

PG&E Letter DCL-2010-510
Mr. Briggs
March 01, 2010
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If Yes is marked (complete a-g):

a) Parameter(s) in Violation:

Total Suspended Solids (TSS) Monthly Average
Limit Exceedance of 53.3% January 2009.

**b) Section(s) of WDR/NPDES
Violated:**

NPDES No. CA0003751 Order 90-09
Section B. Effluent Limitations, Subsection 2.
Discharge 001P Constituents - Suspended Solids
- Units mg/l - Monthly Average 30.

c) Reported Value(s)

TSS Monthly Average for January 2009
Discharge 001P = 46 mg/l.

**d) WDR/NPDES
Limit/Condition:**

TSS Monthly Average Limit Order 90-09
Discharge 001P = 30 mg/l.

e) Dates of Violation(s)
(reference page of report/data
sheet):

High daily maximum for Discharge 001P TSS
occurred January 22, 2009 subsequently resulting
in monthly average limit exceedance.

f) Explanation of Cause(s):
(attach additional information as
needed)

(If "YES", see overview section of attached report)
Reference Annual Report Overview Section,
Subsection 4. Review of Compliance Record and
Corrective Actions, Item d.

g) Corrective Action(s):
(attach additional information as
needed)

(If "YES", see overview section of attached report)
Reference Annual Report Overview Section,
Subsection 4. Review of Compliance Record and
Corrective Actions, Item d.

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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. The results of the influent and effluent monitoring presented are the observed results of the measurements and analyses required by the monitoring program, and is neither an assertion of the adequacy of any instrument reading or analytical result, nor an endorsement of the appropriateness of any analytical or measurement procedure. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions or concerns, or require additional information, please contact Bryan Cunningham at (805) 545-4439.

Sincerely,



Name: Kenneth J. Peters
Title: Station Director – Diablo Canyon Power Plant

2010510/jlk/bkc

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cc: w/enclosure

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ENCLOSURE

**ANNUAL SUMMARY REPORT ON
DISCHARGE MONITORING
AT THE
DIABLO CANYON POWER PLANT**

(NPDES NO. CA0003751)

2009

**2009 Annual Summary Report on Discharge Monitoring
at the
Diablo Canyon Power Plant**

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2009 Annual Summary Report on Discharge Monitoring
at the
Diablo Canyon Power Plant

OVERVIEW

- A. This annual summary report follows the format used in quarterly monitoring reports. Analytical results below the respective Reporting Limit (ND or non-detect) are plotted as a "zero" value in accordance with ELAP guidance. Less-than results are typically reported to express an average of values that include non-detects and at least one positive result. These less-than results are plotted conservatively at the value. During 2009, discharges occurred from all discharge paths except 0011, 001K, 016, and 017.
- B. California Ocean Plan Table B substances that were not analyzed for have not been added to the discharge stream. The substances listed in Table B in the 1990 Ocean Plan were each analyzed for and reported in the permit renewal application for Diablo Canyon Power Plant (DCPP) submitted in October 1994 and January 2001. There have been no changes in activities conducted at the plant that would have significantly affected the results previously reported in the above referenced documents.

SUMMARY OF MONITORING PROGRAM

A. Monitoring of Plant Influent and Effluent

1. Monitoring Data

- a. Appendix 1 provides a list of discharge path names for ease of reference. Appendix 2 contains monitoring data in tabular form. Appendix 3 contains monitoring data in graphical form.
- b. Annual oil and grease analyses were performed in October on Stormwater/Yard Drain Discharges 005, 008, 009, 013, and 015. Results were non-detect (less than 5 mg/l) for discharges 005 through 015. No discharges that resulted in adequate sample quantities occurred from 016 and no discharge occurred from 017 during 2009.
- c. In October, Discharge 001D (Liquid Radioactive Waste Treatment System) annual grab samples for lithium, boron, and hydrazine were collected and analyzed. The results were non-detect (less than 0.2 mg/l), 170 mg/l, and non-detect (less than 0.003 mg/l), respectively.

2. Facility Operating and Maintenance Manual

Pacific Gas and Electric Company (PG&E) maintains a multiple volume Plant Manual at DCPP that contains procedures used for operation and maintenance activities at the plant, including those activities that relate to wastewater handling, treatment, sampling, analysis and discharge.

Plant procedures are prepared and reviewed by DCPP Staff and approved by DCPP Management. DCPP conducts biennial internal audits that review NPDES Plant procedures contained in the manual. Ongoing reviews of Plant procedures are conducted to assure that the manual remains valid, current, and complete for the facility.

3. Laboratories Used to Monitor Compliance

The following laboratories were used during 2009 for monitoring compliance. They are certified under the appropriate agencies for the test/analyses they perform. As part of the on-going annual certification process, these laboratories take part in, and have passed, annual quality performance evaluation testing.

- a. PG&E Chemistry Laboratory, DCP, Avila Beach, California (Lab Certification # CA01036)
- b. Aquatic Bioassay Consultants, Ventura, California (Lab Certification # CA01907)
- c. Creek Environmental, San Luis Obispo, California (Lab Certification # CA00975)
- d. Columbia Analytical Services, Kelso, Washington (Lab Certification # WA00035)
- e. Test America, Inc., Earth City, Missouri (Lab Certification # MO00054)

Results were also reported from Calscience Environmental Laboratories (CA-ELAP Lab #1230). These results were from samples taken by Liberty Composting of Bakersfield, CA of sewage treatment sludge received at their facility originating from the DCP discharge 001N pathway. The results were provided by Calscience back to the contractor that operates DCP's sewage treatment unit. The sample results are reported by PG&E as a courtesy, and not used to demonstrate compliance with the annual 001N pathway sludge analyses required by DCP's NPDES Permit.

4. Review of Compliance Record and Corrective Actions

a. Circulating Water Pump Chlorination/Bromination Monitoring

The 2009 quarterly NPDES reports discuss chlorination cycles when discharge monitoring was interrupted. These are listed below with brief descriptions of the cause and corrective action. When these monitoring interruptions occurred, engineering evaluations (approved by the CCRWQCB January 13, 1994; PG&E Letter No. DCL-94-002) were performed. Detailed descriptions of these evaluations are included in the quarterly reports. Evaluations concluded that discharge chlorine limits were not exceeded during these events.

Date	Chlorination Cycle Monitoring Interruptions	Cause	Corrective Action
07/01/09 to 07/08/09	Unit 2 42 Readings	Calibration shifted following start-up of monitor.	Monitor recalibrated.
09/02/09 to 09/09/09	Unit 1 41 Readings	Calibration shifted following start-up of monitor.	Monitor recalibrated.
11/06/09	Unit 2 1 Reading	Chlorine monitor malfunction.	Monitor repaired, grab sample used.

c. Closed Cooling Water Releases

During 2009, maintenance activities that required draining of closed cooling water systems were performed and are summarized below. PG&E received concurrence from the CCRWQCB in response to letters dated July 19, 1995 (PG&E Letter DCL-95-156), May 23, 1996 (PG&E Letter DCL-96-522), and May 19, 1997 (PG&E Letter DCL-97-533) regarding the use of glutaraldehyde and isothiazolin to control microbiological growth and corrosion in DCP's closed cooling water systems. Any drainage from these systems is discharged at a flow-rate such that the chronic toxicity level is below the "No Observable Effect Concentration" (NOEC) at NPDES Discharge 001. The volumes of cooling water drained in 2009 from the component cooling water (CCW), intake cooling water (ICW), and service cooling water (SCW) systems are presented below. The glutaraldehyde (Glut) and isothiazoline (Iso) concentrations presented in the table below are system concentrations, not concentrations at the point of discharge to receiving water.

Date	System	Volume (gallons)	Glut (mg/l)	Iso (mg/l)	Total Suspended Solids (mg/l)	Oil & Grease (mg/l)	Reason & Comments
01/16/09	Unit 2 SCW	10	73	22	n/a	n/a	Routine Maintenance
01/15/09	Unit 1 CCW	7,000	110	0.0	< 2.0	< 1.4	Routine Maintenance
01/21/09	Unit 2 SCW	33,000	118	7.2	< 2.0	< 1.4	Routine Maintenance
01/26/09	Unit 1 SCW	11,000	240	5.3	< 2.0	< 1.4	Routine Maintenance
01/29/09	Unit 1 ICW	1,500	128	6.2	n/a	n/a	Routine Maintenance
02/10/09	Unit 1 CCW	3,700	144	0.0	< 2.0	< 1.4	Routine Maintenance
03/03/09	Unit 1 ICW	550	0.0	0.0	n/a	n/a	Routine Maintenance
03/12/09	Unit 1 ICW	3,300	95	0.0	n/a	n/a	Routine Maintenance
06/04/09	Unit 2 ICW	3,367	91	6.6	n/a	n/a	Routine Maintenance
07/20/09	Unit 1 SCW	33,600	163	5.3	2.6	<1.4	Routine Maintenance
07/28/09	Unit 2 SCW	33,500	51	5.7	<2.0	<1.4	Routine Maintenance
08/20/09	Unit 1 ICW	3,300	58	2.5	n/a	n/a	Routine Maintenance
08/28/09	Unit 1 SCW	25	65	2.4	n/a	n/a	Routine Maintenance
08/29/09	Unit 2 SCW	12	66	1.3	n/a	n/a	Routine Maintenance
09/09/09	Unit 2 CCW	4,000	140	n/a	<2.0	<1.4	Routine Maintenance
10/04/09	Unit 2 SCW	100	118	2.6	n/a	n/a	Routine Maintenance
12/18/09 to 12/23/09	Unit 2 SCW	72	64	8	n/a	n/a	Valve Leakage

- d. An exceedance of the 100 mg/L daily maximum limit for total suspended solids (TSS) from discharge 001P occurred on January 22, 2009. Extra sampling was being performed to support preparation of a baseline profile for TSS during routine backwashing of one of the seawater reverse osmosis (SWRO) facility media filters. This work was being performed as follow-up to a TSS exceedance that had been measured at discharge 001P during the 4th Quarter of 2008. The daily maximum for TSS on January 22nd was 127 mg/L. The monthly average for January 2009 of 46 mg/L also exceeded the respective 30 mg/L permit limit by 53.3% as a result of this event. CCRWQCB staff were notified of the exceedance on January 25, 2009 via voice-mail when analysis results became available.

The SWRO was subsequently shut down for an extended period at the end of January to implement planned electrical breaker work, and was not restarted until February 8th. While the SWRO was shut down, a temporary in-line tank (20,000 gallon baffled transportable baker tank) was installed to facilitate settling and capture of backwash solids. An additional temporary 10,000 gallon mixing tank was also installed to receive the settling tank effluent as well as non-backwash brine prior to discharge of the combined SWRO system waste water effluents to the 001P pathway. Following SWRO restart, extensive troubleshooting and additional sampling was performed during February and March of 2009 with these engineering controls in place. The settling tank was found to be effective at trapping a large portion of entrained filter backwash solids; and the mixing tank effective at further moderating entrained solids peaks during the periodic short term filter backwash cycles. No further exceedances of the discharge limitation for TSS occurred for the remainder of 2009. The installed interim controls will remain in use pending completion of planning and installation of similar permanent engineering controls.

B. Monitoring of Receiving Water

1. Ecological Studies at Diablo Canyon

Marine ecological monitoring was continued during 2009 under the Receiving Water Monitoring Program (RWMP) as requested in a letter from the Central Coast Regional Water Quality Control Board (CCRWQCB) dated December 9, 1998, and as detailed in a letter from PG&E dated January 8, 1999 (DCL-99-503). This program includes tasks from the Ecological Monitoring Program (EMP) with additional stations and increased sampling frequencies. This program replaces the EMP and the Thermal Effects Monitoring Program (TEMP). Several one-year-only tasks outlined in the above letters were completed in 1999 and were not requested to be performed in 2009. Results of 2008

RWMP data were submitted to the CCRWQCB on April 30, 2009. A table in Appendix 4 summarizes requirements and completed tasks for 2009.

2. In Situ Bioassay

Results of the Mussel Watch Program are reported to the CCRWQCB directly by the California Department of Fish and Game in the agency's periodic report for this program.

C. Sodium Bromide Treatment Program

DCCP continued its integrated sodium bromide and "foul release coating" strategy to control macrofouling in the Circulating Water System (CWS). The treatment program consists of six 20-minute injections (at four hour intervals) of a blend of generic sodium bromide and sodium hypochlorite into DCCP's seawater intake conduits. Each injection attempts to achieve a target concentration of 200 parts per billion (ppb) Total Residual Oxidant (TRO) at the inlet waterbox of the main condensers. Discharge TRO, measured at the plant outfall, remained below NPDES limitations. Typically, discharge values were between 20 ppb and 50 ppb. In conjunction with the chemical treatment, untreated portions of the cooling water system were previously painted with a non-toxic "foul release coating" to reduce or prevent attachment of fouling organisms.

In anticipation of the 1R15 refueling outage, sodium bromide injections were terminated for both Unit 1 conduits in early January 2009. Sodium hypochlorite injections six times a day continued for microfouling control in the condenser until late January, just before the start of 1R15. Unit 1 injections remained off through 1R15 until mid-March 2009 when simultaneous sodium hypochlorite and sodium bromide injections were reinitiated as Unit 1 Circulating Water Pumps were restarted. Simultaneous injections continued through the remainder of 2009 with only brief interruptions for maintenance activities in June and mid-October.

Both conduits of Unit-2 were treated with simultaneous injections of sodium bromide and sodium hypochlorite six times a day through the end of September 2009 with brief interruptions for maintenance activities in late January, mid-February, mid-May, and early June. Injections were also shut down briefly for conduit 2-2 in early July due to an unscheduled curtailment of Circulating Water Pump 2-2. At the end of September sodium bromide injections were shut down for refueling outage 2R15. Sodium hypochlorite injections were shut down in early October. Simultaneous injections for both Unit 2 conduits were restarted in early November and continued uninterrupted through the remainder of the fourth quarter.

APPENDIX 1

DIABLO CANYON POWER PLANT

NPDES DISCHARGE POINTS	
DISCHARGE NUMBER	DESCRIPTION
001	Once-Through Cooling Water
001 A	Firewater Systems
001 B	Auxiliary Salt Water Cooling System
001 C	Discharge Deleted
001 D	Liquid Radioactive Waste Treatment System
001 E	Service Cooling Water System
001 F	Turbine Building Sump
001 G	Make-Up Water System Waste Effluent
001 H	Condensate Demineralizer Regenerant
001 I	Seawater Evaporator Blowdown
001 J	Condensate Pumps Discharge Header Overboard
001 K	Condenser Tube Sheet Leak Detection Dump Tank Overboard
001 L	Steam Generator Blowdown
001 M	Wastewater Holding and Treatment System
001 N	Sanitary Wastewater Treatment System
001 P	Seawater Reverse Osmosis System Blowdown
002	Intake Structure Building Floor Drains
003	Intake Screen Wash
004	Bio Lab and Storm Water Runoff
005, 008, 009, 013, 014, 015	Yard Storm Drains
006, 007, 010, 011, 012	Storm Water Runoff
016	Bio Lab Seawater Supply Pump Valve Drain
017	Seawater Reverse Osmosis System Blowdown Drain

APPENDIX 2

TABULAR SUMMARIES OF INFLUENT AND EFFLUENT MONITORING

**2009 Annual Summary Report on Discharge Monitoring
at the
Diablo Canyon Power Plant**

DISCHARGE 001

Month	TEMPERATURE (DEG F)						FLOW (MGD)				
	INFLUENT			EFFLUENT			DELTA T		high	low	avg
	high	low	avg	high	low	avg	high	avg			
JAN	55.6	53.0	54.0	74.7	70.8	73.0	19.4	18.9	2486	1279	2248
FEB	55.7	53.2	54.3	73.5	71.4	72.3	19.0	18.0	1279	1279	1279
MAR	54.9	49.2	51.6	73.8	59.9	67.6	19.2	16.0	2486	1279	1871
APR	52.9	47.5	50.1	71.6	66.4	68.9	19.4	18.8	2486	2486	2486
MAY	54.2	48.3	50.9	72.7	67.1	69.4	18.8	18.5	2486	1862	2412
JUN	55.8	51.6	53.5	73.9	69.7	71.9	18.9	18.4	2486	2278	2479
JUL	55.0	51.4	53.2	73.6	68.5	71.6	19.2	18.4	2486	1862	2434
AUG	54.6	51.8	53.3	72.9	56.0	68.3	19.2	15.0	2486	2486	2486
SEP	56.9	53.2	55.0	75.9	66.3	71.9	19.6	16.9	2486	2486	2486
OCT	60.7	52.7	56.1	79.3	69.1	74.9	20.2	18.9	2486	933	1358
NOV	56.7	54.4	55.4	74.8	65.9	72.4	19.1	17.0	2486	1239	2286
DEC	56.7	54.5	55.6	75.8	73.4	74.7	19.2	19.1	2486	2486	2486
limit:							22		2760		

The Influent and Effluent "high" and "low" temperature values correspond to the highest and lowest daily average value for that month. The Influent high and low temperature does not necessarily correspond to the same day as the Effluent high and low temperature for that month. The "avg" temperature for Influent and Effluent is the average for the entire month. The Monthly Delta T "high" is the highest Delta T for a day of the month based on daily average Influent and Effluent temperature values. The "Avg" temperature is calculated from Influent and Effluent monthly avg values.

DISCHARGE 001

Month	TOTAL RESIDUAL CHLORINE (daily max. ug/l)			TOTAL CHLORINE USED (lbs/day)		
	high	low	avg	high	low	avg
JAN	49	<20	31	504	182	370
FEB	78	<20	17	274	192	244
MAR	47	<7	12	403	230	326
APR	43	12	28	504	432	462
MAY	39	<10	14	461	202	379
JUN	25	<7	10	662	326	543
JUL	47	15	30	677	562	609
AUG	57	21	36	619	562	587
SEP	66	30	41	634	576	598
OCT	37	<20	16	502	202	293
NOV	43	<20	30	576	238	504
DEC	57	25	42	590	518	543

Note: The residual chlorine limits in Permit CA0003751, Order 90-09, is an instantaneous max of 200 ug/l, and includes a time-based limit (per the Ocean Plan) which depends on the length of the respective chlorination cycle.

**2009 Annual Summary Report on Discharge Monitoring
at the
Diablo Canyon Power Plant**

DISCHARGE 001

METALS (monthly avg. ug/l)

Month	CHROMIUM		COPPER		NICKEL		*ZINC	
	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent
JAN	ND(10)							
FEB	ND(10)							
MAR	ND(10)							
APR	ND(10)	ND(10)	ND(10)	ND(10)	14	14	ND(10)	ND(10)
MAY	ND(10)	ND(10)	ND(10)	ND(10)	14	12	ND(10)	ND(10)
JUN	ND(10)							
JUL	ND(10)							
AUG	ND(10)	ND(10)	ND(10)	ND(10)	11	11	ND(10)	ND(10)
SEP	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	19	ND(10)
OCT	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	14	ND(10)
NOV	ND(10)	ND(10)	ND(10)	ND(10)	14	15	ND(10)	ND(10)
DEC	ND(10)	ND(10)	ND(10)	ND(10)	11	11	ND(10)	ND(10)
6-month median limit:		10	-	10	-	30	-	70

**DISCHARGE 001
VARIOUS ANNUAL ANALYSES
(monthly avg. ug/l)**

Parameter	Influent	Effluent	6-Mo. Med. Effluent Limit
Arsenic	1.35	1.35	30
Cadmium	ND(10)	ND(10)	10
Cyanide	ND(10)	ND(10)	30
Lead	ND(10)	ND(10)	10
Mercury	ND(0.001)	ND(0.001)	0.2
Silver	ND(10)	ND(10)	2.9
Titanium	-	1.0	none
*Phenolic Compounds (non-chlorinated)	ND(13.3)	ND(14.0)	150
**Phenolic Cmpds (chlorinated)	ND(3.35)	ND(3.50)	10
***PCB's	ND(1.52)	ND(1.59)	none

*Reporting limits shown are the sum of individual Reporting Limits for 8 target compounds.
 **Reporting limits shown are the sum of individual Reporting Limits for 6 target compounds.
 ***Reporting limits shown are the sum of individual Reporting Limits for 7 target compounds.

**DISCHARGE 001
AMMONIA (as N) (ug/l)**

Month	Influent	Effluent
JAN	ND(200)	ND(200)
FEB		
MAR		
APR	ND(200)	ND(200)
MAY		
JUN		
JUL	ND(200)	ND(200)
AUG		
SEP		
OCT	ND(200)	ND(200)
NOV		
DEC		
6-month median limit:		3,060

**2009 Annual Summary Report on Discharge Monitoring
at the
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MONTHLY pH (averages)

Discharge: Month	001		002	003	004	001P
	Influent	Effluent				
JAN	8.0	7.9	8.0	8.1	8.0	7.8
FEB	8.0	8.0	8.0	8.1	8.0	7.7
MAR	8.0	8.1	7.9	7.7	8.0	7.8
APR	7.7	7.7	8.0	8.0	8.1	7.5
MAY	8.1	8.1	7.9	7.9	7.9	7.6
JUN	7.9	7.9	7.9	7.9	7.9	7.8
JUL	7.7	7.7	7.9	7.9	7.9	7.7
AUG	8.0	8.0	8.0	8.0	8.0	7.7
SEP	8.0	8.1	8.1	8.1	8.1	7.8
OCT	7.9	7.9	8.2	8.0	8.0	7.6
NOV	8.0	8.1	7.9	8.1	8.0	7.8
DEC	8.0	8.0	7.9	8.0	7.9	7.8

DISCHARGE 001F

Month	GREASE & OIL (mg/l)		SUSPENDED SOLIDS (mg/l)	
	high	avg	high	avg
JAN	ND(5.0)	ND(5.0)	ND(5)	ND(5)
FEB	ND(5.0)	ND(5.0)	ND(5)	ND(5)
MAR	ND(5.0)	ND(5.0)	ND(5)	ND(5)
APR	ND(5.0)	ND(5.0)	ND(5)	ND(5)
MAY	ND(5.0)	ND(5.0)	8	7
JUN	ND(5.0)	ND(5.0)	ND(5)	ND(5)
JUL	ND(5.0)	ND(5.0)	ND(5)	ND(5)
AUG	ND(5.0)	ND(5.0)	ND(5)	ND(5)
SEP	ND(5.0)	ND(5.0)	ND(5)	ND(5)
OCT	ND(5.0)	ND(5.0)	ND(5)	ND(5)
NOV	ND(5.0)	ND(5.0)	ND(5)	ND(5)
DEC	ND(5.0)	ND(5.0)	6	6
limit:	20	15	100	30

Note: "high" limits based upon Daily Maximum limits. "avg" limits based upon Monthly Average Limits.

**DISCHARGE 001N
(Monthly Summary of Weekly Data)**

Month	GREASE & OIL (mg/l)			SUSPENDED SOLIDS (mg/l)			SETTLABLE SOLIDS (ml/l)		
	high	low	avg	high	low	avg	high	low	avg
JAN	6.5	ND(5)	<5.0	31	11	19	ND(0.1)	ND(0.1)	ND(0.1)
FEB	10.0	ND(5)	<5.0	36	18	24	ND(0.1)	ND(0.1)	ND(0.1)
MAR	17.0	ND(5)	6.6	74	15	40	0.1	ND(0.1)	<0.1
APR	ND(5.0)	ND(5.0)	ND(5.0)	36	ND(5)	17	ND(0.1)	ND(0.1)	ND(0.1)
MAY	ND(5.0)	ND(5.0)	ND(5.0)	10	5	7	ND(0.1)	ND(0.1)	ND(0.1)
JUN	ND(5.0)	ND(5.0)	ND(5.0)	13	5	8	ND(0.1)	ND(0.1)	ND(0.1)
JUL	ND(5.0)	ND(5.0)	ND(5.0)	19	9	13	ND(0.1)	ND(0.1)	ND(0.1)
AUG	ND(5.0)	ND(5.0)	ND(5.0)	24	7	15	ND(0.1)	ND(0.1)	ND(0.1)
SEP	ND(5.0)	ND(5.0)	ND(5.0)	34	10	32	ND(0.1)	ND(0.1)	ND(0.1)
OCT	ND(5.0)	ND(5.0)	ND(5.0)	26	7	15	ND(0.1)	ND(0.1)	ND(0.1)
NOV	ND(5.0)	ND(5.0)	ND(5.0)	13	8	11	ND(0.1)	ND(0.1)	ND(0.1)
DEC	ND(5.0)	ND(5.0)	ND(5.0)	16	11	13	ND(0.1)	ND(0.1)	ND(0.1)
limit:	20	-	15	-	-	60	3.0	-	1.0

Note: "high" limits based upon Daily Maximum limits. "avg" limits based upon Monthly Average limits.

**2009 Annual Summary Report on Discharge Monitoring
at the
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DISCHARGE 001D, H, L, F, METALS (avg. ug/l)

Month	001D				001 H				001L				001F			
	Ag	Cd	Cr	Cu	Ag	Cd	Cr	Cu	Ag	Cd	Cr	Cu	Ag	Cd	Cr	Cu
JAN	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	<10	36	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	11	15
FEB																
MAR																
APR	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	14	48	ND(10)	19						
MAY																
JUN																
JUL	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	27	35	ND(10)	11						
AUG																
SEP																
OCT	ND(10)	ND(10)	12	ND(10)	ND(10)	ND(10)	16	31	ND(10)	ND(10)	ND(10)	<10	ND(10)	ND(10)	ND(10)	14
NOV					ND(10)	ND(10)	13	89								
DEC																

limit: none

Note: 001D, 001H and 001L analyses performed on quarterly composites.
001F analyses performed quarterly on a composite of weekly samples.

DISCHARGE 001D, H, L, F, METALS (avg. ug/l)

Month	001D				001 H				001L				001F			
	Hg	Ni	Pb	Zn	Hg	Ni	Pb	Zn	Hg	Ni	Pb	Zn	Hg	Ni	Pb	Zn
JAN	ND(0.20)	ND(10)	ND(10)	41	ND(0.20)	13	<10	18	ND(0.20)	ND(10)	ND(10)	ND(10)	ND(0.20)	22	ND(10)	35
FEB																
MAR																
APR	ND(0.20)	ND(10)	ND(10)	84	ND(0.20)	12	ND(10)	12	ND(0.20)	ND(10)	ND(10)	ND(10)	ND(0.20)	ND(10)	ND(10)	44
MAY																
JUN																
JUL	ND(0.20)	ND(10)	ND(10)	53	ND(0.20)	17	ND(10)	27	ND(0.20)	ND(10)	ND(10)	ND(10)	ND(0.20)	ND(10)	ND(10)	24
AUG																
SEP																
OCT	ND(0.20)	ND(10)	ND(10)	131	ND(0.20)	19	ND(10)	15	ND(0.20)	ND(10)	ND(10)	ND(10)	ND(0.20)	13	ND(10)	27
NOV					ND(0.20)	17	ND(10)	12								
DEC																

limit: none

Note: 001D, 001H and 001L analyses performed on quarterly composites.
001F analyses performed quarterly on a composite of weekly samples.

**2009 Annual Summary Report on Discharge Monitoring
at the
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**MONTHLY TOTAL SUSPENDED SOLIDS
Averages (mg/l)**

Month	001D*	001G	001H	001I	001J	001K	001L	001M	001P	002	003
JAN	<5	ND(5)	ND(5)		ND(5)		ND(5)	ND(5)	46	ND(5)	ND(5)
FEB	<5	ND(5)	ND(5)				ND(5)	ND(5)	27	7	5
MAR	8	ND(5)	ND(5)		ND(5)		ND(5)		9	ND(5)	ND(5)
APR	<5	ND(5)	ND(5)				ND(5)		17	ND(5)	6
MAY	<5	ND(5)	ND(5)				ND(5)		19	7	22
JUN	<5	ND(5)	ND(5)		ND(5)		ND(5)	ND(5)	6	ND(5)	ND(5)
JUL	<5	ND(5)	ND(5)		ND(5)		ND(5)		5	ND(5)	8
AUG	<5	ND(5)	ND(5)		ND(5)		ND(5)		ND(5)	ND(5)	9
SEP	<5	ND(5)	<5		ND(5)		ND(5)		5	ND(5)	ND(5)
OCT	<5	ND(5)	ND(5)		ND(5)		ND(5)	10	5	<5	ND(5)
NOV	<5	ND(5)	ND(5)		ND(5)		ND(5)	20	18	ND(5)	ND(5)
DEC	<5	ND(5)	ND(5)				ND(5)		10	ND(5)	19

Limit: 30 30 30 30 30 30 30 30 30 30 30 -

* Discharges from 001D are batched. Monthly averages are flow weighted.
Note: No discharges occurred from 001I and 001K during 2009.
Blank spots for other discharge points indicate that no discharge occurred during that particular month.

**QUARTERLY GREASE & OIL
Averages by Month (mg/l)**

Month	001D*	001G	001H	001I	001J	001K	001L	001M	001P	002	003	004
JAN	ND(5)	ND(5)	ND(5)		ND(5)		ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
FEB								ND(5)				
MAR					ND(5)							
APR	<5.0	ND(5.0)	ND(5.0)				ND(5.0)		ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
MAY	<5.0						ND(5.0)					
JUN	ND(5.0)				ND(5.0)			ND(5.0)				
JUL	6.2	ND(5.0)	ND(5.0)		ND(5.0)		ND(5.0)		ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
AUG	<5.0											
SEP	ND(5.0)				ND(5.0)							
OCT	<5.0	ND(5.0)	ND(5.0)		ND(5.0)		ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
NOV								ND(5.0)				
DEC								ND(5.0)				

Limit: 15 15 15 15 15 15 15 15 15 15 15 15

* Discharges from 001D are batched. Monthly averages are flow weighted.
Note: No discharges occurred from 001I and 001K during 2009.

**2009 Annual Summary Report on Discharge Monitoring
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**QUARTERLY ACUTE AND CHRONIC TOXICITY TESTING
(toxicity units, tu_a and tu_c)**

Month	ACUTE		*CHRONIC
	Test Result	6-Month Median	Test Result
JAN			
FEB	0.00	0.00	1.0
MAR			
APR	0.00	0.00	1.0
MAY			
JUN			
JUL			
AUG	0.23	0.23	1.0
SEP			
OCT	0.00	0.23	1.0
NOV			
DEC			
6-month median limit:			5.1

* This parameter is monitored for the State Ocean Plan instead of the NPDES Permit. A value of 1.0 indicates no chronic toxicity.

**DISCHARGE 001N
ANNUAL ANALYSES**

Sludge Parameter	Result	Limit
Percent Moisture	99%	None
Total Kjeldahl Nitrogen	880 mg/kg	None
Ammonia (N)	120 mg/kg	None
Nitrate (N)	ND(0.1) mg/kg	None
Total Phosphorus	65.0 mg/kg	None
pH	7.1	None
Oil and Grease	12.0 mg/kg	None
Boron	8.9 mg/kg	None
Cadmium	0.06 mg/kg	10 X STLC*
Copper	32.0 mg/kg	10 X STLC
Chromium	0.7 mg/kg	10 X STLC
Lead	0.9 mg/kg	10 X STLC
Nickel	0.7 mg/kg	10 X STLC
Mercury	ND(0.001) mg/kg	10 X STLC
Zinc	69 mg/kg	10 X STLC
Volume	1.48 tons	None

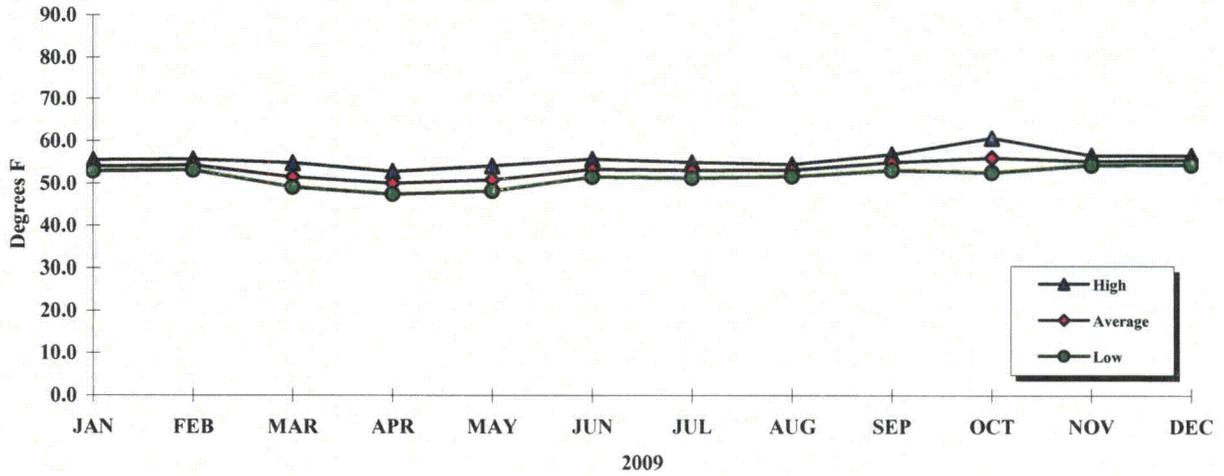
Note: Annual samples were collected in October.
* STLC = Soluble Threshold Limit Concentration

APPENDIX-3

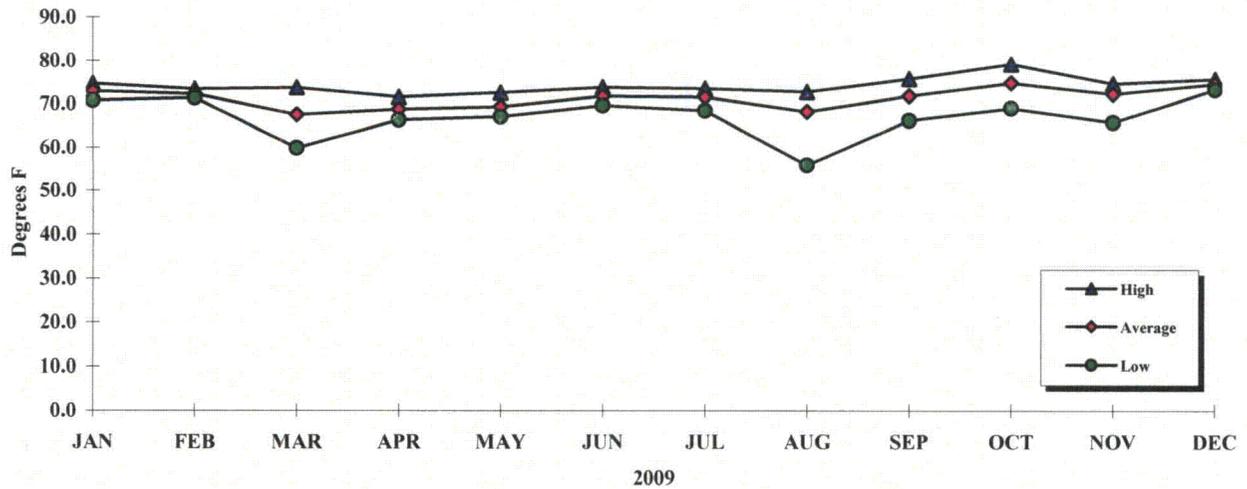
GRAPHICAL SUMMARIES OF INFLUENT AND EFFLUENT MONITORING

2009 Annual Summary Report on Discharge Monitoring
at the
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DISCHARGE 001 INFLUENT
Temperature (°F)

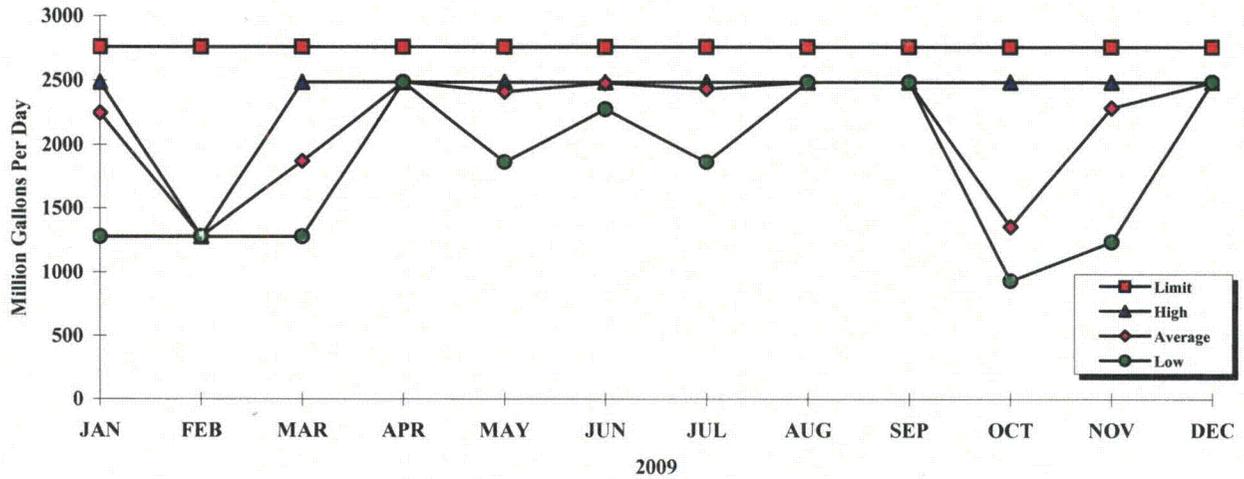


DISCHARGE 001 EFFLUENT
Temperature (°F)

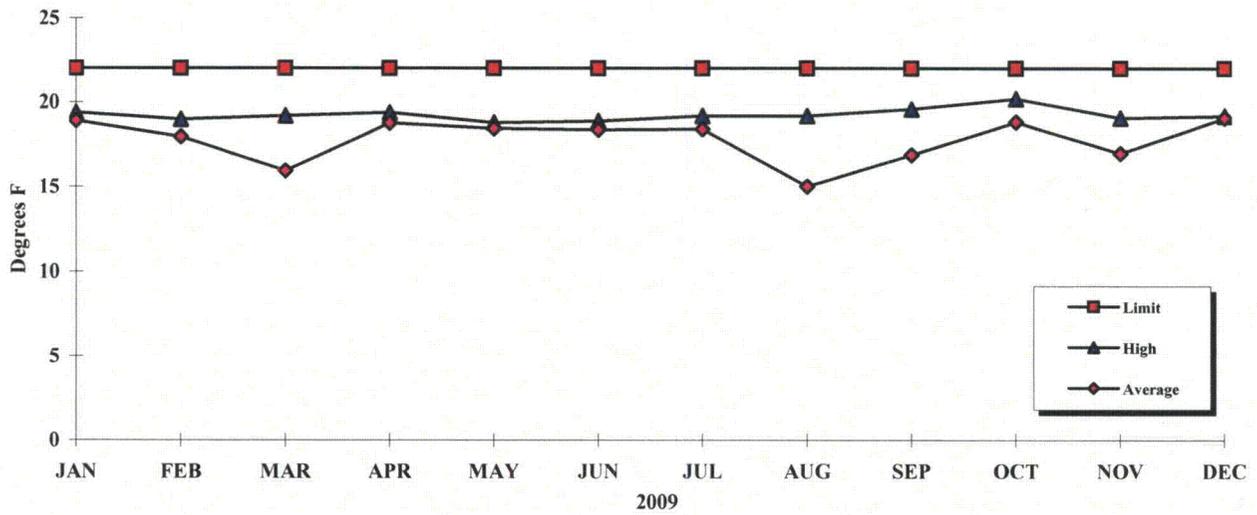


2009 Annual Summary Report on Discharge Monitoring at the Diablo Canyon Power Plant

DISCHARGE 001 EFFLUENT *Flow (MGD)*

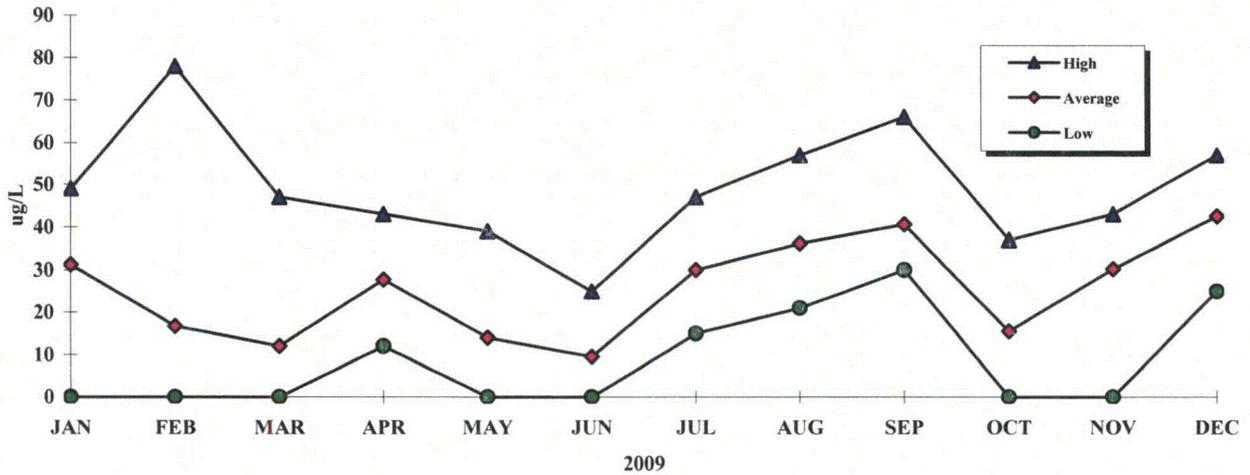


DISCHARGE 001 EFFLUENT *Monthly Delta T (°F)*



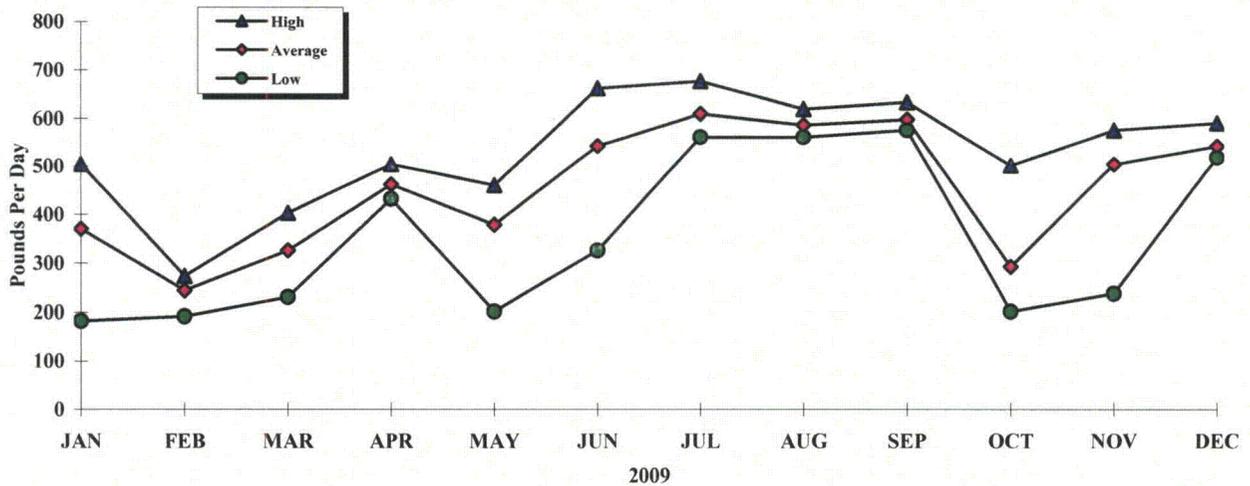
2009 Annual Summary Report on Discharge Monitoring at the Diablo Canyon Power Plant

DISCHARGE 001
Total Chlorine Residual, ug/l



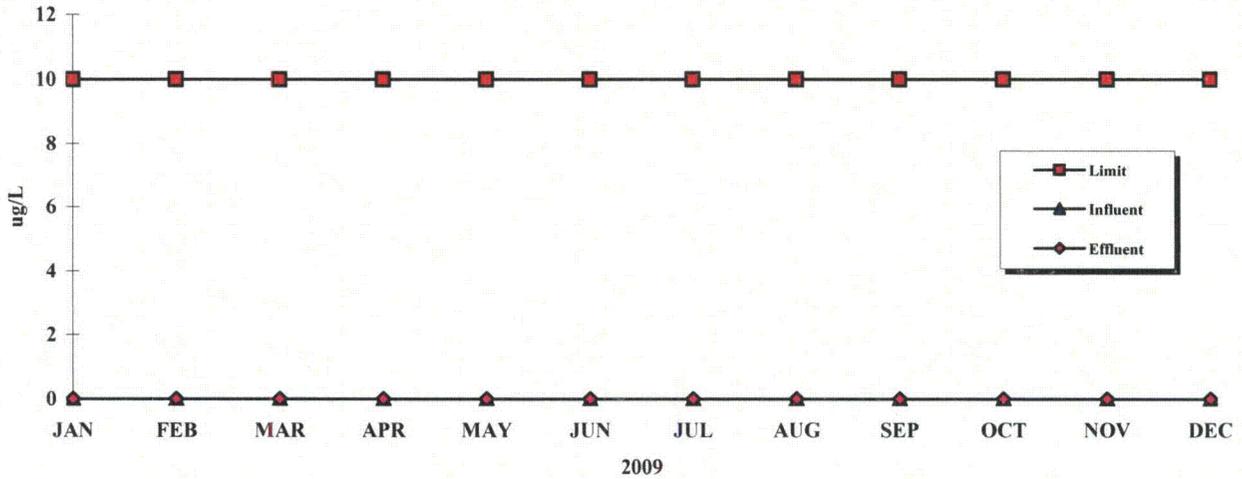
Note: Values plotted at zero were below the reporting limit.

DISCHARGE 001
Total Chlorine Used, pounds per day



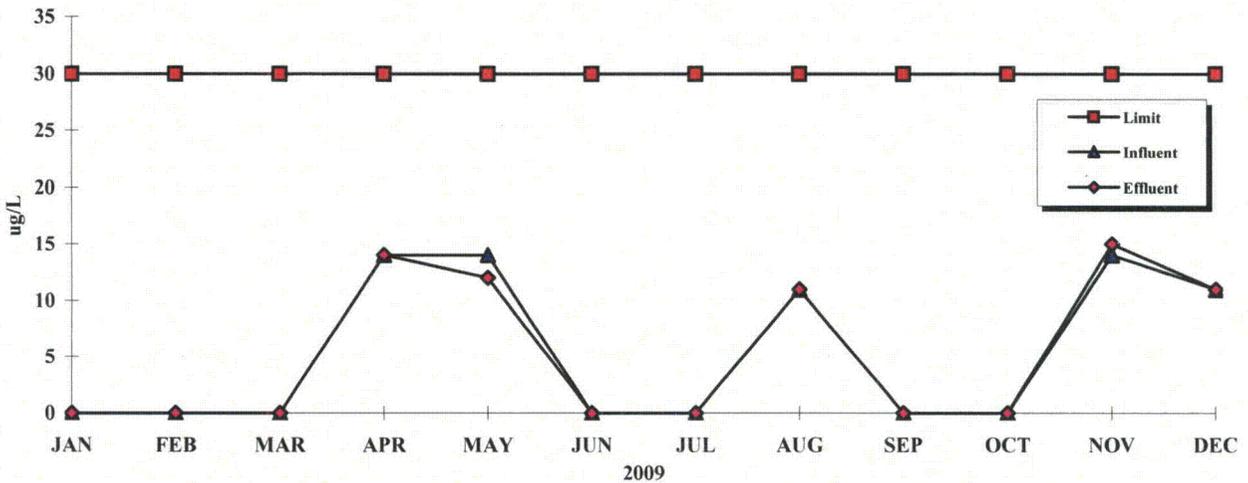
2009 Annual Summary Report on Discharge Monitoring at the Diablo Canyon Power Plant

DISCHARGE 001
Copper (monthly average, ug/l)



Note: The analyte was not detected at or above the reporting limit for values plotted at zero.
The 6-month median limit (the most conservative limit) is plotted on this chart.
The daily maximum limit for Copper is 50 ug/l.

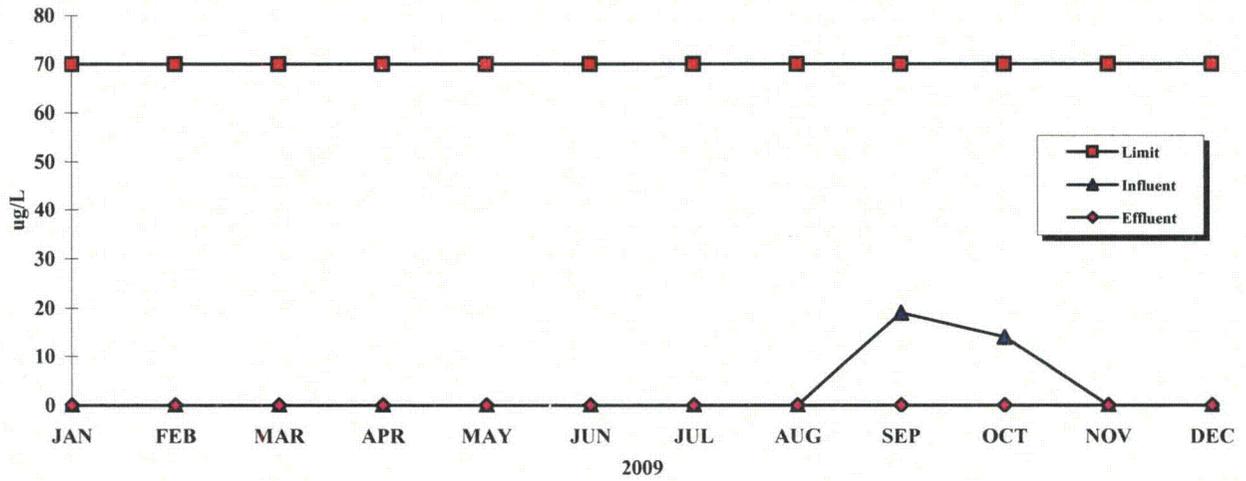
DISCHARGE 001
Nickel (monthly average, ug/l)



Note: The analyte was not detected at or above the reporting limit for values plotted at zero.
The 6-month median limit (the most conservative limit) is plotted on this chart.
The daily maximum limit for Nickel is 100 ug/l.

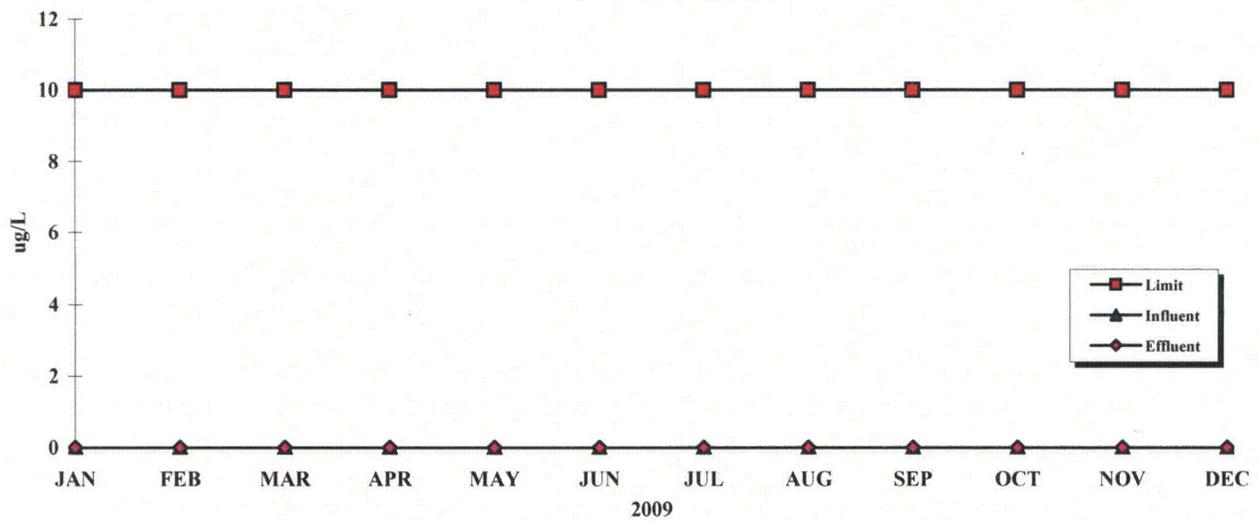
**2009 Annual Summary Report on Discharge Monitoring
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DISCHARGE 001
Zinc (monthly average, ug/l)



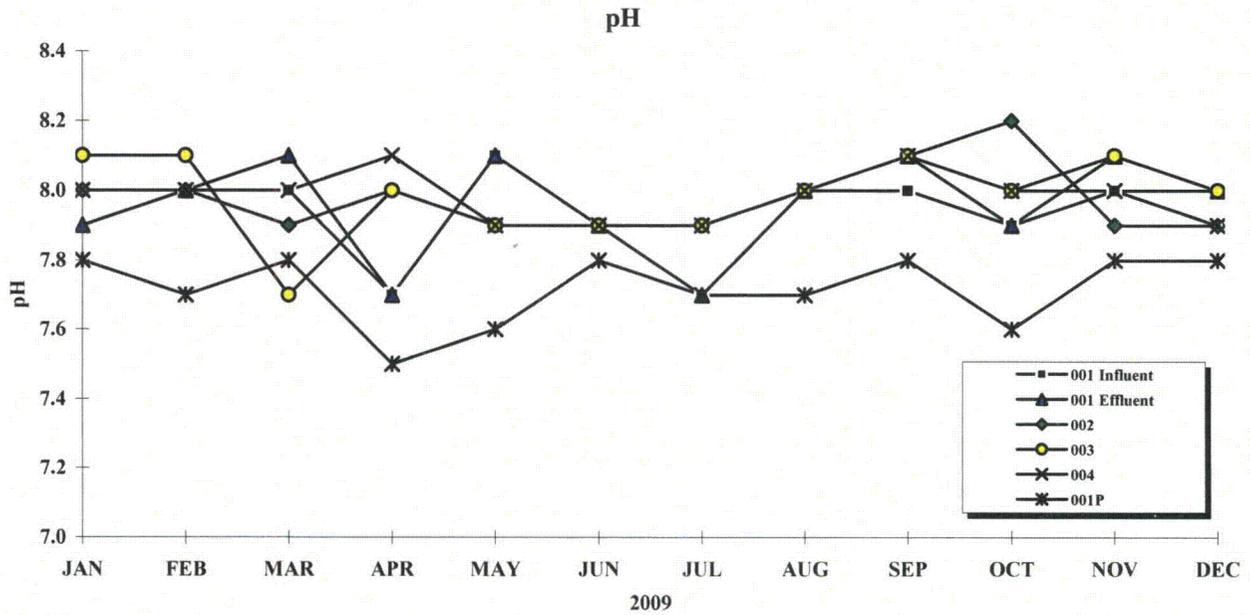
Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

DISCHARGE 001
Chromium (monthly average, ug/l)

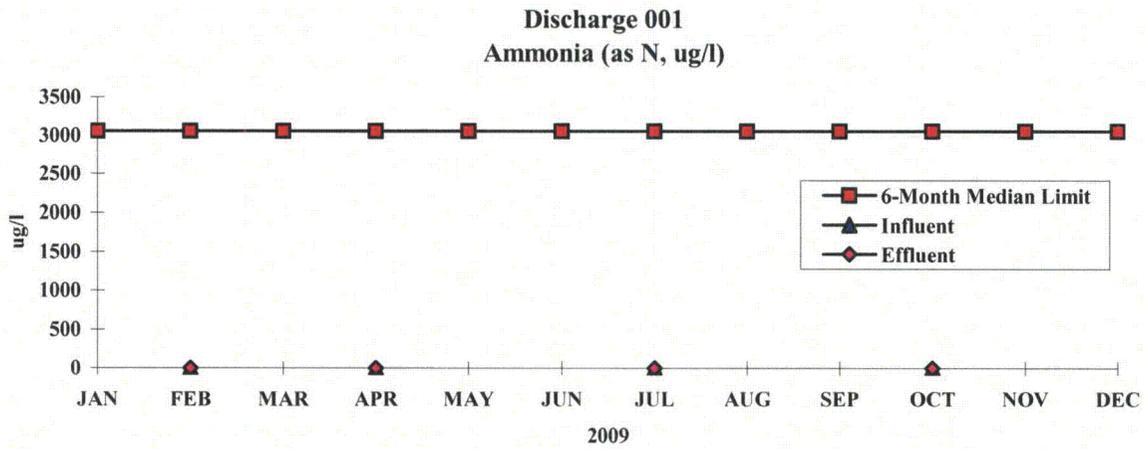


Note: The analyte was not detected at or above the reporting limit for values plotted at zero.
The 6-month median limit is plotted on this chart. The daily maximum limit for chromium is 40 ug/l.

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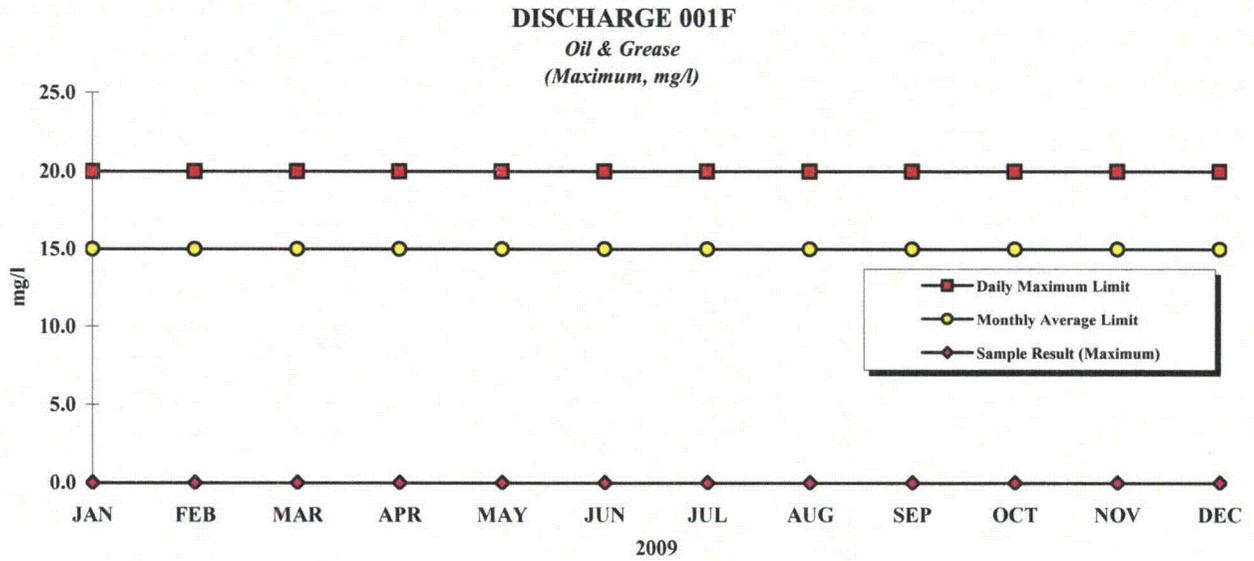


Note: Several data points on this chart overlap.

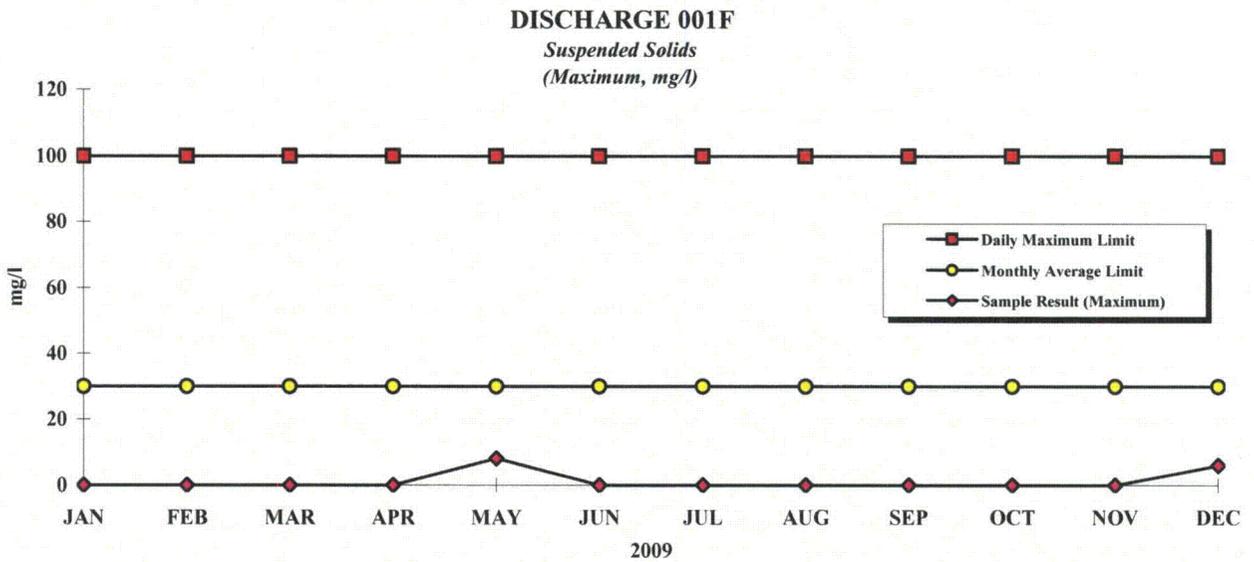


Note: The analyte was not detected at or above the reporting limit for values plotted at zero.
Influent and Effluent values overlap at four points on this plot.

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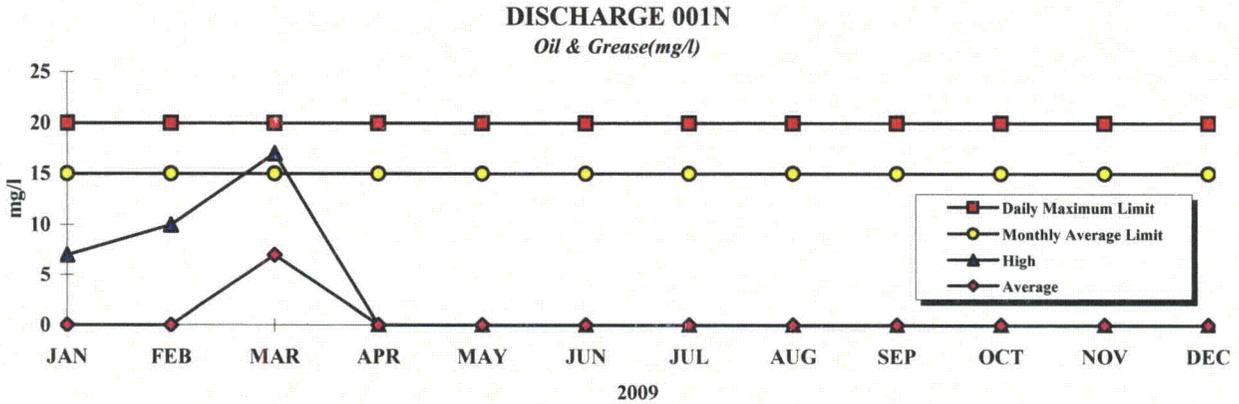


Note: Values plotted at zero were below the reporting limit.

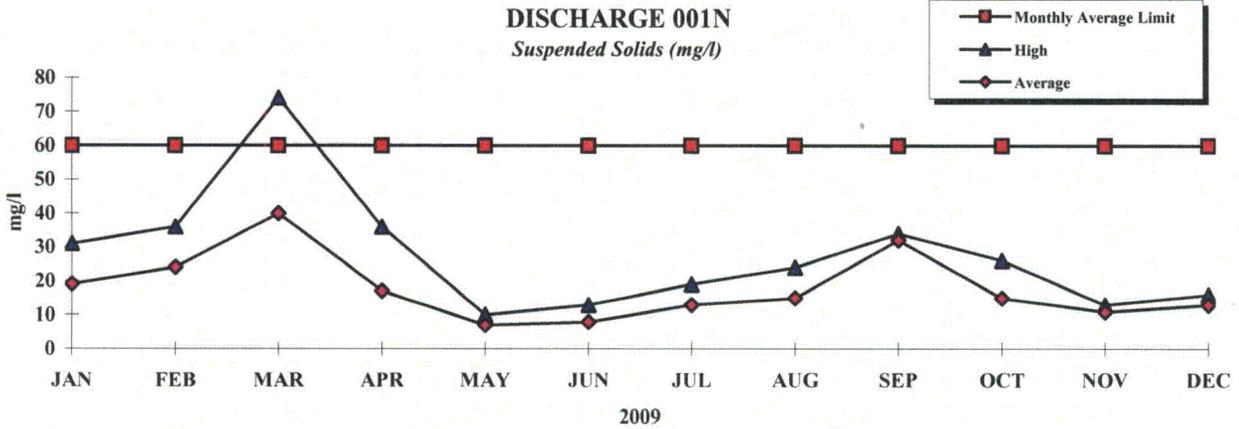


Note: Maximum values are plotted.

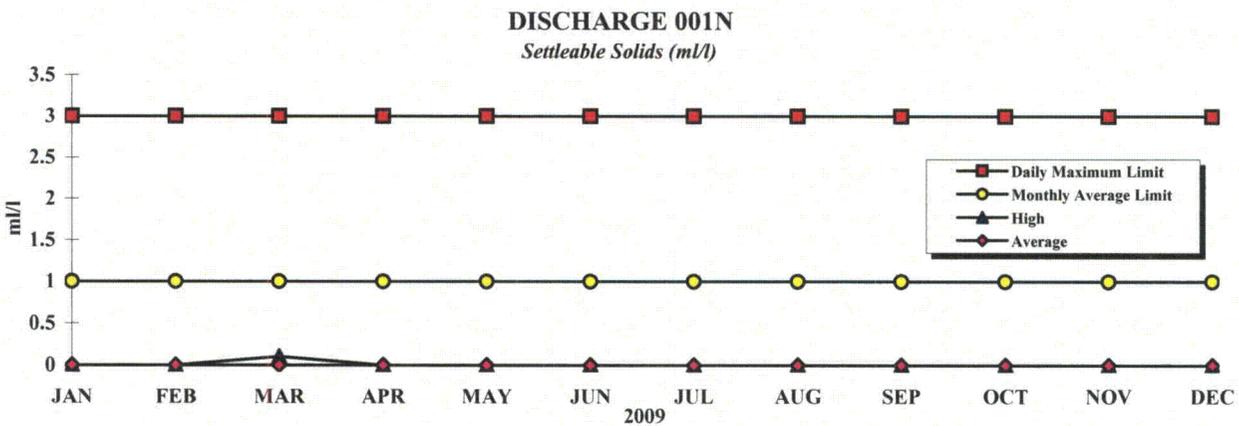
**2009 Annual Summary Report on Discharge Monitoring
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Note: Values plotted at zero were below the reporting limit.
High, low and average values overlap at eight points on this plot.



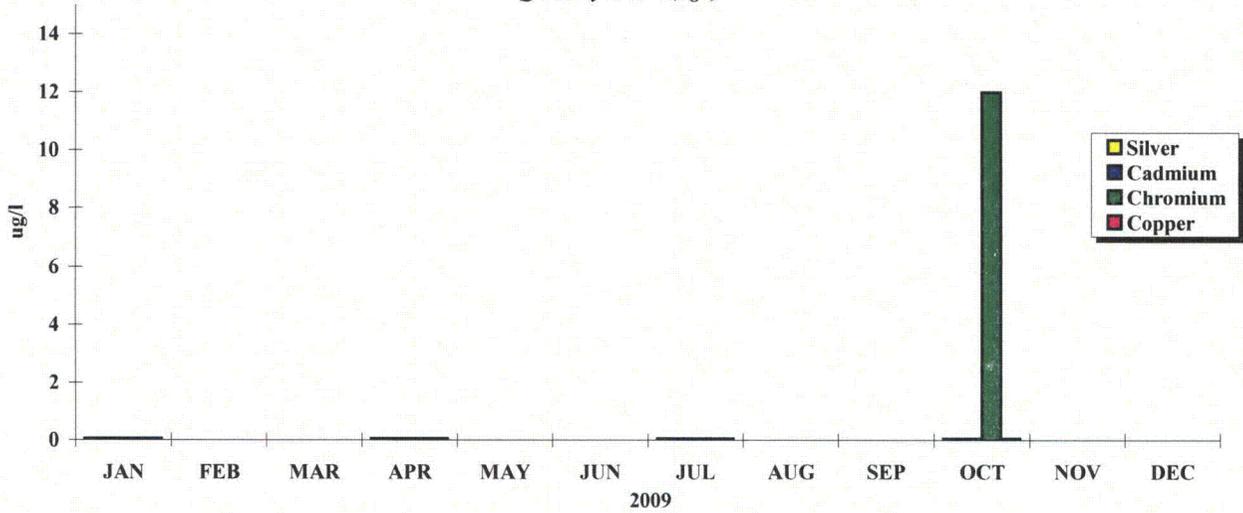
Note: March average value is below the Monthly Average Limit. There is no Daily Maximum limit.



Note: Values plotted at zero were below the reporting limit.
High, average, and low values overlap at eleven points on this plot.

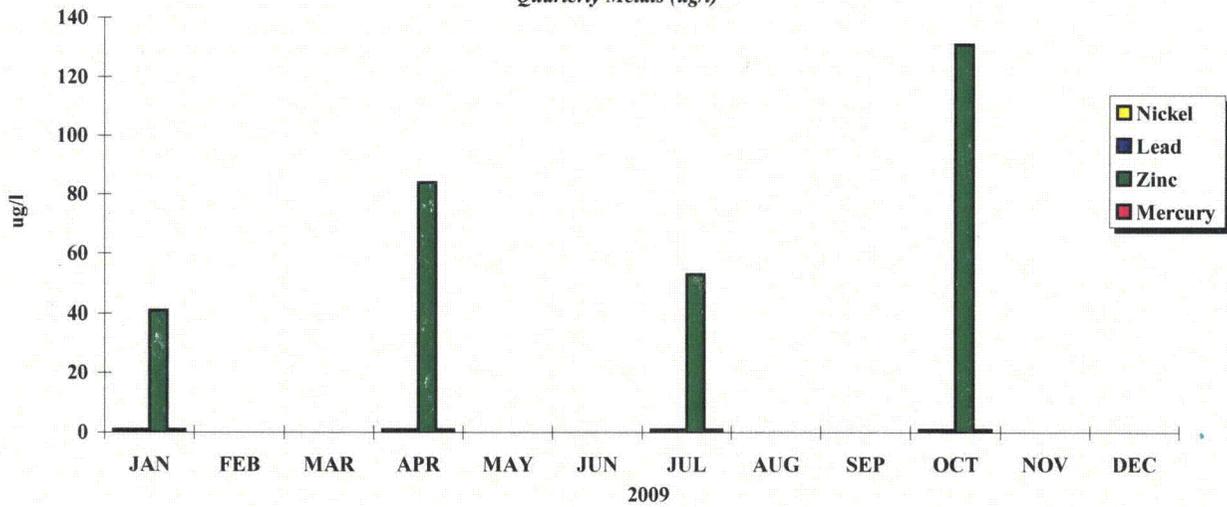
**2009 Annual Summary Report on Discharge Monitoring
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DISCHARGE 001D
Quarterly Metals (ug/l)



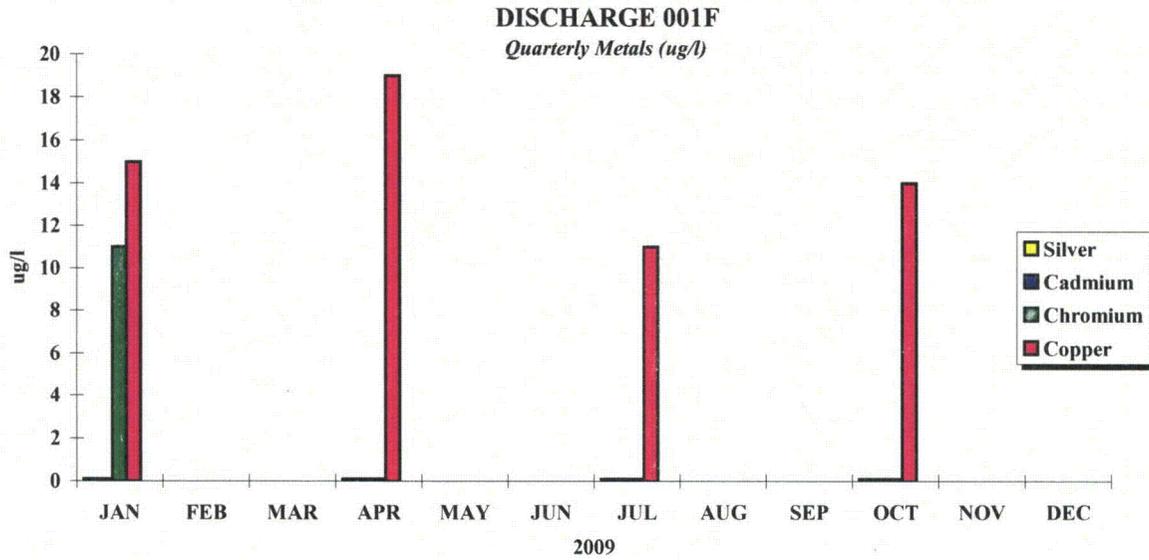
Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

DISCHARGE 001D
Quarterly Metals (ug/l)

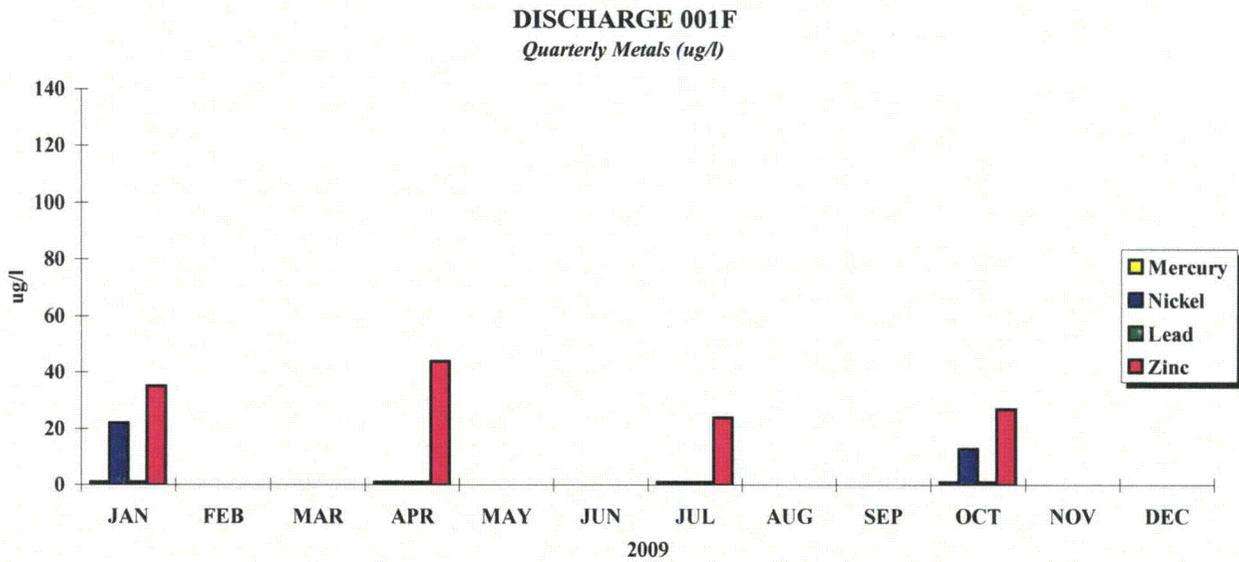


Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

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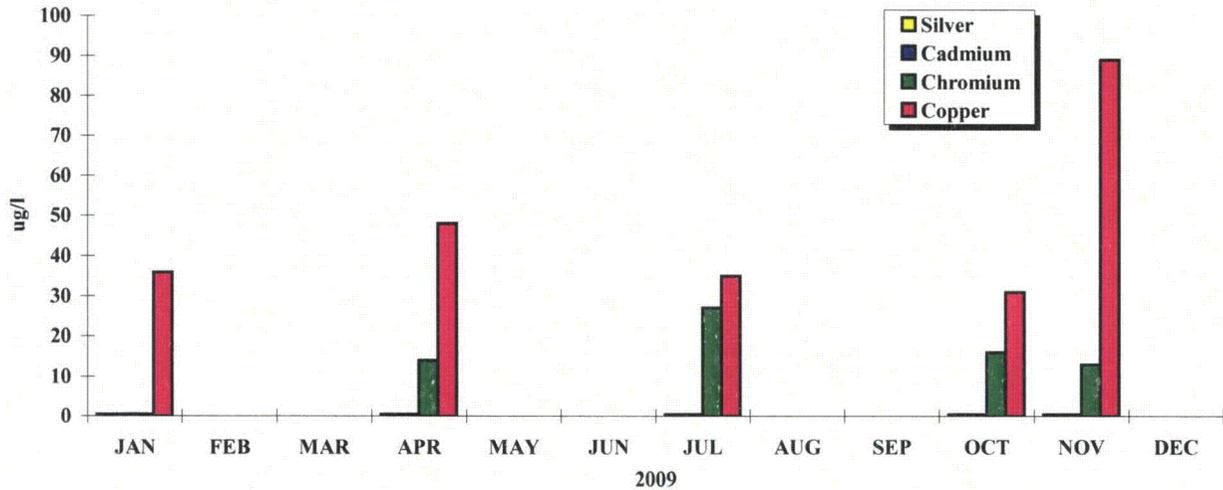
Note: The analyte was not detected at or above the reporting limit for values plotted at zero.



Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

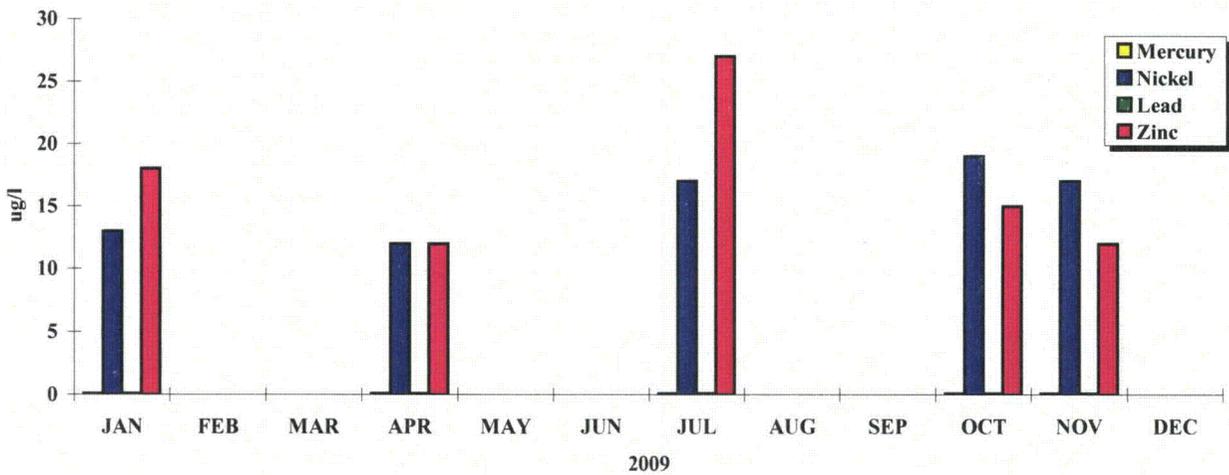
**2009 Annual Summary Report on Discharge Monitoring
at the
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DISCHARGE 001H
Quarterly Metals (ug/l)



Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

DISCHARGE 001H
Quarterly Metals (ug/l)

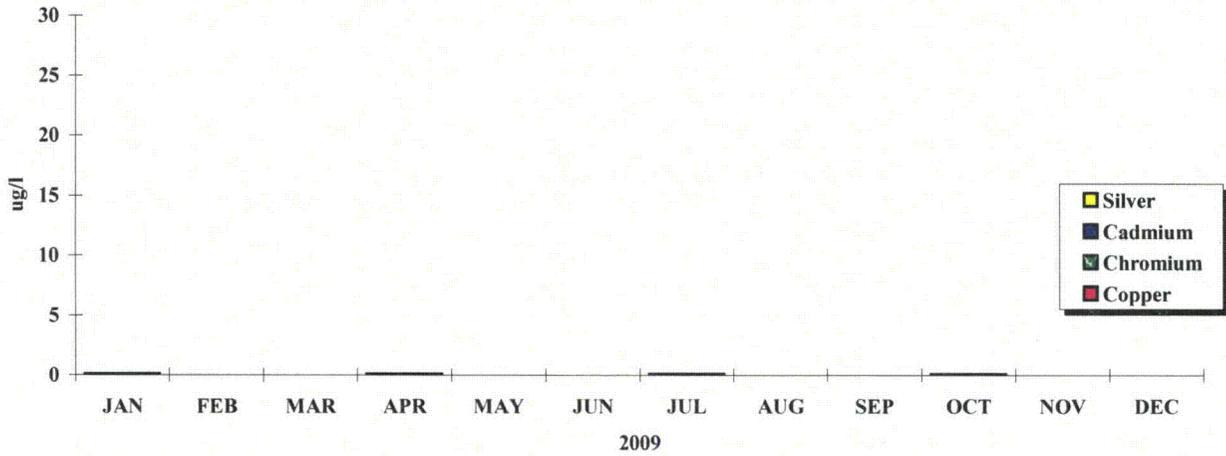


Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

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DISCHARGE 001L

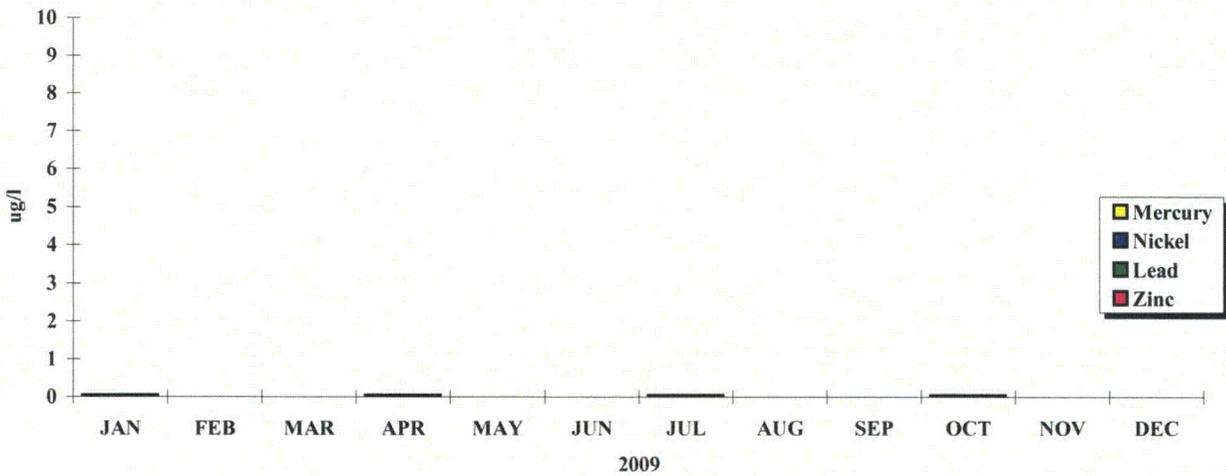
Quarterly Metals (ug/l)



Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

DISCHARGE 001L

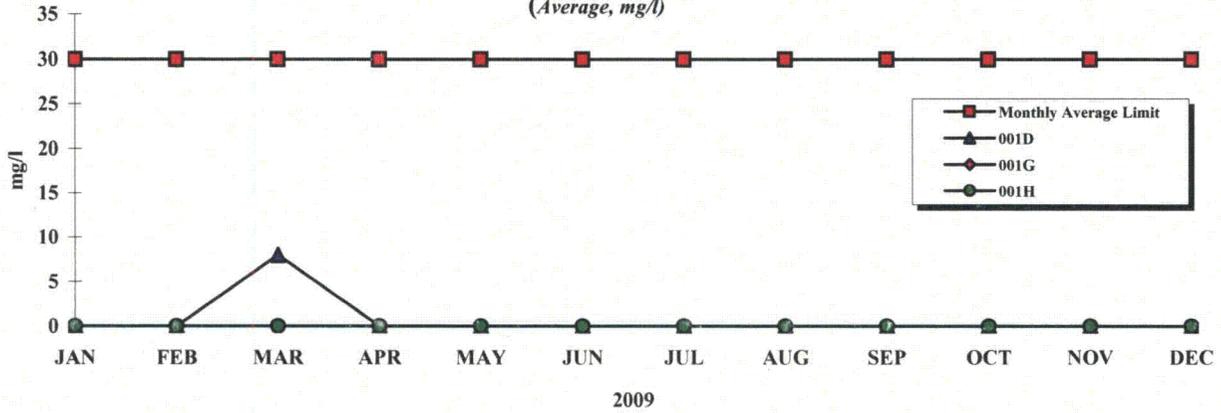
Quarterly Metals (ug/l)



Note: The analyte was not detected at or above the reporting limit for values plotted at zero.

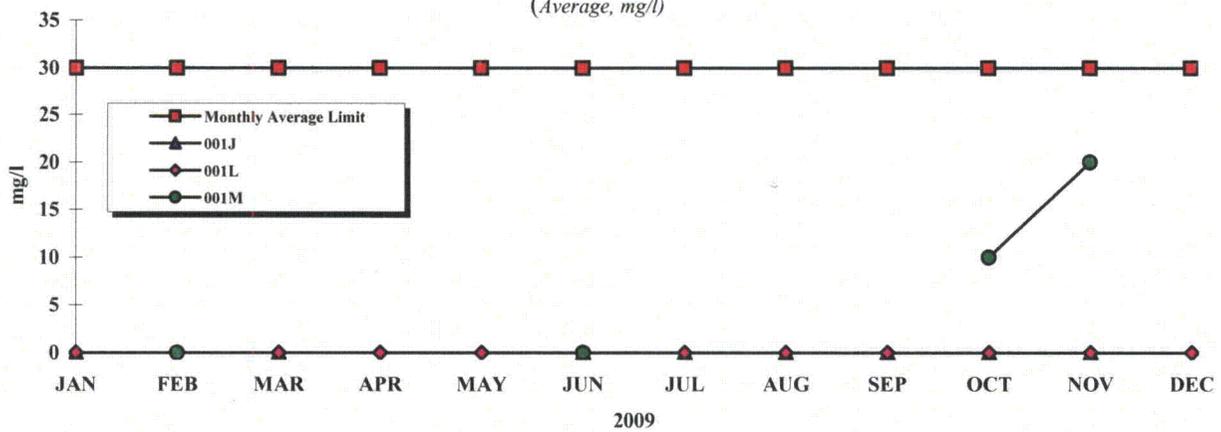
2009 Annual Summary Report on Discharge Monitoring at the Diablo Canyon Power Plant

MONTHLY TOTAL SUSPENDED SOLIDS (Average, mg/l)



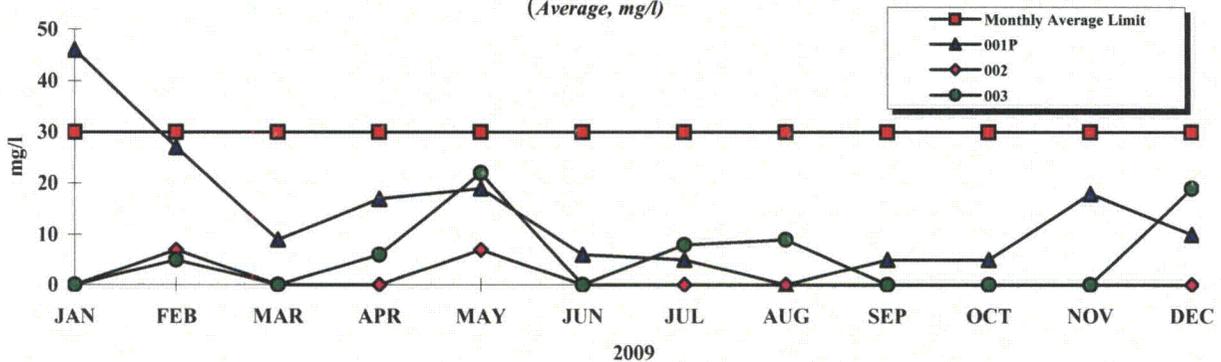
Note: Points on chart may overlap. Values plotted at zero were below the reporting limit.

MONTHLY TOTAL SUSPENDED SOLIDS (Average, mg/l)



Note: Points on chart may overlap. Values plotted at zero were below the reporting limit.

MONTHLY TOTAL SUSPENDED SOLIDS (Average, mg/l)

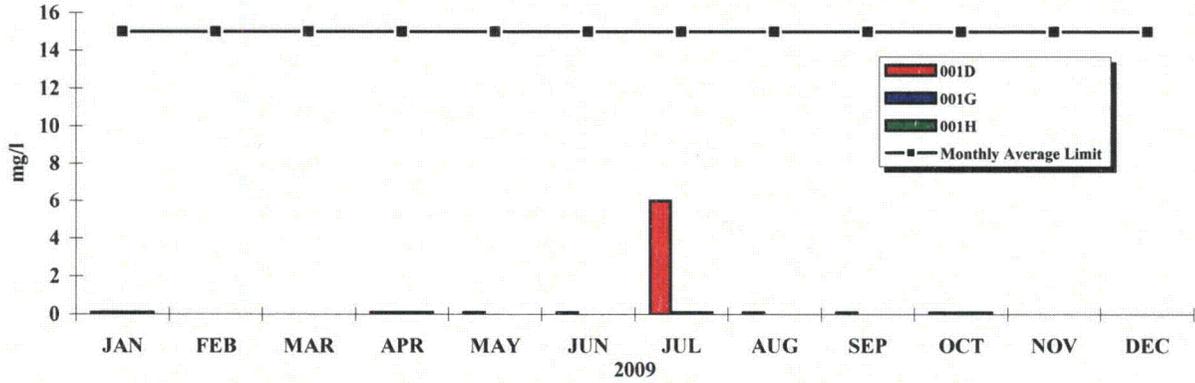


Note: Points on chart may overlap. Values plotted at zero were below the reporting limit.

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QUARTERLY OIL & GREASE

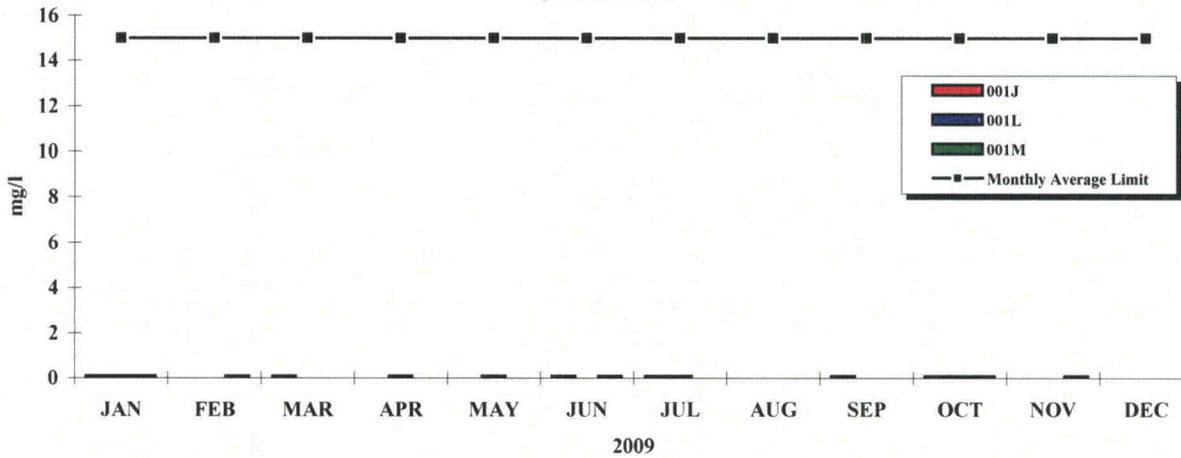
(Average, mg/l)



Note: Values plotted at zero were below the reporting limit. Less than values are plotted at the value.

QUARTERLY OIL & GREASE

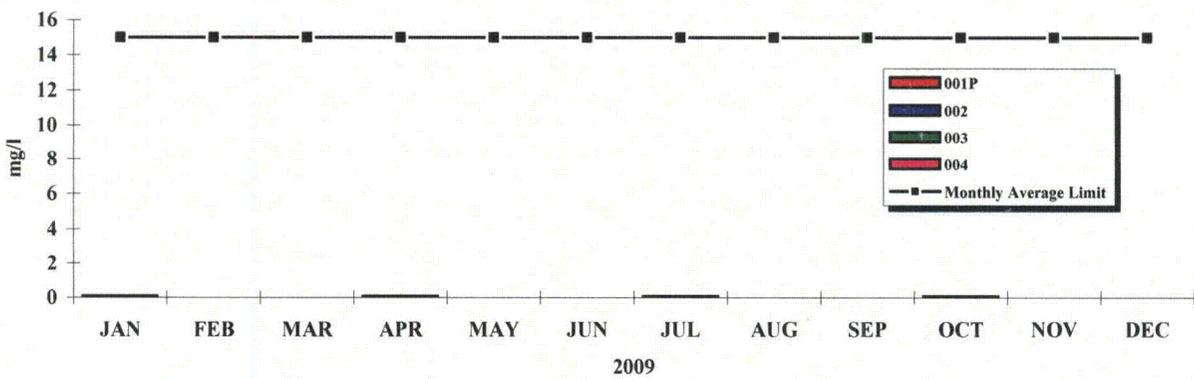
(Average, mg/l)



Note: Values plotted at zero were below the reporting limit.

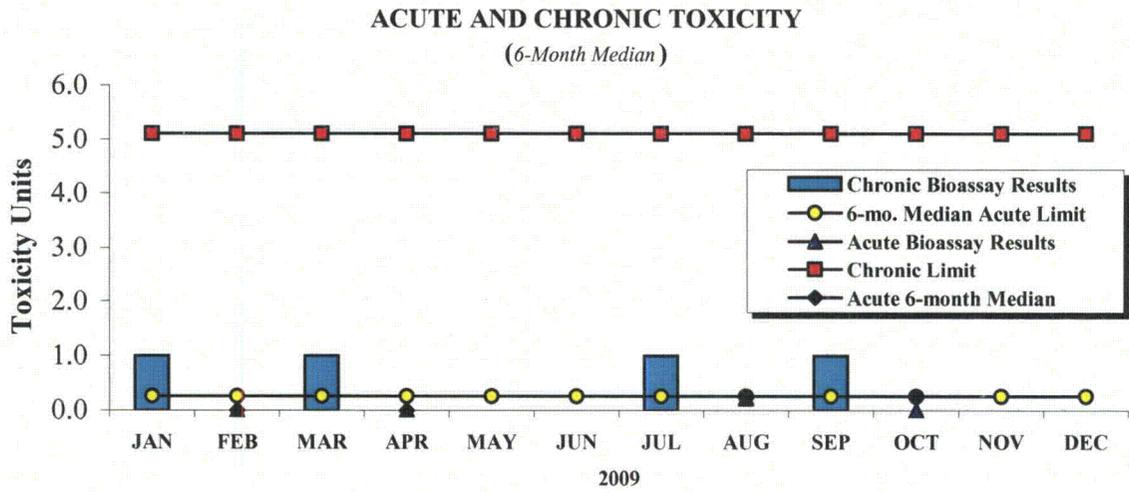
QUARTERLY OIL & GREASE

(Average, mg/l)



Note: Values plotted at zero were below the reporting limit.

**2009 Annual Summary Report on Discharge Monitoring
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Note: > 0 acute 6-month median value in October due to positive test result (TUa 0.23) in August .

APPENDIX 4

SUMMARY OF RWMP MONITORING FOR 2009

Study	RWMP Stations/ Surveys per Year	1st Survey Completion Stations/ Dates	2nd Survey Completion Stations/ Dates	3rd Survey Completion Stations/ Dates	4th Survey Completion Stations/ Dates
Horizontal Band Transects	14 / 4x	Feb 11	May 28	Aug 20	Dec 2
Vertical Band Transects	5 / 4x	Feb 8	Jun 10	Jul 24	Dec 4
Benthic Stations	8 / 4x	Feb 4	Jun 25	Sep 4	Jan 4, 2010
Fish Observation Transects	12 / 4x	May 1	Jul 14	Sep 21	Jan 6, 2010
Bull Kelp Census	* / 1x	n/a	n/a	n/a	Oct 16
Temperature Monitoring	24 / **	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec

* Diablo Cove census.

** Temperature measured throughout the year at 20 minute intervals (14 intertidal and 10 subtidal stations).