WATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

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JAMES F. STAHL
Chief Engineer and General Manager

MAR 2 9 2001
File No: 20-04.01-55

Mr. Harold J. Singer, Executive Officer
California Regional Water Quality Control Board
Lahontan Region - Victorville Branch
15428 Civic Drive, Suite 100
Victorville, CA 92392-2359

Dear Mr. Singer:

Palmdale Water Reclamation Plant
WQCB Order No. and 6-00-57
Monitoring and Reporting Program No. 00-57
WDID No. 6B190107069
Annual Monitoring Report 2000

Enclosed please find the 2000 Annual Monitoring Report for the Palmdale Water Reclamation Plant. This report provides a concise summary of monitoring data and events which occurred during 2000.

Very truly yours,

James F. Stahl

Jose A. Saez

Jose A. Saez
Supervising Engineer,
Monitoring Section

JAS:BC:ras
Enclosure

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PALMDALE WATER RECLAMATION PLANT

ANNUAL MONITORING REPORT

2000

RWQCB ORDER NO. 6-00-57
MONITORING & REPORTING PROGRAM NO. 00-57

SANITATION DISTRICTS OF LOS ANGELES COUNTY

PALMDALE WATER RECLAMATION PLANT
ANNUAL MONITORING REPORT

2000

RWQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57

County Sanitation Districts
of Los Angeles County

Copies of this report have been sent to:

USEPA
Region IX
75 Hawthorne Street
San Francisco, CA 94105

California State Department of Health Services
Attn: Ms. Vera Melnyk Vecchio, District Engineer
Drinking Water Field Operations Branch
1449 West Temple Street, Suite 202
Los Angeles, CA 90026

County of Los Angeles Department of Health Services
Attn: Mr. Richard Wagener, Acting Bureau Director of Environmental Protection
2525 Corporate Place, Room 150
Monterey Park, CA 91754

L.A. County Dept. of Public Works
Attn: Mr. Rod Kubomoto
Waste Management Division, 7th Floor
P. O. Box 1460
Alhambra, CA 91802-1460

Mr. Anthony P. Baal
1809 East Avenue Q13
Palmdale, CA 93550

Mr. Lewis Trout
Los Angeles World Airports
Palmdale Regional Airport
39516 North 25 St., E.
Palmdale, CA 93550-2158

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CHAPTER 1

PERMIT COMPLIANCE AND RECLAIMED WATER USE REPORT

CHAPTER 1

PERMIT COMPLIANCE AND RECLAIMED WATER USE REPORT

1.1 INTRODUCTION

This report contains the annual report for the Waste Discharge Permit held by the Palmdale Water Reclamation Plant (WRP) for the year 2000.

1.2 PERMIT REQUIREMENTS

Waste Discharge and Monitoring and Reporting Requirements

1. The waste discharge requirements for the Palmdale WRP were revised from Board Order No. 6-93-18, which was adopted on March 11, 1993 by the California Regional Water Quality Control Board, Lahontan Region (RWQCB), to Board Order No. 6-00-57, which was adopted on June 14, 2000 by the RWQCB.

2. The monitoring and reporting requirements for the Palmdale WRP were revised from Monitoring and Reporting Program No. 93-18A2, as revised on January 22, 1996 and September 10, 1997 by order of the Executive Officer of the RWQCB, to Revised Monitoring and Reporting Program No. 00-57, as revised on June 14, 2000 by the RWQCB.

This report satisfies the annual reporting requirements under Board Order Nos. 6-93-18 and 6-00-57, and Monitoring and Reporting Program Nos. 93-18A2 and 00-57.

Compliance Discussion

The waste discharge requirements adopted on June 14, 2000 include over 9,000 numeric limitations that must be met each year based on quantitative results of final effluent and receiving water sampling and analysis. During 2000, the Palmdale WRP met these limits with greater than 99 percent success.

Average and Daily BOD_5

The 30-day average limit of 30 mg/L for secondary effluent soluble BOD_5 was exceeded during April, September, October and November with values of 54, 32, 49 and 37 mg/L, respectively. In addition, the daily limit of 45 mg/L for secondary effluent soluble BOD_5 was exceeded on April 18 and 25, May 23, September 26, October 3, 17 and 24, and November 1 and 7 with values of 73, 74, 57, 46, 51, 48, 58, 54 and 60 mg/L, respectively.

The most probable cause of the BOD_5 exceedances was the presence of nitrifying bacteria in the samples. As a result of significant populations of nitrifying bacteria in the secondary effluent, higher BOD_5 values are generated due to the production of nitrogenous BOD_5 (from the oxidation of ammonia to nitrate). Analysis of the April, May, September, October and November data from Palmdale WRP has demonstrated that most of the oxygen demand was due to nitrification. For example, analyses of soluble carbonaceous biochemical oxygen demand ($CBOD_5$) for 2000 showed a range in $CBOD_5$ from 1 to 8 mg/L and an annual average of 4 mg/L. This demonstrates that most of the BOD_5 demand was due to nitrification.

Effluent pH

On August 30, the pH of the unchlorinated effluent exceeded the upper limit of 9.0 specified in Effluent Limitation I.A.3 with a value of 9.1 pH units. This incident was the result of biological activity in the oxidation ponds. Carbon dioxide dissolved in water forms carbonic acid, which lowers the pH. In oxidation ponds, photosynthetic metabolism of algae removes carbon dioxide from solution, which results in a natural increase in pH. Because photosynthesis is a function of solar intensity, effluent pH exhibits both a diurnal cycle (increasing during the day and decreasing at night) and a seasonal cycle (higher in summer and lower in winter). The ponds were designed to be facultative (typical pH range: 6.0-9.0) and have an anaerobic sludge layer on the bottom where carbon dioxide is produced as the solids break down. In the summer, the ponds tend to become more aerobic. Aerobic ponds have a higher rate of algae production, utilize more carbon dioxide and produce higher pH effluent. Thus, as winter approaches and the days become shorter, pH levels tend to decrease. Therefore, while the pH limit was exceeded on 1 day, it was a result of the natural biological conditions in the oxidation ponds.

Monitoring and Reporting Discussion

Effluent Sampling

Monthly monitoring of oil and grease was not performed in July or August, and monitoring of sulfate and chloride was not performed in August because of logistical problems encountered in the transition to the new Monitoring and Reporting Requirements (Program No. 00-57).

Groundwater Monitoring

The groundwater monitoring program for monitoring wells and water supply wells continued throughout 2000. Monitoring wells MW3 and MW19 were out of service throughout 2000, and MW4 failed to operate after the first quarter sampling event. Several of the lysimeters did not generate any samples due to their inability to sustain sufficient vacuum in their suction lines. The Districts withdrew pumps, video logged, cleaned, redeveloped and placed new monitoring pumps in all the monitoring wells, except MW3, at the end of 2000 and beginning of 2001. Monitoring well MW3 remains out of service because of difficulties in repairing this well. Due to rehabilitation efforts, annual monitoring, which was scheduled for December 2000, could not be performed for some of the wells. Make-up sampling events have been scheduled in 2001 for these wells. Since the supply wells do not belong to the Districts, they were only sampled when they were in operation.

1.3 BIOSOLIDS MANAGEMENT

Approximately 1.27 MG of digested biosolids were conveyed to the drying beds during 2000. This quantity is equivalent to 169 dry tons of biosolids. It is estimated that approximately 364 tons of dried biosolids were added to the stockpile during 2000. No biosolids were removed from the site during 2000.

1.4 OPERATIONAL AND MAINTENANCE ACTIVITIES

Palmdale WRP operates on-site oxidation ponds. Pond 1 has been out of service for over 5 years due to a damaged effluent pipeline. Pond 1 will remain off-line (out of service) until the need for additional oxidation capacity arises in the future.

Ponds 4 and 5 are aerated, which permits pond BOD loadings in excess of 60 lbs/acre/day while maintaining the remaining ponds below the limit.

1.5 EFFLUENT REUSE

Reclaimed water for irrigation and disposal was delivered to the Los Angeles World Airports (LAWA) Irrigation Site during 2000. The irrigation/disposal areas are shown in Figure 2-1 (See Chapter 2).

The LAWA irrigation site is a 2,560 acre area located north and northeast of the Palmdale WRP. Only a portion of this area is currently dedicated to agricultural irrigation. Reclaimed water that is not used for irrigation is discharged to other portions of the LAWA site for disposal. The areas used for irrigation and the responsible operators are:

LAWA	-	30 acres operated by LAWA for growing pistachio trees 60 acres operated by LAWA for growing chestnut trees 30 acres operated by LAWA for a seasonal barley crop
Anthony P. Baal	-	40 acres leased from LAWA for growing Christmas trees, gourds, and landscape plants (lease was signed on February 1, 1989)
James Harris	-	20 acres leased from LAWA for growing chestnut trees (effective November 1994)

In 2000, approximately 184 MG of reclaimed water were used by the LAWA, 5 MG by Anthony P. Baal and 2 MG by James Harris

NAME AND ADDRESS OF USERS

James Bort
Los Angeles World Airports
Palmdale Regional Airport
39516 No. 25th St., E
Palmdale, CA 93550-2158
(661) 266-7602

Antelope Valley Chestnut Plantation
Mr. James L. Harris
37340 No. 10th Street, E.
Palmdale, CA 93550

The Tree Mover
Anthony P./Thomas A. Baal
1809 E. Ave. 0-13
Palmdale, CA 93550

TABLE 1-1
PALMDALE WATER RECLAMATION PLANT
RECLAIMED WATER USAGE MONITORING REPORT- 2000
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57
WDID NO. 6B190107069

User	Reclaimed Water Delivered and Used (Million Gallons)		Use Area	Type of Use
	Daily Mean	Annual Total	(Acres)	
LAWA Eastgrove Pistachio	0.058	21.05	30	Agricultural Irrigation
LAWA Eastgrove Chestnuts	0.188	68.85	60	
LAWA Eastgrove Barley	0.258	94.50	30	
Anthony Baal	0.015	5.65	40	
James Harris	0.007	2.40	20	
TOTALS	0.526	192.45	180	

PALMDALE WATER RECLAMATION PLANT

CHAPTER 2

WASTEWATER FACILITIES AND STAFF

CHAPTER 2

WASTEWATER FACILITIES AND STAFF

2.1 SANITATION DISTRICTS OVERVIEW

The Districts operate eleven wastewater treatment plants, listed in Table 2-1, and approximately 1,200 miles of trunk sewers in Los Angeles County. In addition, approximately 9,400 miles of lateral sewers, operated by other agencies, connect to the trunk sewers.

As indicated in Table 2-1, seven treatment plants, including the Joint Water Pollution Control Plant (JWPCP), are grouped into an integrated sewerage system, known as the Joint Outfall System, which treats about 95% of the Districts' sewage. These seven plants are all on a single network of sewers. JWPCP is the downstream plant and the other six are upstream plants. Flows from the upstream plants can be bypassed to a limited extent to JWPCP. JWPCP currently provides 200 MGD of secondary treatment; the balance of its flow receives advanced primary treatment. Sludge from the upstream plants is returned to the sewer system and conveyed to JWPCP for further treatment (anaerobic digestion and dewatering) and disposal.

Two plants, the Saugus and Valencia WRPs, also comprise an integrated system with sludge processing and disposal taking place at the Valencia WRP. These plants are located in the City of Santa Clarita.

The Palmdale and Lancaster WRPs are stand-alone facilities, and both these plants have sludge processing facilities.

Seven of the plants provide tertiary treatment consisting of inert media filtration and disinfection following activated sludge secondary treatment. La Cañada uses extended aeration activated sludge to provide secondary treatment. Two plants, Lancaster and Palmdale, use oxidation ponds to provide secondary treatment. The Lancaster WRP, in addition, provides a unique form of tertiary treatment to a portion of its effluent; a unit of the Lancaster WRP known as the Antelope Valley Tertiary Treatment Plant partially removes phosphate from the secondary effluent and then provides filtration and disinfection. The phosphate removal inhibits algae growth in recreational lakes that receive the effluent. JWPCP provides pure oxygen activated sludge secondary treatment to 200 MGD of its flow and advanced primary treatment to the balance of the flow.

Most of the plants operate with more than one discharge permit. Eight of the plants have NPDES permits; three do not. Ten of the plants have reuse (non-NPDES) permits and provide reclaimed water for reuse. JWPCP has no reuse permit. Three of the plants (Pomona, San Jose Creek and Whittier Narrows) are also covered by a permit with requirements for groundwater replenishment.

TABLE 2-1
SANITATION DISTRICTS
WASTEWATER TREATMENT PLANTS

Plant	Design Capacity (MGD)	Treatment Level	Sludge Treatment Facilities	NPDES Permit	Reuse Permit	Groundwater Recharge Permit
Joint Outfall Sewerage System						
La Cañada WRP	0.2	Secondary[3]			X	
Long Beach WRP	25	Tertiary[1]		X	X	
Los Coyotes WRP	37.5	Tertiary[1]		X	X	
Pomona WRP	15	Tertiary[1]		X	X	X
San Jose Creek WRP	100	Tertiary[1]		X	X	X
Whittier Narrows WRP	15	Tertiary[1]		X	X	X
Joint Water Pollution Control Plant (JWPCP)	385	Partial Secondary[2]	X	X		
Subtotal	577.7					
Santa Clarita Valley Sewerage System						
Saugus WRP	6.5	Tertiary[1]		X	X	
Valencia WRP	12.6	Tertiary[1]	X	X	X	
Subtotal	19.1					
Stand-alone Plants						
Lancaster WRP	16	Secondary[4]	X		X	
(Antelope Valley Tertiary Treatment Plant)[5]	0.6[5]	Tertiary[5]				
Palmdale WRP	15.0	Secondary[4]	X		X	
Subtotal	31.0					
Entire Sanitation Districts						
Total	627.8					

1. Tertiary treatment consists of activated sludge secondary followed by inert media filtration and disinfection.
2. JWPCP has 385 MGD of advanced primary treatment capacity plus 200 MGD of pure oxygen activated sludge secondary capacity. Final effluent is a blend of primary and secondary effluents.
3. The La Cañada WRP has extended aeration activated sludge secondary treatment.
4. The Lancaster and Palmdale WRPs have oxidation ponds.
5. The Antelope Valley Tertiary Treatment Plant is part of the Lancaster WRP and treats a portion of the Lancaster WRP effluent (providing phosphate removal, filtration and chlorination).

2.2 PALMDALE WATER RECLAMATION PLANT

The Palmdale WRP is located at 39300 30th Street East, Palmdale, California, 93550.

As indicated in Table 2-1, the plant has one wastewater permit for irrigation with and disposal of reclaimed water. Figure 2-1 shows the details of the plant (including both 30th and 40th street sites), the City of Los Angeles World Airports' (LAWA) irrigation site, and the locations of the groundwater monitoring wells.

Process Description

Figure 2-2 is a process schematic of the plant that uses the following process sequence: comminution, primary sedimentation and oxidation ponds. Primary sludge and primary skimmings are anaerobically digested. The digested sludge is dried in drying beds and stockpiled on site.

Chronology

The chronology in Table 2-2 is provided as background in understanding how the plant evolved to its present state of development.

Facility Improvements in 2000

There were no new facilities or modifications to existing facilities in 2000, except for the fact that the Districts began implementing improvements in effluent disposal practices at the LAWA disposal site.

Treatment Plant Operators

Operators at the Palmdale WRP and their certifications are listed in Table 2-3.

TABLE 2-2
CHRONOLOGY
PALMDALE WATER RECLAMATION PLANT

Item	Contract Number	Date
District 20 formed		08/07/51
Palmdale Treatment Plant completed (0.75 MGD)	767	09/04/53
District 20 enlarged (0.75 TO 2.5 MGD)		1956
Oxidation Ponds 5 and 6	1122	09/22/57
Digester Tank No. 2	1135	01/08/58
Dike Lining Pond 6	1239	10/03/58
Percolation Ponds 1 and 2	1237	11/03/58
District 20 Effluent Line	1238	11/14/58
Dike Lining Pond 5	1255	01/27/59
Effluent use for irrigation began		05/01/59
Oxidation ponds 1-4 and percolation ponds 1-4 combined	1398	08/03/61
District 20 Stage I Expansion (2.5 MGD to 3.1 MGD)	1996	09/14/72
Interim disposal ponds 6-9		10/80
Effluent Relief Line (24-inch)	2671	01/09/84
DOA Effluent Delivery Line (18-inch)		01/20/84
Stage II Expansion (3.1 MGD to 6.5 MGD)	2883	02/22/89
Oxidation Ponds 4 and 5	2975	05/05/89
Primary Effluent Relief Line	3055	07/19/90
Stage III Expansion (6.5 MGD to 8 MGD)	3098	07/14/93
Pond Effluent System	3168	10/30/92
Fire Protection & Water Supply Improvements	3213	11/04/92
Stage IV Groundwater Monitoring Facilities	3340	12/29/95
Stage IV Expansion (8.0 MGD to 15.0 MGD)	3341	02/26/97*

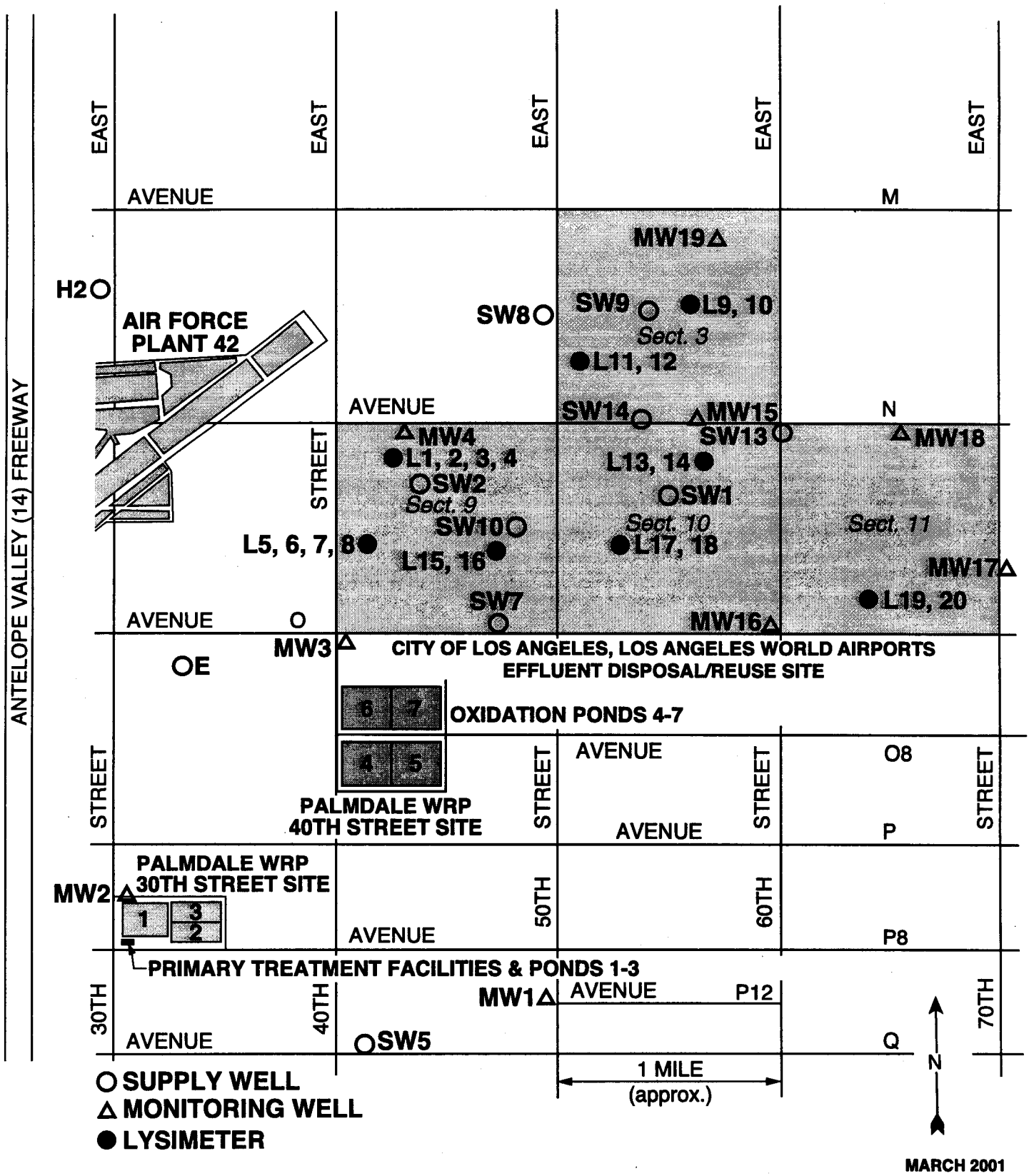
* The treatment facilities for Stage IV expansion were placed in operation in July 1996.

TABLE 2-3

TREATMENT PLANT OPERATORS
PALMDALE WATER RECLAMATION PLANT
ANNUAL REPORT - 2000

Operator	Shift	Certification
Tim Linn, Supervisor	Day	Grade III
Roberto Martinez	Day	Grade III
William Zeller	Day	Grade II
James Barrick	Day	Grade OIT

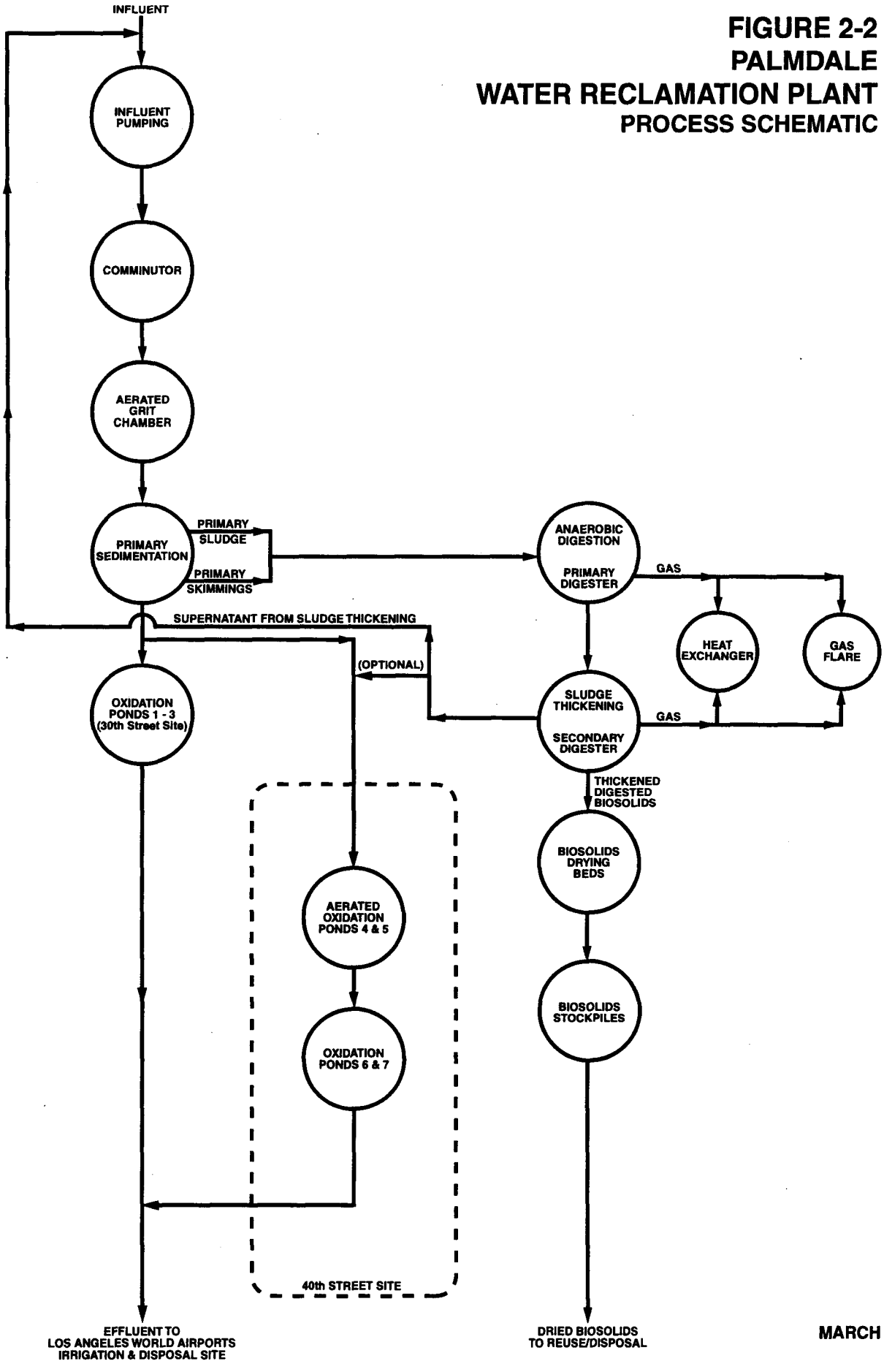
FIGURE 2-1
PALMDALE WATER RECLAMATION PLANT
DISPOSAL/REUSE SITES, WELLS AND LYSIMETERS



MARCH 2001

EXHIBIT I-1 TO CITY OF LOS ANGELES' RESPONSE TO DISCOVERY ORDER

FIGURE 2-2
PALMDALE
WATER RECLAMATION PLANT
PROCESS SCHEMATIC



MARCH 2001

PALMDALE WATER RECLAMATION PLANT

CHAPTER 3

LABORATORIES

CHAPTER 3

LABORATORIES

3.1 INTRODUCTION

The Sanitation Districts operate ten laboratories located at nine of its eleven treatment plants. The laboratories are divided into two categories: treatment plant laboratories (TPLs) and water quality laboratories (WQLs).

The eight treatment plant laboratories are the Long Beach, Los Coyotes, Pomona, San Jose Creek, Whittier Narrows, Saugus, Valencia and Lancaster TPLs. These laboratories are concerned primarily with process control of the treatment plants. Additional duties of the TPLs include a portion of the monitoring (generally simpler tests which do not require specialized equipment or expertise) pursuant to waste discharge and water reclamation permits.

The two water quality laboratories are the San Jose Creek and Joint Water Pollution Control Plant (JWPCP) WQLs. They utilize specialized equipment and expertise to perform tests which the TPLs are unable to perform. Note that there are both a San Jose Creek WQL and a San Jose Creek TPL. The JWPCP WQL also functions as a TPL; it includes a group which conducts process control tests for the JWPCP.

There are no laboratories at the La Cañada and Palmdale plants; consequently, the San Jose Creek TPL also functions as the TPL for the La Cañada WRP and the Lancaster TPL also functions as the TPL for the Palmdale WRP.

3.2 QUALITY ASSURANCE ACTIVITIES

The Quality Assurance (QA) Group of the Sanitation Districts Laboratory Section is responsible for monitoring the validity and quality of analytical data produced in all ten laboratories. In order to accomplish this goal, a quality assurance plan prepared by the QA Group is strictly adhered to. The plan includes routine QA activities that are performed in the laboratories in order to assure the defensibility of data reported.

In 2000, routine QA activities that were performed, both intralaboratory and interlaboratory, included, but were not limited to, the following:

Intralaboratory Quality Control

1. A routine practice of running laboratory control samples, duplicates and matrix spikes or duplicate spikes for every tenth sample or every batch, whichever is more frequent, was maintained. Control limits have been established for both precision and accuracy for most analytes, and quality control data were plotted on the control charts. For situations where the data were outside of the control limits, corrective action was initiated and maintained at the bench level until the problems were solved.

2. A reagent or method blank was routinely run with each batch of samples as a contamination check.

3. Calibration standards were run with every batch of samples analyzed.

4. For some organic constituents, surrogate standards were added to every sample, duplicate, spike, and blank. Results were compared to established acceptance limits. When unacceptable QA results were obtained, corrective action was performed.

5. Instrument QA was also done (e.g., for GC/MS, mass calibration and tuning were performed to meet ion abundance criteria, etc.).

6. In 2000 at San Jose Creek WQL and JWPCP WQL, chemical and bacteriological suitability testing was conducted monthly on laboratory purified water used for microbiological testing.

7. The annual Inhibitory Residue Test was performed in 2000.

8. Positive, negative, and sterility checks were performed on each batch of prepared media.

9. The Biology Section performed routine toxicity bioassay QA by running a known toxicant with every batch of samples. They also performed other QA activities as required for a biology laboratory.

Interlaboratory Quality Control

1. The nine laboratories supplying data for NPDES monitoring programs (i.e., all the laboratories except Lancaster) participated in the EPA's Discharge Monitoring Report (DMR) QA by analyzing chemistry samples purchased from NSI Solutions, Inc. (one of the EPA certified suppliers). Overall performance was satisfactory.

2. In 2000, to comply with a NPDES permit requirement, the San Jose Creek WQL Biology Section performed bioassay testing for standard toxicants issued by EPA. Overall performance was satisfactory.

3. In 2000, all ten Districts' laboratories normally participate in the California Department of Health Services' (DHS) Environmental Laboratory Accreditation Program (ELAP) Performance Evaluation (PE) study. Overall performance was satisfactory.

4. The Districts' ten laboratories analyzed microbiology samples issued by the California DHS in 2000 as part of its ELAP certification for microbiology. Overall performance was satisfactory.

5. Quality control samples in the form of QC check standards, either prepared in-house or obtained from EPA or commercial sources, were issued by the QA Group to all Districts' laboratories. In situations where the results were not acceptable, the analysts and their supervisors were informed and error resolutions were performed. This consisted of checking calculations, data transcription, instrumentation, methodology, etc. Follow-up check samples were issued to verify if the analyses were already in control. QA check samples issued in 2000 (including those for error resolution) consisted of 957 samples and 1,035 tests. The error resolution was 1.4%.

6. Split samples collected from an effluent source were issued monthly to all Districts' laboratories. A different analyte was determined each month. Results of all laboratories were statistically analyzed and any laboratory reporting an out-of-range value had to perform corrective action as described under interlaboratory Quality Control, Item 5.

7. Coliform standards and plates prepared by the San Jose Creek Microbiology Laboratory were issued monthly to all laboratories for MF coliform test and plate counts. Results were statistically analyzed for precision according to Standard Methods and accuracy according to the EPA Microbiological Methods Manual. The statistics were done using $\log_{10}$ transformed data.

8. In late 1999 and early 2000, all Districts' laboratories were site visited and audited by the California DHS, as part of the laboratories' ELAP re-certification process. All laboratories have been re-certified through October-December, 2001.

PALMDALE WATER RECLAMATION PLANT

CHAPTER 4

WASTEWATER MONITORING DATA

CHAPTER 4

2000 WASTEWATER MONITORING DATA

4.1 ORGANIZATION OF THE DATA

The monitoring programs at the Sanitation Districts wastewater treatment plants can be rather complex; consequently, the following explanation is provided to aid in interpreting the data.

Data are maintained in two databases:

1. An **operational database** for data which normally are monitored daily or weekly and are used for the day-to-day operation of the plants. These include flow, BOD, suspended solids, etc. Many of the parameters included in the operational database must be monitored and reported in accordance with the requirements listed in the NPDES permit, waste discharge requirements or reuse permit of each plant.

Monthly and annual averages are presented along with other descriptive statistics.

2. A **laboratory database** for data which normally are monitored monthly or less often. These include primarily metals and organic compounds. Separate data summaries are presented for:
   - **Influent monitoring**
   - **Effluent monitoring**

Each treatment plant has operation and laboratory data sets presented in its own annual report. One exception is the San Jose Creek WRP which consists of two independently operated units; San Jose Creek East (Stages I and II) and San Jose Creek West (Stage III). Separate data sets for each of these plants is presented in the San Jose Creek WRP annual report. The results of all samples are presented together with descriptive statistics. This data summary may contain results which were not reported in monthly monitoring reports. These additional data can result from sampling conducted for purposes other than routine monitoring. The additional sampling may be done by other agencies (Regional Water Quality Control Board or USEPA) or by the Sanitation Districts for a special study or as a sampling follow-up to a questionable sample.

4.2 LABORATORY TEST CODES

The Sanitation Districts use a unique 3-character code to identify each constituent in the laboratory database. Priority pollutants and other significant constituents are organized into the following groups:

Test Group	Test Code Series
Physical Properties and Solids	100
Nitrogens and Sulfurs	200
Miscellaneous	300
Carbons	400
Chlorinated Pesticides and PCBs	500
Volatile Organic Compounds	600
Metals	700
Base-Neutral/Acid Extractable Compounds	800

Dioxins	D00
Furans	F00

In the laboratory data summaries, the constituents are sorted in numerical order according to the test code. Both the constituent name and test code are given at the top of each column in the data summary. Table 4-1 is provided for assistance in finding specific constituents in the summaries. One can first look for the desired constituent in this table (arranged alphabetically) to find the test code. Then, knowing the test code, one can find the desired constituent and its data in the tables which follow Table 4-1 (arranged in numeric order).

Statistical summaries follow the influent and effluent data and effluent limits follow the effluent statistical summaries.

4.3 DETECTION LIMITS

Sample results below the method detection limits are indicated by the use of the less than symbol (<). A few parameters, such as DDT and PCBs are reported as sums. In those cases, we have chosen to report total detected DDT and total detected PCBs. Results which were below the detection limit were not included in the sum. Consequently, if none of the isomers were detected, the total is reported as zero.

4.4 PERMIT LIMITS

A single plant may have several permits and several sets of limits which, at a maximum, consist of the following:

- **NPDES Permit Limits** for discharge to navigable waterways.
- **Waste Discharge Requirements** for effluent disposal to sites other than those covered by NPDES requirements (e.g., Lancaster and Palmdale WRPs).
- **Reuse Permit Limits** for nonpotable use in irrigation, impoundments, etc.
- **Recharge Permit Limits** for groundwater replenishment in the Montebello Forebay.
- **California Drinking Water Standards** are included by reference in many reuse permits and in the recharge permit. Drinking Water Standards are specified in Title 22, Chapter 15, Article 3, Sections 64421-64473 of the California Code of Regulations. Note the following:

  1. Primary Drinking Water Standards are health-related.

  2. Secondary Drinking Water Standards are not health-related. They are concerned with palatability and aesthetic acceptance.

- **Radioactivity requirements** are included by reference in most permits. Radioactivity requirements are specified in Title 22, Chapter 15, Article 3, Sections 64441-64443 of the California Code of Regulations. The radioactivity standards are a subset of the drinking water standards; however, the permits use language which suggests that radioactivity should be treated separately from the drinking water standards. The permits have separate paragraphs requiring compliance with radioactivity standards and with drinking water standards. Furthermore, the permits require compliance only for trace constituents or other

substances in the drinking water standards, which suggests that radioactivity is not a substance, but, rather, is a quality.

- **Action Levels** of the California Department of Health Services (DHS) are included by reference in the recharge permit. Action levels are given in a letter dated October 24, 1990 from the DHS Office of Drinking Water.

- **Taste and Odor Thresholds** are listed in the DHS Action Levels for several constituents; however, these thresholds are not considered to be applicable to reclaimed water as it is not delivered directly to users for use as potable water.

The permits limits may be expressed in terms of an instantaneous maximum, daily maximum, 7-day average and/or 30-day average. Longer averaging periods have lower limits. In general then, the limits listed in Table 4-4 are 30-day averages (which have the lowest values).

The reuse permits require compliance with the Drinking Water Standards maximum contaminant levels that normally apply to 24-hour composite samples or grab samples. The Montebello Forebay permit, however, requires compliance with the Drinking Water Standards and action levels based on a running 12-month average.

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
% MOISTURE	158
% ORGANIC MATTER	406
1,1,1,2-TETRACHLOROETHANE	6D5
1,1,1-TRICHLOROETHANE	603
1,1,2,2-TETRACHLOROETHANE	653
1,1,2-TRICHLOROETHANE	618
1,1-DICHLOROETHANE	616
1,1-DICHLOROETHENE	605
1,1-DICHLOROPROPENE	6C7
1,2,3,4-TETRAMETHYLBENZENE	686
1,2,3-TRICHLOROBENZENE	889
1,2,3-TRICHLOROPROPANE	6D6
1,2,4,5-TETRACHLOROBENZENE	8E7
1,2,4-TRICHLOROBENZENE	846
1,2-DIBROMO-3-CHLOROPROPANE	6C3
1,2-DIBROMOETHANE	673
1,2-DICHLOROBENZENE	819
1,2-DICHLOROETHANE	619
1,2-DICHLOROPROPANE	650
1,2-DIPHENYLHYDRAZINE	829
1,3,5-TRICHLOROBENZENE	899
1,3,5-TRIMETHYLBENZENE	661
1,3-BUTADIENE	675
1,3-DICHLOROBENZENE	820
1,3-DICHLOROPROPANE	6C5
1,4-DICHLOROBENZENE	821
1,4-DICHLOROBENZENE-D4	S20
1,4-DIOXANE	696
1,4-NAPHTHOQUINONE	8C7
1234678HEPCHLRDIBENZODIOXIN	D27
1234678HEPTCHLORDIBENZFUR	F23
1234789HEPTCHLORDIBENZFUR	F24
123478HEXCHLORDIBENZODIOXIN	D24
123478HEXCHLORODIBENZOFUR	F19
1234TETRCHLORDIBENZODIOXIN	D18
123678HEXCHLORDIBENZODIOXIN	D25
123678HEXCHLORODIBENZOFUR	F20
123789HEXCHLORDIBENZODIOXIN	D26
123789HEXCHLORODIBENZOFUR	F22
12378PENCHLORDIBENZODIOXIN	D22
12378PENTACHLORODIBENZFUR	F17
123TRICHLORODIBENZODIOXIN	D14
123TRICHLORODIBENZOFURAN	F15
12478PENCHLORDIBENZODIOXIN	D23
124TRICHLORODIBENZODIOXIN	D15
1278TETRCHLORDIBENZODIOXIN	D19

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
12DICHLORODIBENZOFURAN	F13
1378TETRCHLORDIBENZODIOXIN	D20
16DICHLORODIBENZODIOXIN	D11
178TRICHLORODIBENZODIOXIN	D16
1CHLORODIBENZODIOXIN	D09
1CHLORODIBENZOFURAN	F09
1-METHYLNAPHTHALENE	894
1-METHYLPHENANTHRENE	896
1-NAPHTHYLAMINE	8C8
1-PROPANOL	671
2,2-DICHLOROPROPANE	6C6
2,3,4,5-TETRACHLOROPHENOL	687
2,3,4,6-TETRACHLOROPHENOL	8E8
2,3,4-TRICHLOROPHENOL	693
2,3,5,6-TETRACHLOROPHENOL	688
2,3,5-TRICHLOROPHENOL	689
2,3,5-TRIMETHYLNAPHTHALEN	898
2,3,6-TRICHLOROPHENOL	690
2,3,7,8-TCDD	844
2,3-BENZOFLUORENE	884
2,4,5-T	5C1
2,4,5-TP(SILVEX)	518
2,4,5-TRICHLOROPHENOL	691
2,4,6-TRIBROMOPHENOL	S06
2,4,6-TRICHLOROPHENOL	664
2,4,6-TRICHLOROPHENOL	856
2,4-D(ACID)	517
2,4-DB	5C2
2,4-DICHLOROPHENOL	658
2,4-DICHLOROPHENOL	847
2,4-DIMETHYLPHENOL	626
2,4-DIMETHYLPHENOL	848
2,4-DINITROPHENOL	849
2,4-DINITROTOLUENE	826
2,6-DICHLOROPHENOL	8A9
2,6-DIMETHYLNAPHTHALENE	892
2,6-DINITROTOLUENE	827
234678HEXCHLORODIBENZOFUR	F21
23478PENTACHLORODIBENZFUR	F18
2378TETRACHLORODIBENZOFUR	F16
2378TETRCHLORDIBENZODIOXIN	D21
237TRICHLORODIBENZODIOXIN	D17
23DICHLORODIBENZODIOXIN	D12
23DICHLORODIBENZOFURAN	F14
24-DP (DICHLORPROP)	5B7
27DICHLORODIBENZODIOXIN	D13

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
2-ACETYLAMINOFLUORENE	8A2
2-BUTANONE	680
2CHLORODIBENZODIOXIN	D10
2CHLORODIBENZOFURAN	F10
2-CHLOROETHYLVINYLETHER	648
2-CHLORONAPHTHALENE	815
2-CHLOROPHENOL	657
2-CHLOROPHENOL	845
2-ETHYLTOLUENE	660
2-FLUOROBIPHENYL	S05
2-FLUOROPHENOL	S01
2-HEXANONE	699
2-METHYL FLUORANTHENE	887
2-METHYL-4,6DINITROPHENOL	850
2-METHYLNAPHTHALENE	895
2-METHYLNAPHTHALENE	8C6
2-NAPHTHYLAMINE	8C9
2-NITROPHENOL	851
2-PROPANOL	672
3,3'-DICHLOROBENZIDINE	822
3,3'-DIMETHYLBENZIDINE	8B3
3,4,5-TRICHLOROPHENOL	692
3,6-DIMETHYLPHENANTHRENE	893
3CHLORODIBENZOFURAN	F11
3-METHYLCHOLANTHRENE	8C4
4-AMINOBIPHENYL	8A3
4-BROMOPHENYL PHENYLETHER	813
4-CHLORO-3-METHYLPHENOL	656
4-CHLORO-3-METHYLPHENOL	853
4CHLORODIBENZOFURAN	F12
4-CHLOROPHENYLPHENYLETHER	816
4-METHYL-2-PENTANONE	681
4-NITROPHENOL	852
5-NITRO-O-TOLUIDINE	8D9
7,12-DIMETHYLBENZ(A)ANTHRACENE	888
7,12-DIMETHYLBENZ(A)ANTHRACENE	8B2
9,10-DIPHENYLANTHRACENE	883
90 FATHEAD ACUTE	B18
90 MENIDIA ACUTE	B19
ACENAPHTHENE	800
ACENAPHTHENE-D10	S22
ACENAPHTHYLENE	801
ACETIC ACID	639
ACETONE	676
ACETONITRILE	665
ACETOPHENONE	8A1

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
ACID CONCENTRATION	344
ACIDITY	318
ACROLEIN	654
ACRYLONITRILE	655
ACTINOLITE FIBERS	CA1
ADA (ANTHRAQUINONE DSA)	329
AEROBIC PLATE COUNT	354
AIR (O2 + AR + N2)	331
ALDRIN	512
ALGAE COUNT	360
ALLYL CHLORIDE	6B8
ALPHA-BHC	508
ALUMINUM	707
AMMONIA NITROGEN	201
AMMONIA NITROGEN	1S6
AMOSITE FIBERS	CA2
ANAEROBIC PLATE COUNT	355
ANTHOPHYLLITE FIBERS	CA3
ANTHRACENE	802
ANTIMONY	725
ARGON (AR)	333
AROCLOR 1016	535
AROCLOR 1221	536
AROCLOR 1232	537
AROCLOR 1242	519
AROCLOR 1248	538
AROCLOR 1254	520
AROCLOR 1260	539
ARSENIC	705
ATRAZINE	550
AVAILABLE CALCIUM OXIDE	321
AVAILABLE PHOSPHORUS	339
BACTERIOPHAGE	382
BARIUM	706
BENZENE	620
BENZIDINE	803
BENZO(A)ANTHRACENE	804
BENZO(A)PYRENE	805
BENZO(B)FLUORANTHENE	806
BENZO(E)PYRENE	890
BENZO(GHI)PERYLENE	807
BENZO(K)FLUORANTHENE	808
BENZYL ALCOHOL	8A4
BENZYL CHLORIDE	678
BERYLLIUM	726
BETA-BHC	523

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
BICARBONATE ALKALINITY	306
BIOLOGICAL EXAMINATION	X06
BIPHENYL	891
BIS(2-CHLOROETHYL)ETHER	810
BIS(2-CL-ETHOXY)METHANE	809
BIS(2-CL-ISOPROPYL)ETHER	811
BISMUTH	727
BORON	314
BROMIDE	319
BROMOCHLOROMETHANE	6B9
BROMODICHLOROMETHANE	608
BROMOETHANE	694
BROMOFORM	610
BROMOMETHANE	646
BULK DENSITY	161
BUTANE	635
BUTYLBENZYL PHTHALATE	814
BUTYRIC ACID	642
C. PERFRINGENS	B51
CADMIUM	708
CALCIUM	703
CALCIUM-HARDNESS	701
CAM TEST	C01
CAMPYLOBACTER	386
CARBON DIOXIDE (CO2)	336
CARBON DISULFIDE	285
CARBON DISULFIDE	698
CARBON MONOXIDE (CO)	337
CARBON TETRACHLORIDE	604
CARBONACEOUS BOD5 (CBOD5	412
CARBONATE ALKALINITY	307
CARBONYL SULFIDE	284
CATION EXCHANGE CAPACITY	108
CCL4 ACTIVITY (CARBON)	121
CERIO. CHRONIC-REPRODUCTION	B07
CERIO. CHRONIC-SURVIVAL	B06
CERIUM	728
CESIUM	729
CHLORIDE	301
CHLORIDE MASS EMISSION RATE	973
CHLORINATED PESTICIDES	5B0
CHLORINE DEMAND	303
CHLORINE REQUIREMENT	304
CHLORINE RESIDUAL	302
CHLOROBENZENE	611
CHLOROBENZILATE	8A6

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
CHLOROETHANE	647
CHLOROFORM	602
CHLOROMETHANE	649
CHLOROPICRIN	6B3
CHLOROPRENE	6C2
CHRYSENE	817
CHRYSENE-D12	S24
CHRYSOTILE FIBERS	CA4
CIS-1,2-DICHLOROETHYLENE	677
CIS-1,3-DICHLOROPROPENE	651
CIS-CHLORDANE	526
CIS-CHLORDENE	541
CIS-NONACHLOR	543
CLOSTRIDIUM PERFRINGENS	375
COBALT	711
COLOR, APPARENT	104
CONDUCTIVITY	102
CONDUCTIVITY	1S4
COPPER	712
CROCIDOLITE FIBERS	CA5
CRYPTOSPORIDIUM	B53
CYANIDE AMENABLE TO CHLORINE	210
DALAPON	5B5
DECACH3CYCLOPENTASILOXANE	6E0
DECAFLUOROBIPHENYL	S04
DELTA-BHC	524
DEMETON	5D3
DEPTH TO BOTTOM	901
DEPTH TO WATER	900
DEPTH TO WATER	1S8
DIALLATE	8A7
DIBENZO(A,H)ANTHRACENE	818
DIBENZOFURAN	8A8
DIBROMOCHLOROMETHANE	609
DICAMBA	5B6
DICHLORODIBENZODIOXINS	D02
DICHLORODIBENZOFURANS	F02
DICHLORVOS	5B1
DICYCLOPENTADIENE	6B5
DIELDRIN	513
DIETHYL PHTHALATE	823
DIETHYL SULFIDE	290
DIETHYLHEXYL PHTHALATE	812
DIMETHOATE	5C7
DIMETHYL DISULFIDE	291
DIMETHYL PHTHALATE	824

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
DIMETHYL SULFIDE	286
DI-N-BUTYL PHTHALATE	825
DI-N-OCTYL PHTHALATE	828
DINOSEB	5C3
DIPHENYLAMINE	8B5
DISSOLVED CARBON DIOXIDE	409
DISSOLVED ORGANIC CARBON	455
DISSOLVED OXYGEN	115
DISSOLVED OXYGEN	1S3
DISULFOTON	5C8
DIVERSITY INDEX	361
E. COLI	B50
ECE (SOIL SALINITY)	E01
EDTA	327
EDTA-IRON(I)	347
ENDOSULFAN I	531
ENDOSULFAN II	532
ENDOSULFAN SULFATE	533
ENDRIN	514
ENDRIN ALDEHYDE	534
ENTEROCOCCUS	357
ENTEROPATHOGENIC E. COLI	383
EPA EXTRACTION PROCEDURE	172
ETHANE	633
ETHANOL	623
ETHYL BENZENE	624
ETHYL MERCAPTAN	260
ETHYL MERCAPTAN	283
ETHYL METHACRYLATE	6D8
ETHYL METHANESULFONATE	8B6
ETHYL PARATHION	5D1
FAMPHUR	8B7
FATHEAD 96H-ACUTE-100%EFF	B02
FATHEAD 96H-ACUTE-CONC	B03
FATHEAD 96H-ACUTE-TITLE22	B01
FATHEAD CHRONIC-GROWTH	B05
FATHEAD CHRONIC-SURVIVAL	B04
FECAL COLIFORM	351
FECAL COLIFORM (MF)	356
FECAL STREPTOCOCCUS	353
FERRIC IRON	746
FERROUS IRON	745
FIELD CONDUCTIVITY	906
FIELD DISSOLVED CO2	908
FIELD DISSOLVED O2	907
FIELD HYDROGEN SULFIDE	910

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
FIELD pH	905
FIELD TOTAL ALKALINITY	909
FIELD WATER TEMPERATURE	904
FLASH POINT	105
FLOATABLE SOLIDS	157
FLOC/FILAMENT SURVEY	X10
FLOW	Z01
FLUORANTHENE	830
FLUORENE	831
FLUORIDE	313
FLUORIDE MASS EMISSION RATE	974
FLUOROMETER READING	362
FORMALDEHYDE	697
FREE ALKALI	345
FREE CYANIDE	207
FREON 11 (CCL3F)	669
FREON 12 (CCL2F2)	668
FREON 21 (CHCL2F)	670
FREON TF	617
GAMMA RADIATION	372
GC/MS SCAN	X03
GIARDIA	B52
GOLD	730
GROSS ALPHA RADIOACTIVITY	370
GROSS BETA RADIOACTIVITY	371
GUTHION	5D4
HEAT OF COMBUSTION	112
HEATING VALUE OF GAS	338
HEPTACHLOR	510
HEPTACHLOR EPOXIDE	511
HEPTACHLORODIBENZODIOXINS	D07
HEPTACHLORODIBENZOFURANS	F07
HEXACHLOROBENZENE	832
HEXACHLOROBUTADIENE	833
HEXACHLOROCYCLOPENTADIENE	834
HEXACHLORODIBENZODIOXINS	D06
HEXACHLORODIBENZOFURANS	F06
HEXACHLOROETHANE	835
HEXACHLOROPROPENE	8B8
HEXANE	637
HEXAVALENT CHROMIUM	710
HOLD FOR TEST ASSIGNMENT	170
HPLC SCAN	X09
HYDROCARBONS-METHOD 4181	C18
HYDROCARBONS-MODIFIED8015	C15
HYDROGEN (H2)	340

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
HYDROGEN CYANIDE	209
HYDROGEN SULFIDE	261
HYDROGEN SULFIDE	281
HYDROSCAN	173
HYDROXIDE ALKALINITY	308
HYMENOLEPIS	392
INDENO(1,2,3-C,D)PYRENE	836
INFRARED SCAN	X02
ION CHROMATOGRAPHY SCAN	X08
IRON	713
ISOBUTYL ALCOHOL	6C9
ISOBUTYL MERCAPTAN	289
ISOBUTYRIC ACID	641
ISODRIN	8B9
ISOPHORONE	837
ISOPROPYL MERCAPTAN	287
ISOPROPYLBENZENE	684
ISOSAFROLE	8C1
ISOVALERIC ACID	643
KEPONE	5C5
KEPONE	8C2
LANTHANUM	731
LAS	343
LEAD	714
LIMONENE	659
LINDANE (GAMMA-BHC)	509
LITHIUM	715
LOWER EXPLOSIVE LIMIT	1B0
M+P CRESOL	862
M+P-CRESOL	628
M+P-XYLENE	695
MACROCYSTIS-GERM TUBE LENGTH	B10
MACROCYSTIS-GERMINATION	B09
MAGNESIUM	704
MAGNESIUM-HARDNESS	702
MALATHION	5D5
MANGANESE	716
MBAS	315
MCPA	5B9
MCPP	5B8
M-DICHLOROBENZENE	614
M-DINITROBENZENE	8B4
MENIDIA ACUTE, % SURVIVAL	B17
MENIDIA-GROWTH	B15
MENIDIA-SURVIVAL	B14
MERCAPTANS	258

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
MERCURY	717
METALS SCAN	X05
METHACRYLONITRILE	6D1
METHANE	632
METHANE (CH4)	335
METHANOL	622
METHAPYRILENE	8C3
METHOXYCLOR	516
METHYL IODIDE	6D2
METHYL MERCAPTAN	259
METHYL MERCAPTAN	282
METHYL METHACRYLATE	6D7
METHYL METHANESULFONATE	8C5
METHYL PARATHION	5C9
METHYL PYRENE	886
METHYLENE BROMIDE	6D3
METHYLENE CHLORIDE	601
METHYL-TERT-BUTYL-ETHER	662
MEVINPHOS	5B2
MICROSCOPIC EXAM	X04
MICROTOX-15	B32
MICROTOX-5	B31
MIREX	552
M-NITROANILINE	8D2
MOLYBDENUM	732
MONOCHLORODIBENZODIOXINS	D01
MONOCHLORODIBENZOFURANS	F01
M-XYLENE	666
MYSID-FECUNDITY	B12
MYSID-GROWTH	B13
MYSID-SURVIVAL	B11
NALED (DIBROM)	5B3
NAPHTHALENE	838
NAPHTHALENE-D8	S21
N-BUTYL MERCAPTAN	295
NICKEL	718
NID	316
NITRATE NITROGEN	204
NITRATE NITROGEN	1S7
NITRITE NITROGEN	205
NITROBENZENE	839
NITROBENZENE-D5	S03
NITROGEN (N2)	334
NITROMETHANE	6B0
N-NITROSODIETHYLAMINE	8D5
N-NITROSODIMETHYLAMINE	840

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
N-NITROSODI-N-BUTYLAMINE	8D4
N-NITROSODI-N-PROPYLAMINE	841
N-NITROSODIPHENYLAMINE	857
N-NITROSOMETHYLETHYLAMINE	8D6
N-NITROSOPIPERIDINE	8D7
N-NITROSOPYRROLIDINE	8D8
NO TEST REQUESTED	999
NOCARDIA	358
NON-METHANE ORGANICS (TCA)	415
NON-METHANE ORGANICS TO-12	416
NON-POLAR OIL AND GREASE	414
NONVOLATILE DISSOLVED SOLIDS	166
NOX (AS NO2)	211
N-PROPYL MERCAPTAN	293
N-PROPYLBENZENE	685
O,O,O-TRIETHYLPHOSPHOROTH	8F1
O+P DICHLOROBENZENE	674
O+P-XYLENE	667
OBJECTIONABLE INSOLUBLES	322
O-CRESOL	627
O-CRESOL	861
OCTACH3CYCLOTETRASILOXANE	6D9
OCTACHLORODIBENZODIOXIN	D08
OCTACHLORODIBENZOFURAN	F08
O-DICHLOROBENZENE	613
ODOR	109
ODOR CHARACTERIZATION	X07
OIL & GREASE	408
OIL & GREASE MASS EMISSION RATE	975
O-NITROANILINE	8D1
OP'-DDD	503
OP'-DDE	501
OP'-DDT	505
ORGANIC LEAD	7A1
ORGANIC NITROGEN	202
ORTHO PHOSPHATE	311
O-TOLUIDINE	8E9
OXYCHLORDANE	529
OXYGEN (O2)	332
O-XYLENE	629
P(DIMETHYLAMINO)AZOBENZENE	8B1
PAINT FILTER TEST	127
PALLADIUM	M02
PCB CONGENER 101	567
PCB CONGENER 105	568
PCB CONGENER 110	569

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
PCB CONGENER 114	570
PCB CONGENER 118	571
PCB CONGENER 119	572
PCB CONGENER 123	573
PCB CONGENER 126	574
PCB CONGENER 128	575
PCB CONGENER 138	576
PCB CONGENER 149	577
PCB CONGENER 151	578
PCB CONGENER 153	579
PCB CONGENER 156	580
PCB CONGENER 157	581
PCB CONGENER 158	582
PCB CONGENER 167	583
PCB CONGENER 168	584
PCB CONGENER 169	585
PCB CONGENER 170	586
PCB CONGENER 177	587
PCB CONGENER 18	554
PCB CONGENER 180	588
PCB CONGENER 183	589
PCB CONGENER 187	590
PCB CONGENER 189	591
PCB CONGENER 194	592
PCB CONGENER 200	593
PCB CONGENER 201	594
PCB CONGENER 206	595
PCB CONGENER 28	555
PCB CONGENER 37	556
PCB CONGENER 44	557
PCB CONGENER 49	558
PCB CONGENER 52	559
PCB CONGENER 66	560
PCB CONGENER 70	561
PCB CONGENER 74	562
PCB CONGENER 77	563
PCB CONGENER 81	564
PCB CONGENER 87	565
PCB CONGENER 99	566
P-CHLOROANILINE	8A5
PCNB (PENTACHLORONITROBENZENE)	5D7
P-DICHLOROBENZENE	615
PEAK FLOW	Z02
PENTACHLOROBENZENE	8E1
PENTACHLORODIBENZODIOXINS	D05
PENTACHLORODIBENZOFURANS	F05

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
PENTACHLORONITROBENZENE	8E2
PENTACHLOROPHENOL	663
PENTACHLOROPHENOL	854
PENTANE	636
PERCENT METHANE IN GAS	902
PERCENT OXYGEN IN GAS	903
PERCHLORATE	3B2
PERMANENT GASES, TOTAL	330
PERYLENE	897
PERYLENE-D12	S25
pH	101
pH	1S1
PHENACETIN	8E3
PHENANTHRENE	842
PHENANTHRENE-D10	S23
PHENOL	855
PHENOL(BY GC)	631
PHENOL-D5	S02
PHENOLS	312
PHENYLACETIC ACID	860
PHORATE	5D2
PHOSGENE	6B2
PHTHALATE ESTERS	6B4
PHYS/CHEM PROPERTIES	X01
PICLORAM	5C4
PLATINUM	M01
PLUTONIUM	128
P-NITROANILINE	8D3
POLYCHLORINATED PHENOLS	6B1
POTASSIUM	325
POTASSIUM	719
POTASSIUM-40	131
PP'-DDD	504
PP'-DDE	502
PP'-DDT	506
P-PHENYLENEDIAMINE	8E4
PRODUCTION DATA	PRD
PRONAMIDE	8E5
PROPANE	634
PROPIONIC ACID	640
PROPIONITRILE	6D4
P-TERPHENYL-D14	S07
P-XYLENE	630
PYRENE	843
PYRIDINE	858
RADIUM 226+228	126

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
RADON	123
RAINFALL	998
REDOX	1S5
RELATIVE % HUMIDITY	159
SAFROLE	8E6
SALINITY	317
SALMONELLA	385
SAMPLE VOLUME	165
SAR	107
SEC-BUTYL MERCAPTAN	288
SELENASTRUM CHRONIC-GROWTH	B08
SELENIUM	720
SEMI-VOLATILE TTO	T10
SER	106
SETTLEABLE SOLIDS	156
SIEVE ANALYSIS <#100SIEVE	379
SIEVE ANALYSIS >#10 SIEVE	176
SIEVE ANALYSIS >#100SIEVE	378
SIEVE ANALYSIS >#30 SIEVE	177
SIEVE ANALYSIS >#45 SIEVE	178
SIEVE ANALYSIS >#60 SIEVE	179
SIEVE ANALYSIS >3/4"SIEVE	376
SIEVE ANALYSIS >3/8"SIEVE	377
SILICON	721
SILVER	722
SIMAZINE	551
SLAKING RATE-40 DEG C INC	323
SLUDGE VOLUME (CYLINDER)	162
SLUDGE VOLUME (SETTLEOMETER)	163
SLUDGE VOLUME INDEX	164
SODIUM	723
SODIUM POTASSIUM TARTRATE	346
SOLUBLE ALUMINUM	775
SOLUBLE ANTIMONY	757
SOLUBLE ARSENIC	755
SOLUBLE BARIUM	756
SOLUBLE BERYLLIUM	771
SOLUBLE BOD	402
SOLUBLE CADMIUM	758
SOLUBLE CALCIUM	753
SOLUBLE CALCIUM-HARDNESS	751
SOLUBLE CARBOHYDRATES	413
SOLUBLE CHLORIDE	341
SOLUBLE CHROMIUM	759
SOLUBLE COBALT	761
SOLUBLE COD	404

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
SOLUBLE COPPER	762
SOLUBLE IRON	763
SOLUBLE LEAD	764
SOLUBLE MAGNESIUM	754
SOLUBLE MAGNESIUM-HARDNESS	752
SOLUBLE MANGANESE	766
SOLUBLE MERCURY	767
SOLUBLE MOLYBDENUM	782
SOLUBLE NICKEL	768
SOLUBLE ORTHO-PHOSPHATE	342
SOLUBLE PHOSPHATE	320
SOLUBLE POTASSIUM	769
SOLUBLE SELENIUM	770
SOLUBLE SILICON	776
SOLUBLE SILVER	772
SOLUBLE SODIUM	773
SOLUBLE SULFATE	263
SOLUBLE SULFIDE	252
SOLUBLE THALLIUM	784
SOLUBLE TIN	785
SOLUBLE VANADIUM	787
SOLUBLE ZINC	774
SORBITOL	328
SPECIFIC GRAVITY	113
SPINDLE NUMBER (VISCOSITY)	118
STANDARD PLATE COUNT	352
STICKLEBACK ACUTE, % SURVIVAL	B16
STRONTIUM	733
STRONTIUM-90	124
STYRENE	682
SULFATE	257
SULFATE MASS EMISSION RATE	972
SULFATE REDUCING BACTERIA	374
SULFITE	254
SULFUR DIOXIDE	292
SUSPENDED SOLIDS	151
SUSPENDED SOLIDS @ pH 7	150
SYM-TRINITROBENZENE	8F2
T INTERMEDIUS/NOVELLUS	397
T NEAPOLITANUS	398
T THIOOXIDANS	399
T-1,4-DICHLORO-2-BUTENE	6C4
TANNIN & LIGNIN	407
TASTE	110
TCLP EXTRACTION	174
TECHNICAL CHLORDANE	540

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
TEMPERATURE	111
TEMPERATURE	1S2
TEMPERATURE (VISCOSITY)	120
TERT-BUTYL MERCAPTAN	294
TETRACHLORODIBENZODIOXINS	D04
TETRACHLORODIBENZOFURANS	F04
TETRACHLOROETHYLENE	607
TETRAHYDROFURAN	679
THALLIUM	734
THERMOPHILIC FUNGI	381
THIOCYANATE	256
THIONAZIN	5C6
THIOSULFATE	253
THORIUM	129
TICH	522
TIN	735
TITANIUM	736
TOLUENE	621
TOTAL ALKALINITY	305
TOTAL ASBESTOS (PLM)	CA0
TOTAL ASCARIS	389
TOTAL BOD	401
TOTAL CARBAMATE PESTICIDE	5B4
TOTAL CHROMIUM	709
TOTAL COD	403
TOTAL COLIFORM	350
TOTAL COLIFORM (MF)	349
TOTAL CYANIDE	206
TOTAL DETECTABLE DDT	507
TOTAL DETECTABLE PCBS	521
TOTAL DETECTED CHLORDANES	530
TOTAL DETECTED PESTICIDES	549
TOTAL DISSOLVED SOLIDS	155
TOTAL ENTERIC BACTERIA	384
TOTAL ENTERIC VIRUSES	395
TOTAL FUNGI	380
TOTAL HARDNESS	309
TOTAL HCH	525
TOTAL HYDROCARBONS	417
TOTAL KJELDAHL NITROGEN	203
TOTAL LIPIDS	411
TOTAL METALS	M03
TOTAL NITROGEN	208
TOTAL NITROGEN	326
TOTAL NITROGEN MASS EMISSION RATE	971
TOTAL NO3 + NO2 NITROGEN	951

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
TOTAL ORGANIC CARBON	405
TOTAL ORGANIC HALOGEN (TOX)	410
TOTAL PARASITES	388
TOTAL PARTICULATES	160
TOTAL PHOSPHATE	310
TOTAL PHOSPHOROUS	324
TOTAL SOLIDS	153
TOTAL SULFIDE	251
TOTAL SULFUR	255
TOTAL SURFACTANTS	3B1
TOTAL THIOBACILLUS SP	396
TOTAL TOXIC ORGANICS	T01
TOTAL XYLENE ISOMERS	6B7
TOXAPHENE	515
TOXIC ORGANIC MGT PLAN	TMP
TOXOCARA	393
TRANS-1,2-DICHLOROETHYLENE	645
TRANS-1,3-DICHLOROPROPENE	652
TRANS-CHLORDANE	527
TRANS-CHLORDENE	542
TRANS-NONACHLOR	528
TRANSPARENCY (SECCHI DISK)	116
TREMOLITE FIBERS	CA6
TRIBUTYL TIN	553
TRICHLORODIBENZODIOXINS	D03
TRICHLORODIBENZOFURANS	F03
TRICHLOROETHYLENE	606
TRICHURIS	391
TRIPHENYLENE	885
TRITIUM	122
TTO FOR ALUMINUM FORMING	T11
TTO FOR COIL COATING	T02
TTO FOR COPPER FORMING	T03
TTO FOR E&EC SUBCAT A&B	T04
TTO FOR E&EC SUBCAT C	T05
TTO FOR ELECTROPL&METAL F	T06
TTO FOR INDUSTRIAL LAUNDRY	T12
TTO FOR METAL MOLD & CAST	T07
TTO FOR TRUCK WASHES	T08
TURBIDITY	103
URANIUM	125
UV ABSORBING ORGANICS	149
VALERIC ACID	644
VANADIUM	737
VANADIUM-48	130
VAPAM (METAM-SODIUM)	5D6

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
VIABLE ASCARIS	390
VINYL ACETATE	625
VINYL CHLORIDE	612
VISCOMETER SPINDLE RPM	119
VISCOSITY	114
VISCOSITY(BROOKFIELD LVT)	117
VOLATILE ACIDS	638
VOLATILE DISSOLVED SOLIDS	168
VOLATILE SUSPENDED SOLIDS	152
VOLATILE TOTAL SOLIDS	154
VOLATILE TTO	T09
WASTE EXTRACTION TEST	171
WET DI WATER	175
YERSINIA	387
ZINC	724

TABLE 4-2
OPERATIONAL DATA - REUSE
PALMDALE WATER RECLAMATION PLANT

2000 MONITORING DATA
MONTHLY AVERAGES
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57

MONTH	PLANT FLOWS (MGD)		
	TOTAL PLANT INFLUENT [1]	MAXIMUM INFLUENT [1]	TOTAL EFFLUENT TO LAWA SITE
JAN	8.77	12.0	8.33
FEB	8.73	11.7	8.21
MAR	8.58	11.7	8.03
APR	8.71	12.1	7.75
MAY	8.83	12.1	7.41
JUN	9.21	12.3	7.62
JUL	9.25	12.3	7.87
AUG	9.39	12.4	8.14
SEP	9.39	12.7	8.44
OCT	9.39	12.6	8.88
NOV	9.29	12.6	9.36
DEC	9.21	12.6	9.34
MEAN	9.06	12.3	8.28
MAX	9.39	12.7	9.36
MIN	8.58	11.7	7.41
LIMITS: MEAN	15.0		
MAX		37.5	
MIN			

NOTE: 1. Represents influent to secondary treatment.

TABLE 4-2
OPERATIONAL DATA - REUSE
PALMDALE WATER RECLAMATION PLANT

2000 MONITORING DATA
MONTHLY AVERAGES
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57

MONTH	OXIDATION POND FREEBOARD					
	POND 2	POND 3	POND 4	POND 5	POND 6	POND 7
	INCHES	INCHES	INCHES	INCHES	INCHES	INCHES
JAN	37	37	40	40	30	30
FEB	37	37	40	40	30	30
MAR	37	37	40	40	30	30
APR	37	37	40	40	30	30
MAY	37	37	40	40	30	30
JUN	37	37	40	40	30	30
JUL	37	37	40	40	30	30
AUG	37	37	40	40	30	30
SEP	37	37	41	40	30	30
OCT	37	37	41	40	29	29
NOV	37	37	40	40	29	29
DEC	37	37	40	40	29	29
MEAN	37	37	40	40	30	30
MAX	37	37	41	40	30	30
MIN	37	37	40	40	29	29
LIMITS: MEAN MAX MIN	24	24	24	24	24	24

TABLE 4-2
OPERATIONAL DATA - REUSE
PALMDALE WATER RECLAMATION PLANT

2000 MONITORING DATA
MONTHLY AVERAGES
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57

MONTH	PLANT FLOW	COD	BIOCHEMICAL OXYGEN DEMAND		
	INFLUENT	INFLUENT	INFLUENT	PRIMARY EFFLUENT	
	30-DAY AVERAGE	WEEKLY VALUE	WEEKLY VALUE	WEEKLY VALUE	30-DAY AVERAGE
	MGD	mg/L	mg/L	mg/L	mg/L
JAN	8.80	583	260	195	192
FEB	8.72	550	248	198	197
MAR	8.67	563	262	204	200
APR	8.64	605	295	202	209
MAY	8.75	610	228	176	177
JUN	9.05	537	210	180	187
JUL	9.28	492	223	174	179
AUG	9.26	500	228	175	173
SEP	9.45	523	213	174	175
OCT	9.36	489	227	185	178
NOV	9.33	483	224	186	188
DEC	9.23	507	213	175	179
MEAN	9.04	537	236	185	186
MAX	9.45	610	295	204	209
MIN	8.64	483	210	174	173
LIMITS: MEAN MAX MIN					

TABLE 4-2
OPERATIONAL DATA - REUSE
PALMDALE WATER RECLAMATION PLANT

2000 MONITORING DATA
MONTHLY AVERAGES
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57

MONTH	SECONDARY EFFLUENT TO LOS ANGELES WORLD AIRPORTS SITE		
	INHIBITED SOLUBLE BOD	SOLUBLE BOD	SOLUBLE COD
	mg/L	mg/L	mg/L
JAN	5	16	81
FEB	3	9	74
MAR	4	12	86
APR	3	54	83
MAY	3	25	70
JUN	4	13	70
JUL	5	20	66
AUG	6	28	69
SEP	5	32	76
OCT	5	49	65
NOV	4	37	61
DEC	5	18	75
MEAN	4	26	73
MAX	6	54	86
MIN	3	9	61
LIMITS:			
MEAN		30	
MAX		45	
MIN			

TABLE 4-2
OPERATIONAL DATA - REUSE
PALMDALE WATER RECLAMATION PLANT

2000 MONITORING DATA
MONTHLY AVERAGES
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57

SYMBOL	EXPLANATION
*	NO DISCHARGE UNDER THIS BOARD ORDER ON THIS DATE. THE SUMMARY REFLECTS ALL DATA SHOWN.
A	PARTIAL OR NO SAMPLE OBTAINED DUE TO SAMPLER MALFUNCTION.
B	ERROR IN TESTING PROCEDURE. INVALID RESULTS OBTAINED.
C	INSUFFICIENT SAMPLE VOLUME FOR PERFORMING ALL TESTS.
D	HOLIDAY WORK SCHEDULE. INSUFFICIENT MANPOWER TO PERFORM ALL TESTS.
E	INSUFFICIENT MANPOWER TO PERFORM ALL TESTS.
F	NECESSARY TESTING EQUIPMENT OUT OF SERVICE.
G	FLOW METER OUT OF SERVICE.
J	AVERAGE VALUE.
K	VALUE CALCULATED FROM AVERAGE VALUE.

TABLE 4-3
PALMDALE WATER RECLAMATION PLANT
2000 INFLUENT MONITORING LABORATORY DATA

TEST CODE	CONSTITUENT	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	ANNUAL MAXIMUM	ANNUAL MINIMUM
101	pH	PH	7.5	7.6	7.6	7.4	7.6	7.5	7.6	7.5	7.6	7.5	7.8	7.9	7.6	7.9	7.4
151	SUSPENDED SOLIDS	MG/L	272	204	269	496	188	188	228	402	196	228	182	217	256	496	182
155	TOTAL DISSOLVED SOLIDS	MG/L							479					519	499	519	479
201	AMMONIA NITROGEN	MG/L	26.2	25.0	26.2	28.2	23.9	22.2	24	18.7	21.9	24.7	24.8	22.5	24.0	28.2	18.7
202	ORGANIC NITROGEN	MG/L	24.6	11.2	12.1	14.2	12.5	12.1	10.2	12.2	13	12.3	9.5	13.2	13.1	24.6	9.5
204	NITRATE NITROGEN	MG/L	0.02	0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01	0.04	0.03	0.02	< 0.01	0.01 - < 0.02	0.04	0.01
205	NITRITE NITROGEN	MG/L	0.01	0.024	0.022	0.025	0.023	0.020	0.025	0.032	0.034	0.021	0.021	0.019	0.023	0.034	0.01
206	TOTAL CYANIDE	MG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
312	PHENOLS	MG/L						0.054							0.054	0.054	0.054
315	MBAS	MG/L	10.9	12.5	12.4	11.4	11.3	11.0	11.6	11.8	12	11.9	11.3	12.4	11.7	12.5	10.9
401	TOTAL BOD	MG/L	245	234	261	334	210	206	223	228	213	227	224	213	235	334	206
403	TOTAL COD	MG/L	532	494	632	823	500	448	492	500	523	489	485	507	535	823	448
502	PP'-DDE	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
504	PP'-DDD	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
506	PP'-DDT	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
508	ALPHA-BHC	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
509	LINDANE (GAMMA-BHC)	UG/L						0.01							0.01	0.01	0.01
510	HEPTACHLOR	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
511	HEPTACHLOR EPOXIDE	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
512	ALDRIN	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
513	DIELDRIN	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
514	ENDRIN	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
515	TOXAPHENE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
519	AROCLOR 1242	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
520	AROCLOR 1254	UG/L						< 0.05							0 - < 0.05	< 0.05	< 0.05
523	BETA-BHC	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
524	DELTA-BHC	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
531	ENDOSULFAN I	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
532	ENDOSULFAN II	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
533	ENDOSULFAN SULFATE	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
534	ENDRIN ALDEHYDE	UG/L						< 0.04							0 - < 0.04	< 0.04	< 0.04
535	AROCLOR 1016	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
536	AROCLOR 1221	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
537	AROCLOR 1232	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
538	AROCLOR 1248	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
539	AROCLOR 1260	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
540	TECHNICAL CHLORDANE	UG/L						< 0.05							0 - < 0.05	< 0.05	< 0.05
601	METHYLENE CHLORIDE	UG/L						4							4	4	4
602	CHLOROFORM	UG/L						14						2	8	14	2
603	1,1,1-TRICHLOROETHANE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
604	CARBON TETRACHLORIDE	UG/L						< 0.3							0 - < 0.3	< 0.3	< 0.3
605	1,1-DICHLOROETHENE	UG/L						< 0.3							0 - < 0.3	< 0.3	< 0.3
606	TRICHLOROETHYLENE	UG/L						< 0.3							0 - < 0.3	< 0.3	< 0.3
607	TETRACHLOROETHYLENE	UG/L						1							1	1	1
608	BROMODICHLOROMETHANE	UG/L						3						< 0.5	1.5 - < 1.8	3	< 0.5
609	DIBROMOCHLOROMETHANE	UG/L						2						0.6	1.3	2	0.6
610	BROMOFORM	UG/L						< 0.5						< 0.5	0 - < 0.5	< 0.5	< 0.5
611	CHLOROBENZENE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
612	VINYL CHLORIDE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
613	O-DICHLOROBENZENE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
614	M-DICHLOROBENZENE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
615	P-DICHLOROBENZENE	UG/L						6							6	6	6
616	1,1-DICHLOROETHANE	UG/L						< 0.3							0 - < 0.3	< 0.3	< 0.3
618	1,1,2-TRICHLOROETHANE	UG/L						< 0.3							0 - < 0.3	< 0.3	< 0.3

TABLE 4-3
PALMDALE WATER RECLAMATION PLANT
2000 INFLUENT MONITORING LABORATORY DATA

TEST CODE	CONSTITUENT	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	ANNUAL MAXIMUM	ANNUAL MINIMUM
619	1,2-DICHLOROETHANE	UG/L						< 0.3							0 - < 0.3	< 0.3	< 0.3
620	BENZENE	UG/L						< 0.3							0 - < 0.3	< 0.3	< 0.3
621	TOLUENE	UG/L						2							2	2	2
624	ETHYL BENZENE	UG/L						< 0.3							0 - < 0.3	< 0.3	< 0.3
645	TRANS-1,2-DICHLOROETHYLENE	UG/L						< 0.3							0 - < 0.3	< 0.3	< 0.3
646	BROMOMETHANE	UG/L						< 1							0 - < 1	< 1	< 1
647	CHLOROETHANE	UG/L						< 2.5							0 - < 2.5	< 2.5	< 2.5
648	2-CHLOROETHYLVINYLETHER	UG/L						< 1							0 - < 1	< 1	< 1
649	CHLOROMETHANE	UG/L						< 2.5							0 - < 2.5	< 2.5	< 2.5
650	1,2-DICHLOROPROPANE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
651	CIS-1,3-DICHLOROPROPENE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
652	TRANS-1,3-DICHLOROPROPENE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
653	1,1,2,2-TETRACHLOROETHANE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
654	ACROLEIN	UG/L						< 10							0 - < 10	< 10	< 10
655	ACRYLONITRILE	UG/L						< 10							0 - < 10	< 10	< 10
662	METHYL-TERT-BUTYL-ETHER	UG/L						< 2.5							0 - < 2.5	< 2.5	< 2.5
705	ARSENIC	MG/L						0.0016							0.0016	0.0016	0.0016
706	BARIUM	MG/L						0.07							0.07	0.07	0.07
708	CADMIUM	MG/L						< 0.002							0 - < 0.002	< 0.002	< 0.002
709	TOTAL CHROMIUM	MG/L						0.08							0.08	0.08	0.08
710	HEXAVALENT CHROMIUM	MG/L												< 0.1	0 - < 0.1	< 0.1	< 0.1
712	COPPER	MG/L						0.07							0.07	0.07	0.07
714	LEAD	MG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
716	MANGANESE	MG/L						0.05							0.05	0.05	0.05
717	MERCURY	MG/L						0.0003							0.0003	0.0003	0.0003
718	NICKEL	MG/L						< 0.02							0 - < 0.02	< 0.02	< 0.02
720	SELENIUM	MG/L						0.0010							0.0010	0.0010	0.0010
722	SILVER	MG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
724	ZINC	MG/L						0.51							0.51	0.51	0.51
725	ANTIMONY	MG/L						0.0005							0.0005	0.0005	0.0005
726	BERYLLIUM	MG/L						< 0.0025							0 - < 0.0025	< 0.0025	< 0.0025
734	THALLIUM	MG/L						< 0.001							0 - < 0.001	< 0.001	< 0.001
800	ACENAPHTHENE	UG/L						< 10							0 - < 10	< 10	< 10
801	ACENAPHTHYLENE	UG/L						< 10							0 - < 10	< 10	< 10
802	ANTHRACENE	UG/L						< 10							0 - < 10	< 10	< 10
803	BENZIDINE	UG/L						< 200							0 - < 200	< 200	< 200
804	BENZO(A)ANTHRACENE	UG/L						< 10							0 - < 10	< 10	< 10
805	BENZO(A)PYRENE	UG/L						< 2							0 - < 2	< 2	< 2
806	BENZO(B)FLUORANTHENE	UG/L						< 10							0 - < 10	< 10	< 10
807	BENZO(GHI)PERYLENE	UG/L						< 10							0 - < 10	< 10	< 10
808	BENZO(K)FLUORANTHENE	UG/L						< 10							0 - < 10	< 10	< 10
809	BIS(2-CL-ETHOXY)METHANE	UG/L						< 10							0 - < 10	< 10	< 10
810	BIS(2-CHLOROETHYL)ETHER	UG/L						< 10							0 - < 10	< 10	< 10
811	BIS(2-CL-ISOPROPYL)ETHER	UG/L						< 10							0 - < 10	< 10	< 10
812	DIETHYLHEXYL PHTHALATE	UG/L						19							19	19	19
813	4-BROMOPHENYL PHENYLETHER	UG/L						< 10							0 - < 10	< 10	< 10
814	BUTYLBENZYL PHTHALATE	UG/L						< 10							0 - < 10	< 10	< 10
815	2-CHLORONAPHTHALENE	UG/L						< 10							0 - < 10	< 10	< 10
816	4-CHLOROPHENYLPHENYLETHER	UG/L						< 10							0 - < 10	< 10	< 10
817	CHRYSENE	UG/L						< 10							0 - < 10	< 10	< 10
818	DIBENZO(A,H)ANTHRACENE	UG/L						< 10							0 - < 10	< 10	< 10
819	1,2-DICHLOROBENZENE	UG/L						< 10							0 - < 10	< 10	< 10
820	1,3-DICHLOROBENZENE	UG/L						< 10							0 - < 10	< 10	< 10
821	1,4-DICHLOROBENZENE	UG/L						< 10							0 - < 10	< 10	< 10

TABLE 4-3
PALMDALE WATER RECLAMATION PLANT
2000 INFLUENT MONITORING LABORATORY DATA

TEST CODE	CONSTITUENT	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	ANNUAL MAXIMUM	ANNUAL MINIMUM
822	3,3'-DICHLOROBENZIDINE	UG/L						< 10							0 - < 10	< 10	< 10
823	DIETHYL PHTHALATE	UG/L						< 10							0 - < 10	< 10	< 10
824	DIMETHYL PHTHALATE	UG/L						< 10							0 - < 10	< 10	< 10
825	DI-N-BUTYL PHTHALATE	UG/L						< 10							0 - < 10	< 10	< 10
826	2,4-DINITROTOLUENE	UG/L						< 10							0 - < 10	< 10	< 10
827	2,6-DINITROTOLUENE	UG/L						< 10							0 - < 10	< 10	< 10
828	DI-N-OCTYL PHTHALATE	UG/L						< 10							0 - < 10	< 10	< 10
829	1,2-DIPHENYLHYDRAZINE	UG/L						< 10							0 - < 10	< 10	< 10
830	FLUORANTHENE	UG/L						< 10							0 - < 10	< 10	< 10
831	FLUORENE	UG/L						< 10							0 - < 10	< 10	< 10
832	HEXACHLOROBENZENE	UG/L						< 10							0 - < 10	< 10	< 10
833	HEXACHLOROBUTADIENE	UG/L						< 10							0 - < 10	< 10	< 10
834	HEXACHLOROCYCLOPENTADIENE	UG/L						< 50							0 - < 50	< 50	< 50
835	HEXACHLOROETHANE	UG/L						< 10							0 - < 10	< 10	< 10
836	INDENO(1,2,3-C,D)PYRENE	UG/L						< 10							0 - < 10	< 10	< 10
837	ISOPHORONE	UG/L						< 10							0 - < 10	< 10	< 10
838	NAPHTHALENE	UG/L						< 10							0 - < 10	< 10	< 10
839	NITROBENZENE	UG/L						< 10							0 - < 10	< 10	< 10
840	N-NITROSODIMETHYLAMINE	UG/L						< 10							0 - < 10	< 10	< 10
841	N-NITROSODI-N-PROPYLAMINE	UG/L						< 10							0 - < 10	< 10	< 10
842	PHENANTHRENE	UG/L						< 10							0 - < 10	< 10	< 10
843	PYRENE	UG/L						< 10							0 - < 10	< 10	< 10
844	2,3,7,8-TCDD	UG/L						< 20							0 - < 20	< 20	< 20
845	2-CHLOROPHENOL	UG/L						< 10							0 - < 10	< 10	< 10
846	1,2,4-TRICHLOROBENZENE	UG/L						< 10							0 - < 10	< 10	< 10
847	2,4-DICHLOROPHENOL	UG/L						< 10							0 - < 10	< 10	< 10
848	2,4-DIMETHYLPHENOL	UG/L						< 10							0 - < 10	< 10	< 10
849	2,4-DINITROPHENOL	UG/L						< 60							0 - < 60	< 60	< 60
850	2-METHYL-4,6DINITROPHENOL	UG/L						< 10							0 - < 10	< 10	< 10
851	2-NITROPHENOL	UG/L						< 10							0 - < 10	< 10	< 10
852	4-NITROPHENOL	UG/L						< 10							0 - < 10	< 10	< 10
853	4-CHLORO-3-METHYLPHENOL	UG/L						< 10							0 - < 10	< 10	< 10
854	PENTACHLOROPHENOL	UG/L						< 10							0 - < 10	< 10	< 10
855	PHENOL	UG/L						20							20	20	20
856	2,4,6-TRICHLOROPHENOL	UG/L						< 10							0 - < 10	< 10	< 10
857	N-NITROSODIPHENYLAMINE	UG/L						< 10							0 - < 10	< 10	< 10
C15	HYDROCARBONS-MODIFIED8015	MG/L									5.47			8.6	7.04	8.6	5.47

TABLE 4-4
PALMDALE WATER RECLAMATION PLANT
2000 EFFLUENT MONITORING LABORATORY DATA

TEST CODE	CONSTITUENT	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	ANNUAL MAXIMUM	ANNUAL MINIMUM
101	pH	PH	8.2	8.3	8.4	8.2	8.0	8.2	8.5	8.7	8.4	8.4	8.3	8.4	8.3	8.7	8.0
107	SAR	SAR						4.29						3.92	4.11	4.29	3.92
111	TEMPERATURE	DEG.C.						20.8	22.2	22.4	20.7	16.5	8.2	9.0	17.1	22.4	8.2
115	DISSOLVED OXYGEN	MG/L	7.5	7.5	9.3	5.0	5.8	7.2	4.4	4.1	4.0	4.4	7.5	9.9	6.4	9.9	4.0
151	SUSPENDED SOLIDS	MG/L	101	93	96	94	125	104	176	137	97	66	148	81	110	176	66
155	TOTAL DISSOLVED SOLIDS	MG/L	504	476	502	545	512	565	534	523	521	482	546	482	516	565	476
201	AMMONIA NITROGEN	MG/L	19.9	20.7	17.6	18.9	10.0	2.8	2.4	0.64	9.0	10.4	11.2	15.7	11.60	20.7	0.64
202	ORGANIC NITROGEN	MG/L	13.7	10.8	13.3	11.8	14.7	13.6	9.5	15.7	13	8.3	15.0	12.0	12.6	15.7	8.3
204	NITRATE NITROGEN	MG/L	0.33	0.18	0.23	0.22	1.31	0.85	< 0.01	0.49	1.95	1.31	5.35	1.80	< 1.17 - 1.17	5.35	< 0.01
205	NITRITE NITROGEN	MG/L	0.102	0.117	0.139	0.310	0.500	3.315	4.03	3.03	1.260	0.692	0.58	0.242	1.193	4.03	0.102
206	TOTAL CYANIDE	MG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
257	SULFATE	MG/L						78.2	96		89	81	98	82.6	87.5	98	78.2
301	CHLORIDE	MG/L						116	131		110	102	101	96.7	109.5	131	96.7
309	TOTAL HARDNESS	MG/L						136						133	135	136	133
310	TOTAL PHOSPHATE	MG/L						10.1						15.3	12.7	15.3	10.1
312	PHENOLS	MG/L						< 0.006							0 - < 0.006	< 0.006	< 0.006
313	FLUORIDE	MG/L						0.32						0.30	0.31	0.32	0.30
314	BORON	MG/L						0.52						0.47	0.50	0.52	0.47
315	MBAS	MG/L	0.20	0.18	0.28	0.22	0.27	0.29	0.32	0.14	0.19	0.25	0.29	0.29	0.24	0.32	0.14
405	TOTAL ORGANIC CARBON	MG/L									47.3				47.3	47.3	47.3
408	OIL & GREASE	MG/L	< 5	6.3	6.3	< 5.4	< 4	< 4			< 4	< 4	14.5	< 5	2.7 - < 5.9	14.5	< 4
502	PP'-DDE	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
504	PP'-DDD	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
506	PP'-DDT	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
508	ALPHA-BHC	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
509	LINDANE (GAMMA-BHC)	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
510	HEPTACHLOR	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
511	HEPTACHLOR EPOXIDE	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
512	ALDRIN	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
513	DIELDRIN	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
514	ENDRIN	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
515	TOXAPHENE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
519	AROCLOR 1242	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
520	AROCLOR 1254	UG/L						< 0.05							0 - < 0.05	< 0.05	< 0.05
523	BETA-BHC	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
524	DELTA-BHC	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
531	ENDOSULFAN I	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
532	ENDOSULFAN II	UG/L						< 0.01							0 - < 0.01	< 0.01	< 0.01
533	ENDOSULFAN SULFATE	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
534	ENDRIN ALDEHYDE	UG/L						< 0.04							0 - < 0.04	< 0.04	< 0.04
535	AROCLOR 1016	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
536	AROCLOR 1221	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
537	AROCLOR 1232	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
538	AROCLOR 1248	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
539	AROCLOR 1260	UG/L						< 0.1							0 - < 0.1	< 0.1	< 0.1
540	TECHNICAL CHLORDANE	UG/L						< 0.05							0 - < 0.05	< 0.05	< 0.05
601	METHYLENE CHLORIDE	UG/L						< 1							0 - < 1	< 1	< 1
602	CHLOROFORM	UG/L						< 0.5			< 0.5			< 0.5	0 - < 0.5	< 0.5	< 0.5
603	1,1,1-TRICHLOROETHANE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
604	CARBON TETRACHLORIDE	UG/L						< 0.3							0 - < 0.3	< 0.3	< 0.3
605	1,1-DICHLOROETHENE	UG/L						< 0.3							0 - < 0.3	< 0.3	< 0.3
606	TRICHLOROETHYLENE	UG/L						< 0.3							0 - < 0.3	< 0.3	< 0.3
607	TETRACHLOROETHYLENE	UG/L						< 0.3							0 - < 0.3	< 0.3	< 0.3
608	BROMODICHLOROMETHANE	UG/L						< 0.5			< 0.5			< 0.5	0 - < 0.5	< 0.5	< 0.5
609	DIBROMOCHLOROMETHANE	UG/L						< 0.5			< 0.5			< 0.5	0 - < 0.5	< 0.5	< 0.5
610	BROMOFORM	UG/L						< 0.5			< 0.5			< 0.5	0 - < 0.5	< 0.5	< 0.5
611	CHLOROBENZENE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
612	VINYL CHLORIDE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
613	O-DICHLOROBENZENE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5
614	M-DICHLOROBENZENE	UG/L						< 0.5							0 - < 0.5	< 0.5	< 0.5