	IRIDAEA	7C2	03/25/87
87D42	CALIFORNIA MUSSELS	7C2	03/25/87
87D43	BLACK ABALONE MEAT	7C2	03/25/87
87D49	CALIFORNIA MUSSELS	POS	03/25/87
87D50	BLACK ABALONE MEAT	POS	03/25/87
*87D76	COMMERCIAL COD	2F1	03/27/87
*87D77	COMMERCIAL COD	2F1	03/27/87
87D78	COMMERCIAL PERCH	7D3	03/27/87
*87D79	COMMERCIAL COD	7D3	03/27/87
87E24	LETTUCE	7G1	04/08/87
87E25	OUTFALL WATER	OUT	04/08/87
87E26	SURFACE WATER	5S2	04/08/87
87H34	OUTFALL WATER COMPOSITE	OUT	04/08/87
87E43	SEAWATER	PON	04/14/87

*samples with detected nuclides other than naturally occurring radionuclides

TABLE B-6 (Cont.)

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
LIST OF ALL MARINE AND TERRESTRIAL SAMPLES
COLLECTED AND ANALYZED

SAMPLE NO.	DESCRIPTION	STATION NO.	COLLECTION DATE
87E44	BULL KELP BLADE	PON	04/14/87
87E45	BULL KELP PNEUMATOCYST	PON	04/14/87
87E46	SEAWATER	DCM	04/14/87
87E47	SEAWATER	POS	04/14/87
*87E48	BULL KELP BLADE	POS	04/14/87
87E49	BULL KELP PNEUMATOCYST	POS	04/14/87
87E50	SEAWATER	7C2	04/14/87
87E51	BULL KELP BLADE	7C2	04/14/87
87E52	BULL KELP PNEUMATOCYST	7C2	04/14/87
87E53	DRINKING WATER	DW1	04/14/87
87E71	MILK	5F2	04/20/87
87E72	MILK	8H1	04/20/87
87F20	OUTFALL WATER	OUT	05/06/87
87F21	SURFACE WATER	5S2	05/06/87
87F22	VEGETATIVE GREENS	7G1	05/06/87
87F23	VEGETATIVE GREENS	5F2	05/06/87
87F61	SEAWATER	PON	05/11/87
87F62	BULL KELP BLADE	PON	05/11/87
87F63	BULL KELP PNEUMATOCYST	PON	05/11/87
87F64	SEAWATER	DCM	05/11/87
87F65	SEAWATER	POS	05/11/87
87F66	BULL KELP BLADE	POS	05/11/87
87F67	BULL KELP PNEUMATOCYST	POS	05/11/87
87F68	SEAWATER	7C2	05/11/87
87F69	BULL KELP BLADE	7C2	05/11/87
87F70	BULL KELP PNEUMATOCYST	7C2	05/11/87
87F72	DRINKING WATER	DW1	05/11/87
87F90	ROCKFISH	PON	05/12/87
87F94	RED ABALONE MEAT	DCM	05/12/87
87F95	ROCKFISH	DCM	05/12/87
87F96	PERCH	DCM	05/12/87
87F99	ROCKFISH	POS	05/12/87
*87G02	RED ABALONE MEAT	POS	05/12/87
87G03	PERCH	POS	05/12/87
87G04	RED ABALONE MEAT	7C2	05/12/87
*87G05	ROCKFISH	7C2	05/12/87
87G06	PERCH	7C2	05/12/87
87F84	MILK	5F2	05/15/87
87F85	MILK	8H1	05/15/87
87F91	BLACK ABALONE MEAT	PON	05/15/87
*87F92	CALIFORNIA MUSSELS	PON	05/15/87
*87F93	IRIDAEA	DCM	05/15/87
87F97	BLACK ABALONE MEAT	DCM	05/15/87
87F98	CALIFORNIA MUSSELS	DCM	05/15/87

*samples with detected nuclides other than naturally occurring radionuclides

TABLE B-6 (Cont.)

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
LIST OF ALL MARINE AND TERRESTRIAL SAMPLES
COLLECTED AND ANALYZED

SAMPLE NO.	DESCRIPTION	STATION NO.	COLLECTION DATE
87G00	BLACK ABALONE MEAT	POS	05/15/87
87G01	CALIFORNIA MUSSELS	POS	05/15/87
87G07	CALIFORNIA MUSSELS	7C2	05/15/87
87G08	BLACK ABALONE MEAT	7C2	05/15/87
87G09	IRIDAEA	7C2	05/15/87
87G37	PERCH	PON	05/27/87
87G38	RED ABALONE MEAT	PON	05/27/87
*87G40	COMMERCIAL COD	2F1	05/28/87
87G41	COMMERCIAL SNAPPER	2F1	05/28/87
87G42	COMMERCIAL SALMON	2F1	05/28/87
*87G43	COMMERCIAL COD	7D3	05/28/87
87G44	COMMERCIAL SALMON	7D3	05/28/87
87G77	OUTFALL WATER	OUT	06/03/87
87G78	SURFACE WATER	5S2	06/03/87
87G79	VEGETATIVE GREENS	7G1	06/22/87
87H28	MILK	5F1	06/22/87
87H29	MILK	8H1	06/24/87
87H35	SEAWATER	PON	06/24/87
87H36	BULL KELP BLADE	PON	06/24/87
87H37	BULL KELP PNEUMATOCYST	PON	06/24/87
87H38	SEAWATER	DCM	06/24/87
*87H39	BULL KELP BLADE	DCM	06/24/87
87H41	SEAWATER	POS	06/24/87
87H42	BULL KELP BLADE	POS	06/24/87
87H43	BULL KELP PNEUMATOCYST	POS	06/24/87
87H44	SEAWATER	7C2	06/24/87
87H46	DRINKING WATER	DW1	06/24/87
*87H40	BULL KELP PNEUMATOCYST	DCM	06/25/87
87I05	CELERY GREENS	7G1	07/08/87
87I06	SNOW PEAS	7C1	07/08/87
87I07	BROCCOLI GREENS	5F2	07/08/87
87I31	SURFACE WATER	5S2	07/10/87
87I32	OUTFALL WATER	OUT	07/10/87
87K64	OUTFALL WATER COMPOSITE	OUT	07/10/87
87I33	SEAWATER	PON	07/13/87
87I34	BULL KELP BLADE	PON	07/13/87
87I35	BULL KELP PNEUMATOCYST	PON	07/13/87
87I36	SEAWATER	DCM	07/13/87
*87I37	BULL KELP BLADE	DCM	07/13/87
*87I38	BULL KELP PNEUMATOCYST	DCM	07/13/87
87I39	SEAWATER	POS	07/13/87
87I40	BULL KELP BLADE	POS	07/13/87
87I41	BULL KELP PNEUMATOCYST	POS	07/13/87
87I42	SEAWATER	7C2	07/13/87
87I43	BULL KELP BLADE	7C2	07/13/87

*samples with detected nuclides other than naturally occurring radionuclides

TABLE B-6 (Cont.)

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
LIST OF ALL MARINE AND TERRESTRIAL SAMPLES
COLLECTED AND ANALYZED

SAMPLE NO.	DESCRIPTION	STATION NO.	COLLECTION DATE
87I44	BULL KELP PNEUMATOCYST	7C2	07/13/87
87I54	DRINKING WATER	DW1	07/20/87
87I55	MILK	5F2	07/20/87
87I56	MILK	8H1	07/20/87
87I96	OUTFALL WATER	OUT	08/04/87
87I97	SURFACE WATER	5S2	08/04/87
87I98	CELERY GREENS	7G1	08/04/87
87I99	ONIONS	5F2	08/04/87
87J45	ROCKFISH	DCM	08/10/87
87J52	RED ABALONE MEAT	PON	08/10/87
87J12	BLACK ABALONE MEAT	7C2	08/11/87
87J13	IRIDAEA	7C2	08/11/87
87J14	CALIFORNIA MUSSELS	7C2	08/11/87
*87J15	BLACK ABALONE MEAT	DCM	08/11/87
*87J16	IRIDAEA	DCM	08/11/87
*87J17	CALIFORNIA MUSSELS	DCM	08/11/87
87J18	CALIFORNIA MUSSELS	PON	08/11/87
87J19	BLACK ABALONE MEAT	PON	08/11/87
87J20	CALIFORNIA MUSSELS	POS	08/11/87
87J21	BLACK ABALONE MEAT	POS	08/11/87
87J38	BULL KELP BLADE	7C2	08/11/87
87J39	BULL KELP PNEUMATOCYST	7C2	08/11/87
87J40	ROCKFISH	7C2	08/11/87
87J41	PERCH	7C2	08/11/87
*87J43	BULL KELP BLADE	DCM	08/11/87
*87J44	BULL KELP PNEUMATOCYST	DCM	08/11/87
87J47	RED ABALONE MEAT	DCM	08/11/87
87J48	BULL KELP PNEUMATOCYST	PON	08/11/87
87J49	BULL KELP BLADE	PON	08/11/87
87J50	PERCH	PON	08/11/87
*87J51	ROCKFISH	PON	08/11/87
87J53	BULL KELP BLADE	POS	08/11/87
*87J54	BULL KELP PNEUMATOCYST	POS	08/11/87
87J55	PERCH	POS	08/11/87
87J56	ROCKFISH	POS	08/11/87
87J37	DRINKING WATER	DW1	08/18/87
87J42	SEAWATER	7C2	08/18/87
87J46	SEAWATER	DCM	08/18/87
87J57	SEAWATER	POS	08/18/87
87J58	SEAWATER	PON	08/18/87
87J78	MILK	5F2	08/24/87
87J79	MILK	8H1	08/24/87
87K41	COMMERCIAL COD	2F1	09/02/87
87K42	COMMERCIAL SNAPPER	2F1	09/02/87

*samples with detected nuclides other than naturally occurring radionuclides

TABLE B-6 (Cont.)

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
LIST OF ALL MARINE AND TERRESTRIAL SAMPLES
COLLECTED AND ANALYZED

SAMPLE NO.	DESCRIPTION	STATION NO.	COLLECTION DATE
87K43	COMMERCIAL SAMMON	2F1	09/02/87
87L71	PERCH	DCM	09/02/87
87K51	SQUASH GREENS	5F2	09/04/87
87K52	SNOW PEAS	7C1	09/04/87
87K53	CELERY GREENS	7G1	09/04/87
87K54	OUTFALL WATER	OUT	09/04/87
87K55	SURFACE WATER	5S2	09/04/87
87L04	SEAWATER	DCM	09/17/87
*87L06	BULL KELP PNEUMATOCYST	DCM	09/17/87
87L07	SEAWATER	POS	09/17/87
87L08	BULL KELP BLADE	POS	09/17/87
87L09	BULL KELP PNEUMATOCYST	POS	09/17/87
87L10	SEAWATER	PON	09/17/87
87L11	BULL KELP BLADE	PON	09/17/87
87L12	BULL KELP PNEUMATOCYST	PON	09/17/87
87L13	SEAWATER	7C2	09/17/87
87L14	BULL KELP BLADE	7C2	09/17/87
*87L15	BULL KELP PNEUMATOCYST	7C2	09/17/87
87L35	MILK	5F2	09/21/87
87L36	MILK	8H1	09/21/87
87L72	DRINKING WATER	DW1	09/29/87
87L96	SURFACE WATER	5S2	10/07/87
87L97	OUTFALL WATER	OUT	10/07/87
87L98	BELL PEPPERS	7G1	10/07/87
87L99	SNOW PEAS	7C1	10/07/87
87M00	PUMPKIN GREENS	5F2	10/07/87
87Q73	OUTFALL WATER COMPOSITE	OUT	10/07/87
87M17	SEAWATER	PON	10/13/87
87M18	BULL KELP BLADE	PON	10/13/87
87M19	BULL KELP PNEUMATOCYST	PON	10/13/87
87M20	SEAWATER	DCM	10/13/87
*87M21	BULL KELP BLADE	DCM	10/13/87
87M22	BULL KELP PNEUMATOCYST	DCM	10/13/87
87M23	SEAWATER	POS	10/13/87
87M24	BULL KELP BLADE	POS	10/13/87
87M25	BULL KELP PNEUMATOCYST	POS	10/13/87
87M26	SEAWATER	7C2	10/13/87
87M27	BULL KELP BLADE	7C2	10/13/87
87M28	BULL KELP PNEUMATOCYST	7C2	10/13/87
87M30	DRINKING WATER	DW1	10/16/87
87M40	MILK	5F2	10/19/87
87M41	MILK	8H1	10/19/87
87M97	OUTFALL WATER	OUT	11/06/87
87M98	SURFACE WATER	5S2	11/06/87

*samples with detected nuclides other than naturally occurring radionuclides

TABLE B-6 (Cont.)

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
LIST OF ALL MARINE AND TERRESTRIAL SAMPLES
COLLECTED AND ANALYZED

SAMPLE NO.	DESCRIPTION	STATION NO.	COLLECTION DATE
87N26	BROCCOLI GREENS	5F2	11/06/87
87N33	GREEN PEPPERS	7G1	11/06/87
87N27	SNOW PEAS	7C1	11/10/87
87N28	SEAWATER	PON	11/12/87
87N29	SEAWATER	DCM	11/12/87
87N30	SEAWATER	POS	11/12/87
87N31	SEAWATER	7C2	11/12/87
*87N34	ROCKFISH	PON	11/12/87
87N35	PERCH	PON	11/12/87
87N36	RED ABALONE MEAT	PON	11/12/87
*87N38	ROCKFISH	DCM	11/12/87
87N39	PERCH	DCM	11/12/87
87N40	RED ABALONE MEAT	DCM	11/12/87
87N41	ROCKFISH	POS	11/12/87
87N42	PERCH	POS	11/12/87
87N43	RED ABALONE MEAT	POS	11/12/87
87N44	DRINKING WATER	DW1	11/12/87
87N59	BULL KELP BLADE	PON	11/12/87
87N60	BULL KELP PNEUMATOCYST	PON	11/12/87
87N61	BULL KELP BLADE	7C2	11/12/87
87N62	BULL KELP PNEUMATOCYST	7C2	11/12/87
87N63	BULL KELP BLADE	POS	11/12/87
87N64	BULL KELP PNEUMATOCYST	POS	11/12/87
*87N37	SEDIMENT	DCM	11/17/87
*87P03	IRIDAEA	DCM	11/20/87
*87P04	CALIFORNIA MUSSELS	DCM	11/20/87
87P05	BLACK ABALONE MEAT	DCM	11/20/87
*87P06	IRIDAEA	7C2	11/20/87
87P07	CALIFORNIA MUSSELS	7C2	11/20/87
87P08	BLACK ABALONE MEAT	7C2	11/20/87
*87P10	CALIFORNIA MUSSELS	POS	11/20/87
87P11	BLACK ABALONE MEAT	POS	11/20/87
*87P12	CALIFORNIA MUSSELS	PON	11/20/87
87Q78	BLACK ABALONE MEAT	PON	11/20/87
87N57	MILK	5F2	11/23/87
87N58	MILK	8H1	11/23/87
*87P13	COMMERCIAL SALMON	2F1	12/02/87
87P14	COMMERCIAL COD	2F1	12/02/87
*87P15	COMMERCIAL SNAPPER	2F1	12/02/87
87P32	BROCCOLI GREENS	5F2	12/07/87
87P33	SNOW PEAS	7C1	12/07/87
87P34	LETTUCE	7G1	12/07/87
87P49	OUTFALL WATER	OUT	12/08/87
87P50	SURFACE WATER	5S2	12/08/87

*samples with detected nuclides other than naturally occurring radionuclides

TABLE B-6 (Cont.)

DIABLO CANYON POWER PLANT 1987 ANNUAL REPORT
LIST OF ALL MARINE AND TERRESTRIAL SAMPLES
COLLECTED AND ANALYZED

SAMPLE NO.	DESCRIPTION	STATION NO.	COLLECTION DATE
87Q30	DRINKING WATER	DW1	12/17/87
87Q33	SEAWATER	PON	12/17/87
87Q34	BULL KELP BLADE	PON	12/17/87
87Q35	BULL KELP PNEUMATOCYST	PON	12/17/87
87Q36	SEAWATER	DCM	12/17/87
87Q37	SEAWATER	POS	12/17/87
87Q38	BULL KELP BLADE	POS	12/17/87
87Q39	BULL KELP PNEUMATOCYST	POS	12/17/87
87Q40	SEAWATER	7C2	12/17/87
87Q41	BULL KELP BLADE	7C2	12/17/87
87Q42	BULL KELP PNEUMATOCYST	7C2	12/17/87
87Q79	BLACK ABALONE MEAT	PON	12/18/87
87Q31	MILK	5F2	12/21/87
87Q32	MILK	8H1	12/21/87

*samples with detected nuclides other than naturally occurring radionuclides