

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 2008-0083-A01

MONITORING AND REPORTING PROGRAM NO. 9456
FOR
CITY OF OXNARD
GROUNDWATER ENHANCEMENT AND TREATMENT PROGRAM – NONPOTABLE REUSE
PROJECT
(File No. 08-070)

The City of Oxnard (City) shall implement this monitoring and reporting program on the effective date of this Order.

PURPOSE OF AMENDED MONITORING AND REPORTING PROGRAM FOR ORDER NO. R4-2011-0079-A01 AND ORDER NO. R4-2008-0083

The Pleasant Valley County Water District (PVCWD) and the City of Oxnard (City) requested the delivery of recycled water produced by the Advanced Water Purification Facility (AWPF) starting in August of 2015 to offset the loss of agricultural water due to the extended drought. The City's AWPF is part of the Groundwater Recovery, Enhancement, and Treatment (GREAT) Program, which was scheduled to deliver the water to Pleasant Valley growers in 2016. Instead, PVCWD growers requested that the water be transported into the PVCWD's irrigation distribution system immediately via the Calleguas Regional Salinity Management Pipeline (SMP) until the planned permanent connection can be constructed or additional flows into the SMP render the option not feasible, whichever comes first.

I. SUBMITTAL OF REPORTS

1. The City shall submit the required reports, outlined in the following paragraphs, to the California Regional Water Quality Control Board, Los Angeles Region (Regional Board), and to the State Water Resource Control Board Division of Drinking Water California Department of Public Health, Drinking Water Field Operations, Santa Barbara District Office (DDWCDPH). The reports shall be received at the Regional Board and the CDPHDDW on the dates indicated as follows:
 - A. **Quarterly Monitoring Reports** shall be received at the Regional Board by the 15th day of the second month following the end of each quarterly monitoring period according to Table M1. The first Quarterly Monitoring Report under this program shall be received at the Regional Board and the CDPHDDW by the quarter following startup.

Table M1 Quarterly Report Periods and Due Dates	
Reporting Period	Report Due
January – March	May 15 th
April – June	August 15 th
July – September	November 15 th
October – December	February 15 th

- B. **Annual Summary Report** shall be received at the Regional Board and the ~~CDPHDDW~~ by March 1 of each year. ~~The first Annual Summary Report under this program shall~~ and cover the monitoring periods from January 2012 to December 2012.
- C. Monthly Monitoring Reports shall be received at the Regional Board by the 15th day of each month during the first two months of operation of the SMP for PVCWMD irrigation.

~~2. All monitoring and annual summary reports must be addressed to the Regional Board, Attention: Information Technology Unit. Reference the reports to Compliance File No. CI-9456 to facilitate routing to the appropriate staff and file.~~

~~3. The Permittee shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (<http://www.waterboards.ca.gov/ciwqs/index.html>) no later than the 15th day following the end of the second month of the designated monitoring period. The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.~~

~~4.2.~~

~~5. The monitoring data shall be submitted to the Regional Board and to the CDPH on hard copy, and on either a 3 1/2" computer diskette or a CD-ROM disk. The Regional Board and the CDPH may request electronic submittal of data contained in a CD-ROM disk or other appropriate electronic medium at any time. The submittal data must be IBM compatible, preferably using Microsoft Excel software.~~

~~6. The Regional Board and the State Water Resources Control Board (State Board) are developing a database compliance monitoring management system that may require the City to submit the monitoring reports electronically, when it becomes operational. The draft regulations state: "Analytical results for chemicals shall be reported directly to the Department, as follows:~~

~~8. Analytical results of all analyses completed in a calendar month shall be reported to the Department no later than the 15th day following the end of the second month of the designated monitoring period.~~

II. MONITORING REQUIREMENTS

1. ~~Whenever possible, q~~ Quarterly monitoring shall be performed during the 1st quarter (January, February, and March), the 2nd quarter (April, May, and June), the 3rd quarter (July, August, and September), and the 4th quarter (October, November, and

December); and annual monitoring shall be conducted during the third quarter of each calendar year. However, if the use of recycled water does not occur during that monitoring period, the City shall collect a sample during the next reuse event. Results of quarterly and annual analyses shall be reported in the following quarterly monitoring report. If there is no use of recycled water during the reporting period, the report shall so state. Monitoring reports shall continue to be submitted to the Regional Board, regardless of whether or not there was a use of recycled water.

2. Monitoring shall be used to determine compliance with the requirements of this Order and shall include, but not limited to, the following:
 - A. Sampling protocols (specified in 40 CFR part 136 or AWWA standards where appropriate) and chain of custody procedures.
 - B. Laboratory or laboratories, which conducted the analyses. Include copy or copies of laboratory certifications by the California Health Services Environmental Laboratory Accreditation Program (ELAP¹) every year or when the City changes their contract laboratory.
 - C. Analytical test methods used for recycled water and the corresponding detection limits, ~~for reporting purposes (DLRs) unregulated and regulated chemicals. Please see the CDPH's website at <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/UCMR.aspx> and <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx> for unregulated and regulated chemicals, respectively.~~
 - D. Quality assurance and control measures.
- ~~3.~~ The samples shall be analyzed using analytical methods described in 40 CFR part 136; or where no methods are specified for a given pollutant, by commercially available methods approved by the USEPA. The City shall select the analytical methods that provide reporting detection limits (DLRs) lower than the limits prescribed in this Order. For those constituents that have drinking water notification levels (NLs) and/or public health goals (PHGs), the DLRs shall be equal to or lower than either the NLs or the PHGs, ~~(If this is not feasible, each quarterly monitoring report shall report efforts to modify the process, the equipment or the laboratory to provide the desirable DLRs. note this is not always feasible). Every effort should be made to analyze Chemicals with NLs in Attachment A-6 using the least DLR possible.~~
- ~~4.~~ The City shall instruct its laboratories to establish calibration standards so that the DLRs (or its equivalent if there is a different treatment of samples relative to calibration standards) are the lowest calibration standard. At no time shall the City use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

¹ ELAP is a part of the [DDW/CDPH](#).

4.3. Upon request by the City, the Regional Board, in consultation with the USEPA and the State Board Quality Assurance Program, may establish DLRs, in any of the following situations:

- A. When the pollutant has no established method under 40 CFR 136 (revised May 14, 1999, or subsequent revision);
- B. When the method under 40 CFR 136 for the pollutant has a ~~DLR RDL~~ higher than the limit specified in this Order; or,
- C. When the City agrees to use a test method that is more sensitive than those specified in 40 CFR part 136 and is commercially available.

5.4. Samples of final effluent must be analyzed within allowable holding time limits as specified in 40 CFR part 136.3. All QA/QC analyses must be run on the same dates when samples were actually analyzed. The City shall make available for inspection and/or submit the QA/QC documentation upon request by Regional Board staff. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the quarterly report.

6.5. For all bacterial analyses, sample dilutions should be performed so the range of values extends from 1 to 800. The detection methods used for each analysis shall be reported with the results of the analyses.

III. **REPORTING REQUIREMENTS**

The City shall submit all reports, shown on Section I SUBMITTAL OF REPORTS to the Regional Board and the ~~GDPHDDW~~ by the dates indicated. All quarterly, and annual monitoring reports should contain a separate section titled “Summary of Non-Compliance”, which discusses the compliance records and corrective actions taken or planned that may be needed to bring the reuse into full compliance with water recycling requirements. This section shall clearly list all non-compliance with water recycling requirements, as well as all excursions of effluent limitations.

1. **Quarterly Reports**

- A. These reports shall include, at a minimum, the following information:
 - a. The volume of the secondary-treated influent and Advanced Wastewater Purification Facility (AWPF) treated recycled water. If no recycled water is used during the quarter, the report shall so state. During the use of the SMP to distribute AWPF treated recycled water to PVCWD, the average daily flow rate pumped into the SMP shall also be reported, as well as the flow rate at each connection to the FVCWD irrigation network.
 - b. The date and time of sampling and analyses.
 - c. All analytical results of samples collected during the monitoring period of

the secondary-treated influent and AWWPF-treated recycled water.

- d. UV dose calculations, lamp intensity readings, and UV transmittance.
 - e. Records of any operational problems, plant upset and equipment breakdowns or malfunctions, and any discharge(s) of the AWWPF-treated recycled water.
 - f. Discussion of compliance, noncompliance, or violation of requirements.
 - g. All corrective or preventive action(s) taken or planned with schedule of implementation, if any.
- B. For the purpose of reporting compliance with numerical limitations, analytical data shall be reported using the following reporting protocols:
- a. Sample results greater than or equal to the DLR must be reported “as measured” by the laboratory (i.e., the measured chemical concentration in the sample); or
 - b. Sample results less than the DLR, but greater than or equal to the laboratory’s method detection limit (MDL), must be reported as “Detected, but Not Quantified”, or DNQ. The laboratory must write the estimated chemical concentration of the sample next to DNQ as well as the words “Estimated Concentration” (may be shortened to Est. Conc.); or
 - c. Sample results less than the laboratory’s MDL must be reported as “Not-Detected”, or ND.
- C. If the City samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any sample more frequently than required in this MRP using approved analytical methods, the results of those analyses shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with average effluent, receiving water, etc., limitations.
- D. The Regional Board may request supporting documentation, such as daily logs of operations.

2. Annual Reports

- A. Tabular and graphical summaries of the monitoring data (AWPF-treated recycled water) obtained during the previous calendar year.
- B. Discussion of the compliance record and corrective or preventive action(s) taken or planned that may be needed to bring the AWWPF-treated recycled water into full compliance with the requirements in this Order.

- C. The description of any changes and anticipated changes including any impacts in operation of any unit processes or facilities shall be provided.
- D. A list of the analytical methods employed for each test and associated laboratory quality assurance/quality control procedures shall be included. The report shall restate, for the record, the laboratories used by the City to monitor compliance with this Order, their status of certification, and provide a summary of performance.
- E. The report shall confirm operator certification and provide a list of current operating personnel, their responsibilities, and their corresponding grade of certification.
- F. The report shall also include the date of the facility's Operation and Maintenance Management Plan, the date the plan was last reviewed, and whether the plan is complete and valid for the current facilities

3. Monthly Reports during the Initial Operations of the Temporary Use of the SMP

- A. These reports shall include information collected during the first two months of utilizing the SMP, including the samples collected at a new monitoring location between the SMP line closest to the Camrosa Round Mountain Desalter discharge and the PVCWD distribution system.
- B. These reports shall include, at a minimum, the following information:
 - a. Startup procedures used to provide an adequate mixture of AWPF treated recycled water and brine in accordance with Order No. R4-2015-0079-A01.
 - b. The average daily flow rate pumped into the SMP from the AWPF and the total monthly volume.
 - c. The average daily flow rate pumped from the SMP to the three connection points to the PVCWD and the total monthly volume.
 - d. The date and time of sampling and analyses.
 - e. All analytical results of samples collected during the first two months of the temporary use of the SMP.
 - f. Discussion of compliance, noncompliance, or violation of requirements.
 - g. All corrective or preventive action(s) taken or planned with a schedule of implementation, if any.
- C. For the purpose of reporting compliance with numerical limitations and supporting documentation, requirements noted in III.1.B, C and D also apply.

IV. MONITORING FOR SECONDARY TREATED EFFLUENT (INFLUENT TO AWPf)

1. The sampling station shall be established where representative samples of influent can be obtained. Samples may be obtained at a single station, provided that the station is representative of wastewater quality entering the AWPf. Should there be any change in the sampling station, the proposed station shall be approved by the Executive Officer prior to its use.
2. Influent Monitoring Program (Table M2)

Table M2 Influent Monitoring Program			
Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Total influent	MGD	---	continuous
BOD ₅ 20°C	mg/L	24-hr composite	weekly
Suspended solids	mg/L	24-hr composite	weekly

V. RECYCLED WATER MONITORING

1. The sampling station shall be established where representative samples of recycled water can be obtained. For this recycling project, recycled water samples shall be obtained from the final effluent channel downstream. Should there be any change in the sampling station, the proposed station shall be approved by the Executive Officer prior to its use. [The monitoring program for this sampling station is provided in Table M3.](#)

2. Monitoring Program for Disinfected AWWPF-Treated Recycled Water (Table M3)

Table M3 – AWWPF-Treated Effluent Monitoring			
Constituent	Units	Type of Sample²	Minimum Frequency of Analysis
Effluent flow	MGD	--	Continuous
Turbidity ³	NTU	---	Continuous
Total coliform	MPN/100ml	Grab	Daily
pH	pH units	Grab	Daily
Settleable solids	mL/L	Grab	Daily
Suspended solids	mg/L	24-hr comp.	Weekly
BOD ₅ 20°C	mg/L	24-hr comp.	Weekly
Oil and grease	mg/L	Grab	Monthly
Total dissolved solids	mg/L	24-hr comp.	Monthly
Chloride	mg/L	24-hr comp.	Monthly
Boron	mg/L	24-hr comp.	Monthly
Sulfate	mg/L	24-hr comp.	Monthly
MBAS	mg/L	24-hr comp.	Monthly
Nitrate-N	mg/L	24-hr comp.	Quarterly
Nitrite-N	mg/L	24-hr comp.	Quarterly
Nitrate-N + nitrite-N	mg/L	24-hr comp.	Quarterly
Inorganic ⁴ with primary MCL	mg/L	24-hr comp./Grab	Quarterly
Constituents/parameters ⁵ with secondary MCL	--	24-hr comp.	Quarterly
Regulated organic chemicals ⁶	µg/L	24-hr comp./Grab	Quarterly
Remaining priority pollutants ⁷	µg/L	24-hr comp./Grab	Quarterly

² Grab sample is an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. When an automatic composite sampler is not used, composite sampling shall be done as follows: If the duration of the discharge is equal to or less than 24 hours but greater than eight (8) hours, at least eight (8) flow-weighted samples shall be obtained during the discharge period and composited. For discharge duration of less than eight (8) hours, individual 'grab' sample may be substituted.

³ Turbidity shall be continuously monitored and recorded at a point after final filtration. The average value recorded each day, the amount of time that 0.2 NTU is exceeded, and the incident of exceeding 0.5 NTU, if any, shall be reported.

⁴ See Attachment A-1 for specific constituents to be monitored.

⁵ See Attachment A-5 for specific constituents to be monitored. Sampling frequency of MBAS is monthly.

⁶ See Attachment A-3 for specific constituents to be monitored. Grab samples shall be used for analyses of volatile organics and cyanide; composite samples shall be used for others.

⁷ See Attachment A-7 for specific constituents to be monitored. Grab samples shall be used for analyses of volatile organics and cyanide; composite samples shall be used for others.

Table M3 – AWPf-Treated Effluent Monitoring			
Constituent	Units	Type of Sample²	Minimum Frequency of Analysis
Disinfection byproduct ^{8,9}	µg/L	24-hr comp./Grab	Quarterly
Radioactivity ¹⁰	pCi/L	24-hr comp.	Annually
Chemicals with NLs ^{11, 12}	µg/L	24-hr comp./Grab	Annually ^[11]
Endocrine disrupting chemicals ^{11, 13}	µg/L	24-hr comp.	Annually ^[11]
Pharmaceuticals and other chemicals ^{11, 14}	µg/L	24 –hr comp.	Annually ^[11]

⁸ See Attachment A-4 for specific constituents to be monitored. Grab samples shall be used for analyses of volatile organics and cyanide; composite samples shall be used for others.

⁹ There are no numeric limits for these constituents, no numeric limits are anticipated at this time, and analytical methods may not be widely available.

Monitoring for these constituents are viewed as a diligent way of assessing and verifying recycled water quality characteristics, which can be useful in addressing issues of public perception about the safety of recycled water. Further, should there be a positive finding, the Regional Board and the CDPH can give the result due consideration as to whether it is of concern or not. Just what such consideration might entail would depend on the knowns and unknowns of these constituents, including its potential health effects at the given concentration, the source of the chemical, as well as possible means of better control to limit its presence, treatment strategies if necessary, and other appropriate actions.

¹⁰ See Attachment A-2 for specific constituents to be monitored.

¹¹ Prior to the commencement of delivering recycled water, at least one grab sample of recycled water shall be collected and analyzed. The results for the initial recycled water quality analysis shall be submitted to the Regional Board. After that, at least one grab sample of recycled water shall be collected and analyzed every year.

¹² See Attachment A-6 for specific constituents to be monitored. Grab samples shall be used for analyses of volatile organics and cyanide; composite samples shall be used for others.

¹³ Endocrine disrupting chemicals include ethinyl estradiol, 17-B estradiol, estrone, bisphenol A, nonylphenol and nonylphenol polyethoxylate, octylphenol and octylphenol polyethoxylate, and polybrominated diphenyl ethers. These chemicals need to be monitored, only when the analytical methods for these chemicals are applicable and approved by the USEPA. These chemicals need to be monitored during August.

¹⁴ Pharmaceuticals and other chemicals include acetaminopen, amoxicillin, azithromycin, caffeine, carbamazepine, ciprofloxacin, ethylenediamine tetra-acetic acid (EDTA), gemfibrozil, ibuprofen, iodinated contrast media, lipitor, methadone, morphine, salicylic acid, and triclosan. These chemicals need to be monitored, only when the analytical methods for these chemicals are applicable and approved by the USEPA. These chemicals need to be monitored during August.

3. During the use of the SMP, a new monitoring location shall be established between the SMP line and the PVCWD distribution system. The monitoring program for this sampling point downstream of the SMP is provided in Table M4.

Table M4 – AWPf-Treated Effluent Monitoring via SMP			
<u>Constituent</u>	<u>Units</u>	<u>Type of Sample¹⁵</u>	<u>Minimum Frequency of Analysis</u>
<u>Total dissolved solids</u>	<u>mg/L</u>	<u>24-hr comp.</u>	<u>Monthly</u>
<u>Chloride</u>	<u>mg/L</u>	<u>24-hr comp.</u>	<u>Monthly</u>
<u>Boron</u>	<u>mg/L</u>	<u>24-hr comp.</u>	<u>Monthly</u>
<u>Sulfate</u>	<u>mg/L</u>	<u>24-hr comp.</u>	<u>Monthly</u>
<u>Boron</u>	<u>mg/L</u>	<u>24-hr comp.</u>	<u>Monthly</u>
<u>Total nitrogen</u>	<u>mg/L</u>	<u>24-hr comp.</u>	<u>Monthly</u>
<u>Inorganic⁴ with primary MCL</u>	<u>mg/L</u>	<u>24-hr comp/Grab</u>	<u>Quarterly</u>
<u>Constituents/parameters⁵ with secondary MCL</u>	<u>--</u>	<u>24-hr comp</u>	<u>Quarterly</u>

VI. RECYCLED WATER USE MONITORING

The City shall submit a quarterly report, in a tabular form, on the list of users serviced during the quarter, the amount of recycled water delivered to each user, and the use of the recycled water. A summary of these data shall be included in the annual report.

VII. GENERAL MONITORING AND REPORTING REQUIREMENTS

1. The City shall summarize and arrange the monitoring data in tabular form to demonstrate compliance with requirements.
2. For every item where the requirements are not met, the City shall submit a statement of the actions undertaken or proposed which will bring the recycled water into full compliance with requirements at the earliest possible time, and submit a timetable for implementation of the corrective measures.
3. Monitoring reports shall be signed by either the principal Executive Officer or ranking elected official. A duly authorized representative of the aforementioned signatories may sign documents if:
 - a. The authorization is made in writing by the signatory;

¹⁵ Grab sample is an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. When an automatic composite sampler is not used, composite sampling shall be done as follows: If the duration of the discharge is equal to or less than 24 hours but greater than eight (8) hours, at least eight (8) flow-weighted samples shall be obtained during the discharge period and composited. For discharge duration of less than eight (8) hours, individual 'grab' sample may be substituted.

- b. The authorization specifies the representative as either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
 - c. The written authorization is submitted to the Executive Officer of this Regional Board.
4. The monitoring report shall contain the following completed declaration:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments thereto; and that, based on my inquiry of the individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Executed on the ___ day of _____ at _____

Signature

Title

5. The City shall retain records of all monitoring information, including all calibration and maintenance, monitoring instrumentation, and copies of all reports required by this Order, for a period of at least three (3) years from the date of sampling measurement, or report. This period may be extended by request of the Regional Board or the [CDPHDDW](#) at any time and shall be extended during the course of any unresolved litigation regarding the regulated activity.
6. Records of monitoring information shall include:
- a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analysis;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.

7. The City shall submit to the Regional Board, together with the first monitoring report required by this Order, a list of all chemicals and proprietary additives which could affect the quality of the recycled water, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.

An annual summary of the quantities of all chemicals, listed by both trade and chemical names, which are used in the treatment process shall be included in the annual report.

Ordered by:

Samuel Unger
Tracy J. Egoscue
Executive Officer

Date: July 9~~October 2~~, 2015~~08~~

/EERICKSOND TSAI

Attachment A-1

Table 64431-A – Inorganic Chemicals*	
Chemical	Maximum Contaminant Levels (mg/L)
Aluminum	1
Antimony	0.006
Arsenic	0.05
Asbestos	7 MFL**
Barium	1
Beryllium	0.004
Cadmium	0.005
Chromium	0.05
Cyanide	0.15
Mercury	0.002
Nickel	0.1
Nitrate	45
Nitrate + Nitrite	10
Nitrite (as nitrogen)	1
Perchlorate	0.006
Selenium	0.05
Thallium	0.002
Fluoride	2

California Code of Regulation (CCR) Title 22, Section 64431

* Last update: March 9, 2008, or most current version.

**MFL = million fibers per liter; MCL for fibers exceeding 10µm in length.

Attachment A-2

Table 4 – Radioactivity*	
Chemical	Maximum Contaminant Levels (pCi/L)
Combined Radium-226 and Radium-228	5
Gross Alpha Particle Activity (Including Radium-226 but Excluding Radon and Uranium)	15
Tritium	20,000
Strontium-90	8
Gross Beta Particle Activity	50
Uranium	20

California Code of Regulation (CCR) Title 22, Section 64443

*Last update: March 9, 2008, or most current version.

Attachment A-3

Table 64444-A – Organic Chemicals*	
Chemical	Maximum Contaminant Levels (mg/L)
(a) Volatile Organic Chemicals	
Benzene	0.001
Carbon Tetrachloride (CTC)	0.0005
1,2-Dichlorobenzene	0.6
1,4-Dichlorobenzene	0.005
1,1-Dichloroethane	0.005
1,2-Dichloroethane (1,2-DCA)	0.0005
1,1-Dichloroethene (1,1-DCE)	0.006
Cis-1,2-Dichloroethylene	0.006
Trans-1,2-Dichloroethylene	0.01
Dichloromethane	0.005
1,2-Dichloropropane	0.005
1,3-Dichloropropene	0.0005
Ethylbenzene	0.3
Methyl-tert-butyl-ether (MTBE)	0.013
Monochlorobenzene	0.07
Styrene	0.1
1,1,2,2-Tetrachloroethane	0.001
Tetrachloroethylene (PCE)	0.005
Toluene	0.15
1,2,4-Trichlorobenzene	0.005
1,1,1-Trichloroethane	0.2
1,1,2-Trichloroethane	0.005
Trichloroethylene (TCE)	0.005
Trichlorofluoromethane	0.15
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2
Vinyl Chloride	0.0005
Xylenes (m,p)	1.75**
(b) Non-Volatile synthetic Organic Chemicals	
Alachlor	0.002
Atrazine	0.001
Bentazon	0.018
Benzo(a)pyrene	0.0002
Carbofuran	0.018
Chlordane	0.0001
2,4-D	0.07
Dalapon	0.2
1,2-Dibromo-3-chloropropane (DBCP)	0.0002
Di(2-ethylhexyl)adipate	0.4

(Continuous to the Next Page)

(Continuous from the Previous Page)

Table 64444-A – Organic Chemicals*	
Chemical	Maximum Contaminant Levels (mg/L)
Di(2-ethylhexyl)phthalate	0.004
Dinoseb	0.007
Diquat	0.02
Endothall	0.1
Endrin	0.002
Ethylene Dibromide (EDB)	0.00005
Glyphosate	0.7
Heptachlor	0.00001
Heptachlor Epoxide	0.00001
Hexachlorobenzene	0.001
Hexachlorocyclopentadiene	0.05
Lindane	0.0002
Methoxychlor	0.03
Molinate	0.02
Oxamyl	0.05
Pentachlorophenol	0.001
Picloram	0.5
Polychlorinated Biphenyls	0.0005
Simazine	0.004
Thiobencarb	0.07
Toxaphene	0.003
2,3,7,8-TCDD (Dioxin)	3×10 ⁻⁸
2,4,5-TP (Silvex)	0.05

California Code of Regulation (CCR) Title 22, Section 64444

* Last update: March 9, 2008, or most current version.

**MCL is for either a single isomer or the sum of the isomers.

Attachment A-4

Table 64533-A – Primary MCLs for Disinfection Byproducts*	
Constituent	Maximum Contaminant Levels (mg/L)
Total Trihalomethanes (TTHM)	0.080
Bromodichloromethane	
Bromoform	
Chloroform	
Dibromochloromethane	
Haloacetic acid (five) (HAA5)	0.060
Monochloroacetic acid	
Dichloroacetic acid	
Trichloroacetic acid	
Monobromoacetic acid	
Dibromoacetic acid	
Bromate**	0.010
Chlorite***	1.0

California Code of Regulation (CCR) Title 22, Section 64533, Chapter 15.5

** Last update: March 9, 2008, or most current version.

** Bromate is listed for plants using ozone disinfection only.

**** Chlorite is listed for plants using chlorine dioxide only.

Attachment A-5

Table 64449-A – Secondary Maximum Contaminant Levels Consumer Acceptance Limits*	
Chemical	Units
Aluminum	0.2 mg/L
Copper	1.0 mg/L
Color	15 units
Foam Agents (MBAS)	0.5 mg/L
Iron	0.3 mg/L
Manganese	0.05 mg/L
Methyl-tert-butyl-ether (MTBE)	0.005 mg/L
Odor – Threshold	3 units
Silver	0.1 mg/L
Thiobencarb	0.001 mg/L
Turbidity	5 units
Zinc	5.0 mg/L

California Code of Regulation (CCR) Title 22, Section 64449

* Last update: June 12, 2008, or most current version.

Attachment A-6

Monitoring for Chemicals with Notification Levels*
Boron
n-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
Carbon disulfide
Chlorate
2-Chlorotoluene
4-Chlorotoluene
Dichlorodifluoromethane (Freon 12)
1,4-Dioxane
Ethylene glycol
Formaldehyde
HMX
Isopropylbenzene
Manganese
Methyl isobutyl ketone (MIBK)
Naphthalene
n-Nitrosodiethylamine (NDEA)
n-Nitrosodimethylamine (NDMA)
n-Nitrosodi-n-propylamine (NDPA)
Propachlor
n-Propylbenzene
RDX
Tertiary butyl alcohol (TBA)
1,2,3-Trichloropropane (1,2,3-TCP)
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
2,4,6-Trinitrotoluene (TNT)
Vanadium

* Last update: December 14, 2007, or most current version.

Attachment A-7

Monitoring for Remaining Priority Pollutants

Pesticides	Base/Neutral Extractibles	Di-n-butyl phthalate
Aldrin	Acenaphthene	Di-n-octyl phthalate
Dieldrin	Benzidine	Diethyl phthalate
4,4'-DDT	Hexachloroethane	Dimethyl phthalate
4,4'-DDE	Bis(2-chloroethyl)ether	Benzo(a)anthracene
4,4'-DDD	2-chloronaphthalene	Benzo(a)fluoranthene
Alpha-endosulfan	1,3-dichlorobenzene	Benzo(k)fluoranthene
Beta-endosulfan	3,3'-dichlorobenzidine	Chrysene
Endosulfan sulfate	2,4-dinitrotoluene	Acenaphthylene
Endrin aldehyde	2,6-dinitrotoluene	Anthracene
Alpha-BHC	1,2-diphenylhydrazine	1,12-benzoperylene
Beta-BHC	Fluoranthene	Fluorene
Delta-BHC	4-chlorophenyl phenyl ether	Phenanthrene
Acid Extractibles	4-bromophenyl phenyl ether	1,2,5,6-dibenzanthracene
2,4,6-trichlorophenol	Bis(2-chloroisopropyl)ether	Indeno(1,2,3-cd)pyrene
P-chloro-m-cresol	Bis(2-chloroethoxyl)methane	Pyrene
2-chlorophenol	Hexachlorobutadiene	Volatile Organics
2,4-dichlorophenol	Isophorone	Acrolein
2,4-dimethylphenol	Naphthalene	Acrylonitrile
2-nitrophenol	Nitrobenzene	Chlorobenzene
4-nitrophenol	N-nitrosodimethylamine	Chloroethane
2,4-dinitrophenol	N-nitrosodi-n-propylamine	1,1-dichloroethylene
4,6-dinitro-o-cresol	N-nitrosodiphenylamine	Methyl chloride
Phenol	Bis(2-ethylhexyl)phthalate	Methyl bromide
---	Butyl benzyl phthalate	2-chloroethyl vinyl ether

STANDARD PROVISIONS
APPLICABLE TO WASTE DISCHARGE REQUIREMENTS

1. DUTY TO COMPLY

The discharger must comply with all conditions of these waste discharge requirements. A responsible party has been designated in the Order for this project, and is legally bound to maintain the monitoring program and permit. Violations may result in enforcement actions, including Regional Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Regional Board. [CWC Section 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, 13350]

2. GENERAL PROHIBITION

Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code (CWC). [H&SC Section 5411, CWC Section 13263]

3. AVAILABILITY

A copy of these waste discharge requirements shall be maintained at the discharge facility and be available at all times to operating personnel. [CWC Section 13263]

4. CHANGE IN OWNERSHIP

The discharger must notify the Executive Officer, in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger. The notice must include a written agreement between the existing and new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgement that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on. [CWC Sections 13267 and 13263]

5. CHANGE IN DISCHARGE

In the event of a material change in the character, location, or volume of a discharge, the discharger shall file with this Regional Board a new Report of Waste Discharge. [CWC Section 13260(c)]. A material change includes, but is not limited to, the following:

- (a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the Waste.

Standard Provisions Applicable to
Waste Discharge Requirements

- (b) Significant change in disposal method, e.g., change from a land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.
- (c) Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.
- (d) Increase in flow beyond that specified in the waste discharge requirements.
- (e) Increase in area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. [CCR Title 23 Section 2210]

6. REVISION

These waste discharge requirements are subject to review and revision by the Regional Board. [CCR Section 13263]

7. TERMINATION

Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information. [CWC Sections 13260 and 13267]

8. VESTED RIGHTS

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, do not protect the discharger from his liability under Federal, State or local laws, nor do they create a vested right for the discharger to continue the waste discharge. [CWC Section 13263(g)]

9. SEVERABILITY

Provisions of these waste discharge requirements are severable. If any provision of these requirements are found invalid, the remainder of these requirements shall not be affected. [CWC Section 921]

Standard Provisions Applicable to
Waste Discharge Requirements

10. OPERATION AND MAINTENANCE

The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order. [CWC Section 13263(f)]

11. HAZARDOUS RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the State Board or the appropriate Regional Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of Section 13271 of the Water Code unless the discharger is in violation of a prohibition in the applicable Water Quality Control plan. [CWC Section 13271(a)]

12. PETROLEUM RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Article 3.5 (commencing with Section 8574.1) of Chapter 7 of Division 1 of Title 2 of the Government Code. This provision does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Section 311 of the Clean Water Act or the discharge is in violation of a prohibition in the applicable Water Quality Control Plan. [CWC Section 13272]

Standard Provisions Applicable to
Waste Discharge Requirements

13. ENTRY AND INSPECTION

The discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- (d) Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order, or as otherwise authorized by the California Water Code, any substances or parameters at any location. [CWC Section 13267]

14. MONITORING PROGRAM AND DEVICES

The discharger shall furnish, under penalty of perjury, technical monitoring program reports; such reports shall be submitted in accordance with specifications prepared by the Executive Officer, which specifications are subject to periodic revisions as may be warranted. [CWC Section 13267]

All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices. Annually, the discharger shall submit to the Executive Officer a written statement, signed by a registered professional engineer, certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required.

Unless otherwise permitted by the Regional Board Executive officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. The Regional Board Executive Officer may allow use of an uncertified laboratory under exceptional circumstances, such as when the closest laboratory to the monitoring location is outside the State boundaries and therefore not subject to certification. All analyses shall be required to be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" [40 CFR Part 136] promulgated by the U.S. Environmental Protection Agency. [CCR Title 23, Section 2230]

Standard Provisions Applicable to
Waste Discharge Requirements

15. TREATMENT FAILURE

In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or to reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of the treatment facility fails, is reduced, or is lost. [CWC Section 13263(f)]

16. DISCHARGES TO NAVIGABLE WATERS

Any person discharging or proposing to discharge to navigable waters from a point source (except for discharge of dredged or fill material subject to Section 404 of the Clean Water Act and discharge subject to a general NPDES permit) must file an NPDES permit application with the Regional Board. [CCR Title 2 Section 22357]

17. ENDANGERMENT TO HEALTH AND ENVIRONMENT

The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the Executive Officer within 24 hours:

- (a) Any bypass from any portion of the treatment facility.
- (b) Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge or any other circumstances.
- (c) Any treatment plant upset which causes the effluent limitation of this Order to be exceeded. [CWC Sections 13263 and 13267]

18. MAINTENANCE OF RECORDS

The discharger shall retain records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used

Standard Provisions Applicable to
Waste Discharge Requirements

to complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

Records of monitoring information shall include:

- (a) The date, exact place, and time of sampling or measurements;
 - (b) The individual(s) who performed the sampling or measurements;
 - (c) The date(s) analyses were performed;
 - (d) The individual(s) who performed the analyses;
 - (e) The analytical techniques or method used; and
 - (f) The results of such analyses.
19. (a) All application reports or information to be submitted to the Executive Officer shall be signed and certified as follows:
- (1) For a corporation – by a principal executive officer or at least the level of vice president.
 - (2) For a partnership or sole proprietorship – by a general partner or the proprietor, respectively.
 - (3) For a municipality, state, federal, or other public agency – by either a principal executive officer or ranking elected official.
- (b) A duly authorized representative of a person designated in paragraph (a) of this provision may sign documents if:
- (1) The authorization is made in writing by a person described in paragraph (a) of this provision.
 - (2) The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
 - (3) The written authorization is submitted to the Executive Officer.

Any person signing a document under this Section shall make the following certification:

Standard Provisions Applicable to
Waste Discharge Requirements

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. [CWC Sections 13263, 13267, and 13268]"

20. OPERATOR CERTIFICATION

Supervisors and operators of municipal wastewater treatment plants and privately owned facilities regulated by the PUC, used in the treatment or reclamation of sewage and industrial waste shall possess a certificate of appropriate grade in accordance with Title 23, California Code of Regulations Section 3680. State Boards may accept experience in lieu of qualification training. In lieu of a properly certified wastewater treatment plant operator, the State Board may approve use of a water treatment plant operator of appropriate grade certified by the State Department of Health Services where reclamation is involved.

Each plant shall be operated and maintained in accordance with the operation and maintenance manual prepared by the municipality through the Clean Water Grant Program. [CWC Title 23, Section 2233(d)]

ADDITIONAL PROVISIONS APPLICABLE TO
PUBLICLY OWNED TREATMENT WORKS' ADEQUATE CAPACITY

21. Whenever a publicly owned wastewater treatment plant will reach capacity within four years the discharger shall notify the Regional Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies and the press. The discharger must demonstrate that adequate steps are being taken to address the capacity problem. The discharger shall submit a technical report to the Regional Board showing flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Board, or within 120 days after receipt of notification from the Regional Board, of a finding that the treatment plant will reach capacity within four years. The time for filing the required technical report may be extended by the Regional Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Board itself. [CCR Title 23, Section 2232]