



California Regional Water Quality Control Board

Central Valley Region

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Gray Davis
Governor

Winston H. Hickox
Secretary for
Environmental
Protection

FILE

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24 June 2002

Mr. Anthony Escalante
Pacific Gas and Electric Company
P.O. Box 425
Auberry, CA 93602
5010N00059

NOTICE OF APPLICABILITY

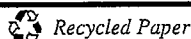
WATER QUALITY ORDER NO. 97-10-DWQ-R5035, GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES TO LAND BY SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS, PACIFIC GAS AND ELECTRIC COMPANY, HELMS HOUSING AND SUPPORT FACILITIES, FRESNO COUNTY

We reviewed your Report of Waste Discharge (RWD), dated 4 February 2002, in support of Pacific Gas & Electric Company's (PG&E) proposal to treat and dispose of domestic wastewater from its Helms Housing and Support Facilities via a raised bed intermittent sand filter treatment system (hereafter ISF). The RWD consists of a Form 200 and supplemental information, dated 19 March 2002 and 18 April 2002.

PG&E currently discharges to a leachfield that has groundwater extraction wells that pump groundwater to maintain a minimum separation distance from the bottom of the leachfield trenches and groundwater. PG&E discharges this extracted groundwater to Long Meadow Creek, a water of the U.S., under the terms and conditions of Waste Discharge Requirements (WDRs) Order No. 96-108 (NPDES Permit No. CA0082637). Order No. 96-108 requires PG&E to continuously monitor the flow to the leachfield. PG&E proposes to construct the raised bed ISF on top of its existing leachfield that will maintain a minimum five-foot separation distance to first encountered groundwater and cease discharge to the leachfield. Maintaining this minimum separation distance will eliminate the need to discharge extracted groundwater to Long Meadow Creek.

By letter dated 6 May 2002, we indicated that the RWD was complete and determined that, based on the information provided in the RWD, the discharge to the ISF meets the conditions for approval under the enclosed Water Quality Order No. 97-10-DWQ, *General Waste Discharge Requirements For Discharges To Land By Small Domestic Wastewater Treatment Systems* (hereafter General Order). All the requirements contained within the General Order described as applicable to "All Small Domestic Systems" and "Subsurface Disposal System" apply to your discharge. You are hereby assigned General Order No. 97-10-DWQ-R5035 for your WWTF. Enclosed are the General Order, Monitoring and Reporting Program No. 91-10-DWQ, and the Standard Provisions and Reporting for Waste Discharge Requirements.

California Environmental Protection Agency



GENERAL ORDER No. 97-DWQ-R5035
PACIFIC GAS AND ELECTRIC COMPANY
HELMS HOUSING AND SUPPORT FACILITIES
FRESNO COUNTY

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After PG&E satisfies Facility-Specific Requirement 5, described below, Regional Board staff will recommend the Regional Board rescind Order No. 96-108 (NPDES Permit No. CA0082637).

PROJECT LOCATION

The ISF is located in eastern Fresno County in the northwest ¼ of Section 34, T10S, R27E, MDB&M, as shown in Attachment A, which is attached hereto and made part of this Notice of Applicability (NOA) by reference. Pacific Gas and Electric Company owns and operates the facility and is hereafter referred to as Discharger. Surface water drainage is to Long Meadow Creek, a tributary to the North Fork of the Kings River. Areal soils consist of fine to medium grained silty sands, sandy silts, and gravels with a median percolation rate of 1.2 min/inch. The average precipitation is about 50 inches, ninety percent of which occurs as snowmelt.

Groundwater monitoring and pumping wells within the ISF's vicinity indicate an average groundwater elevation of approximately 5.3 feet below surface grade, determined by measurements made from 1996-2001. The Discharger reports the minimum depth to groundwater of 4.7 feet during the same period. According to the RWD, during July through November, groundwater is at least 20 feet below ground surface. The depth to groundwater is influenced by spring snowmelt runoff. Groundwater flows south-southwest toward Long Meadow Creek, approximately 2,800 feet from the ISF. The beneficial uses of the groundwater are identified in the General Order.

FACILITY DESCRIPTION

The Discharger's Helms Housing and Support Facilities (hereafter Housing Facility) consists of 18 homes, a school, a recreation building, and a repair shop. The average wastewater flow is about 3,300 gallons per day (gpd). The ISF will be constructed and operated according to the flow diagram and design specifications depicted in Attachments B and C, which are attached hereto and made part of this NOA by reference. The proposed ISF will consist of an existing 7,000-gallon septic tank, an Orenco filter, an existing 7,000-gallon effluent holding tank, an existing sump, and an ISF on top of the existing abandoned leachfield. The design flow rate of the ISF is 6,300 gpd. The Orenco filter will be installed at the outlet of the existing septic tank to provide additional treatment prior to discharging to the effluent holding tank and ISF. Wastewater discharged to the ISF will move vertically through two-feet of sand and an additional one-foot of soil before entering the fill dirt of the existing leachfield. PG&E proposes to maintain a five-foot separation distance from the bottom of the leach trenches at the interface between the gravel of the wastewater distribution system and ISF filtration medium to first-encountered groundwater¹. The RWD indicates that wastewater percolating through the existing leachfield trenches should be adequately treated.

The Discharger proposes to monitor groundwater elevation monthly in an existing upgradient groundwater well installed in 2001 (MW-4 as described in the RWD²) from December through June of each year when winter runoff occurs and groundwater elevations are highest. The RWD indicates that

¹ Pursuant to a 18 June 2002 telephone conversation between Ms. Sara Everitt (PG&E) and Ms. Alexis Phillips-Dowell (Regional Board).

² MW-4 is not labeled on Figure 2 of the RWD's *Existing Leachfield* diagram, therefore, for the purpose of this NOA and monitoring requirements, MW-4 is located approximately 60 feet west and 15 feet south of the "Leachfield Building."

during times when the Discharger is unable to maintain the five-foot separation, the Discharger will cease discharge to the ISF and wastewater from the septic tank will be transported to the Fresno-Clovis Wastewater Treatment Facility for disposal. The Discharger proposes to annually flush the ISF's wastewater distribution system and perform a pressure inspection test to verify that the orifices in the distribution system are not clogged.

This NOA regulates the discharge of domestic wastewater to the ISF.

FACILITY-SPECIFIC REQUIREMENTS


1. Discharge of wastewater at a location or in a manner different from that described in the RWD and the requirements contained in the General Order is prohibited.
2. Discharge to the ISF when groundwater is within five feet of the bottom of the leach trenches at the interface between the gravel and ISF filtration medium, as shown in Attachment C, is prohibited.
3. When groundwater is less than five feet of the bottom of the leach trenches at the interface between the gravel and ISF filtration medium, the Discharger must dispose of wastewater offsite in the manner described in the RWD or as approved by the Executive Officer.
4. As a means for determining compliance with General Order Requirement B.1.c, influent flow to the ISF shall not exceed 6,300 gallons per day.
5. Prior to initiating discharge to the ISF, the Discharger shall submit a technical report certifying that the ISF was constructed in accordance with the RWD and is capable of complying with the General Order and this NOA. The technical report shall also identify in hundreds of feet above ground surface the elevation of the interface between the gravel and ISF filtration medium. The technical report is subject to the requirements of Facility-Specific Requirement 7 and is subject to Executive Officer written approval.
6. The Discharger shall comply with the requirements of Monitoring and Reporting Program (MRP) No. 91-10-DWQ, as well as the additional monitoring listed in Attachment D, *Supplemental Monitoring and Reporting Program No. 97-DWQ-R5035*, which is attached hereto and made part of the NOA by reference.
7. All technical reports required herein that involve evaluation, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code, sections 6735, 7835, and 7835.1. To demonstrate compliance with Title 16, California Code of Regulations, sections 415 and 3065, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.
8. The Discharger shall submit the required annual fee (as specified in the annual billing issued by the State Water Resources Control Board) until the NOA is officially terminated.

GENERAL ORDER No. 97-DWQ-R5035
PACIFIC GAS AND ELECTRIC COMPANY
HELMS HOUSING AND SUPPORT FACILITIES
FRESNO COUNTY

9. Failure to abide by the conditions of the General Order and this letter authorizing applicability, including its supplemental monitoring and reporting requirements, could result in enforcement actions as authorized by provisions of the California Water Code.

If you have any questions regarding this NOA, please contact Alexis R. Phillips-Dowell at (559) 445-5500.



 THOMAS R. PINKOS
Acting Executive Officer

Enclosures - Attachments:

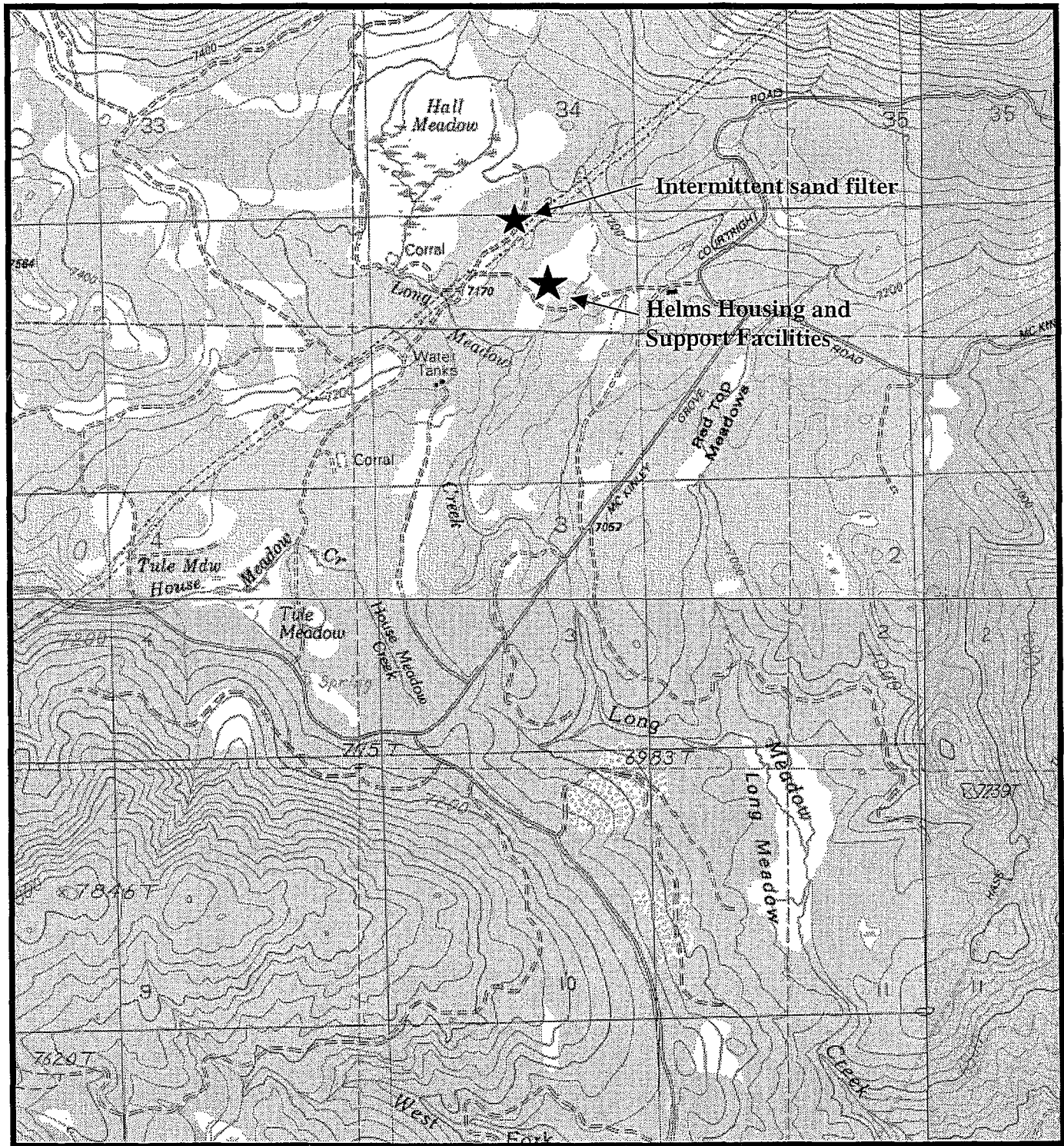
- A - Location Map
- B - Flow Diagram
- C - Cross Section of Intermittent Sand Filter
- D - Supplemental Monitoring and Reporting Program No. 91-10-DWQ-5035

General Order:

Monitoring and Reporting Program No. 97-10-DWQ
Standard Provisions and Reporting for Waste Discharge Requirements

cc w/enclosures: Ms. Sara Everitt, Pacific Gas and Electric Company, San Francisco

cc w/attachments only: United States Department of Agriculture, Sierra National Forest, Clovis
Ms. Robin Tani, Fresno County Planning Department, Fresno
Fresno County Environmental Health Department, Fresno
Mr. Ron Crites, Brown and Caldwell, Rancho Cordova



ATTACHMENT A

Location Map

WATER QUALITY ORDER NO. 97-10-DWQ-R5035

PACIFIC GAS AND ELECTRIC COMPANY

HELMS HOUSING AND SUPPORT FACILITIES

FRESNO COUNTY

Northwest ¼ of Section 34, T10S, R27E, MDB&M



Influent (6,300 gpd design)

Existing Septic Tank
(7,000-gal)

Orenco Filter

Existing Effluent
Storage Tank
(7,000-gal)

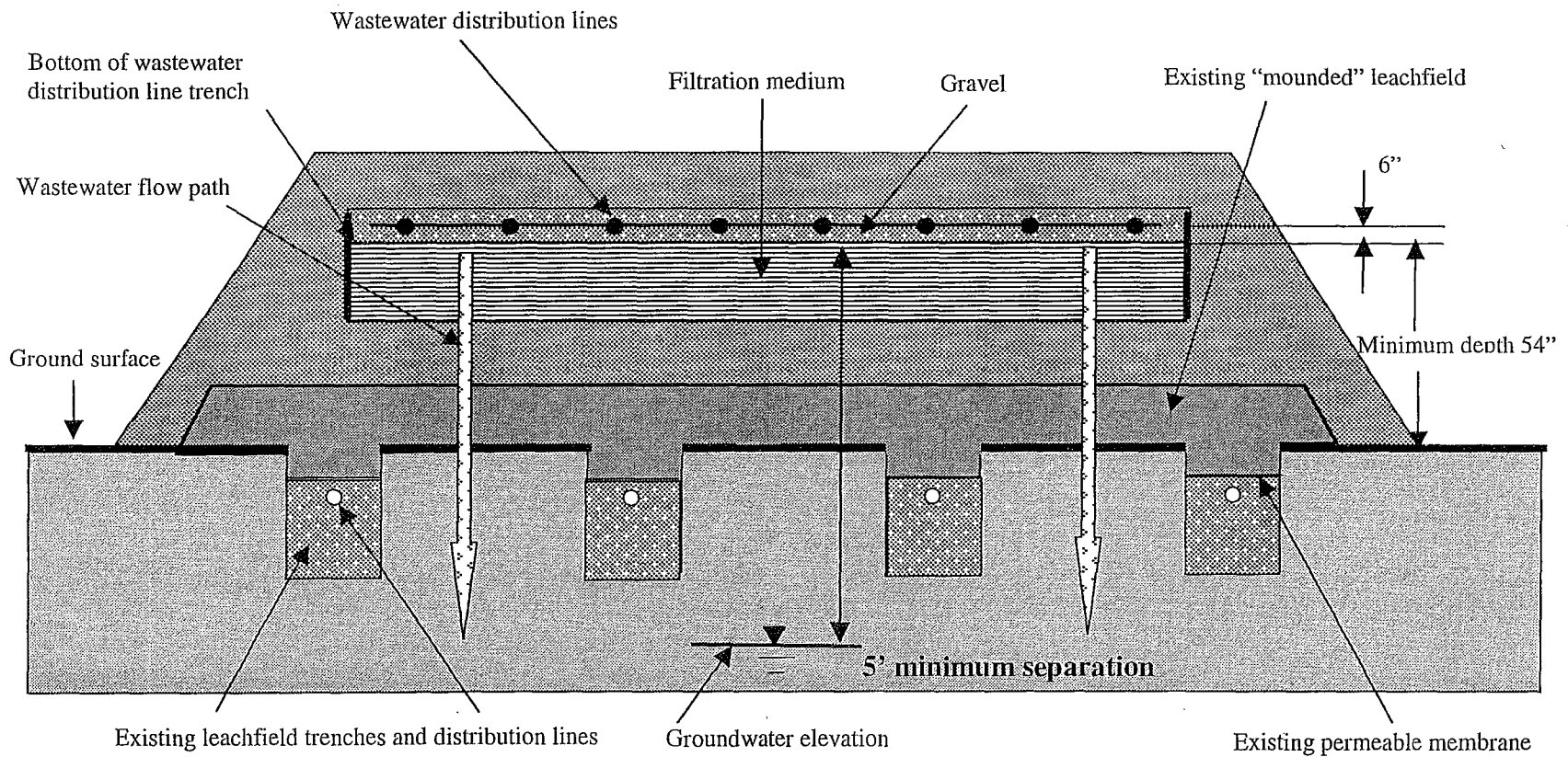
Sump

Raised Bed Intermittent
Sand Filter

Groundwater

**ATTACHMENT B
Flow Diagram**

WATER QUALITY ORDER NO. 97-10-DWQ-R5035
PACIFIC GAS AND ELECTRIC COMPANY
HELMS HOUSING AND SUPPORT FACILITIES
FRESNO COUNTY



ATTACHMENT C
Cross Section of Intermittent Sand Filter

WATER QUALITY ORDER NO. 97-10-DWQ-R5035
 PACIFIC GAS AND ELECTRIC COMPANY
 HELMS HOUSING AND SUPPORT FACILITIES
 FRESNO COUNTY

NOT TO SCALE

ATTACHMENT D

STATE WATER RESOURCES CONTROL BOARD
SUPPLEMENTAL MONITORING AND REPORTING PROGRAM NO. 91-10-DWQ-5035
FOR
GENERAL WASTE DISCHARGE REQUIREMENTS (WDRs)
FOR SMALL DOMESTIC WASTE SYSTEMS

PACIFIC GAS AND ELECTRIC COMPANY
HELMS HOUSING AND SUPPORT FACILITIES
FRESNO COUNTY

This Supplemental Monitoring and Reporting Program (SMRP) is issued pursuant to California Water Code (CWC) section 13267. The Discharger shall not implement any changes to this SMRP unless and until the Executive Officer issues a revised SMRP. Sample station locations are described below. Changes to sample location(s) shall be established with concurrence of Regional Board staff, and a description of the revised stations shall be submitted to the Regional Board and attached to this SMRP.

Septic Tank Monitoring

Effluent Monitoring

The following septic tank effluent monitoring supersedes that described in MRP No. 97-10-DWQ.

Monitoring of septic tank effluent (i.e., influent to the Intermittent Sand Filter, ISF) shall include the following:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow	gpd ¹	Continuous	Monthly

¹ Gallons per day

Groundwater Monitoring

The Discharger shall monitor groundwater elevation in Monitoring Well No. 4 (located approximately 60 feet west and 15 feet south of the "Leachfield Building"). Groundwater monitoring shall include at least the following:

<u>Parameter</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency¹</u>
Depth to groundwater	To 0.01 foot (hundredths) below site grade	Measured	Monthly
Separation distance ²	To 0.01 foot (hundredths)	Calculated	Monthly

¹ December through June

² Separation distance shall be reported as the distance from measured groundwater to the elevation above site grade of the interface between the gravel and ISF filtration system, as shown in Attachment C of the NOA, and identified in the technical report submitted pursuant to Facility-Specific Requirement 5.

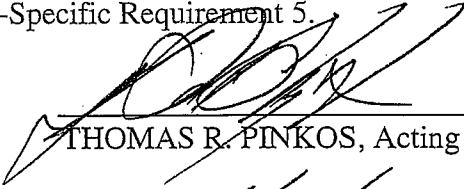
ATTACHMENT D
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PACIFIC GAS AND ELECTRIC COMPANY
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FRESNO COUNTY

Maintenance and Inspection

The Discharger shall provide in an annual report (in addition to the requirements described in MRP No. 97-10-DWQ) the following information:

- a. The date(s) of the septic tank cleaning(s) and the company or companies performing this service for the previous calendar year;
- b. The date(s) and description of the annual or additional maintenance of the ISF system for the previous calendar year. Annual maintenance includes, at a minimum, a pressure test inspection and flushing of the ISF wastewater distribution laterals.
- c. A statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration.

The Discharger shall implement the above supplemental monitoring and reporting program on the first day of the month following satisfaction of Facility-Specific Requirement 5.



 THOMAS R. PINKOS, Acting Executive Officer

 6/20/02
 (Date)

ARP:6/20/2002

RECEIVED
 JUN 20 2002
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