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

ORDER NO. R4-2008-0083 (File No. 08-070)

WATER RECYCLING REQUIREMENTS AND WASTE DISCHARGE REQUIREMENTS FOR CITY OF OXNARD GROUNDWATER ENHANCEMENT AND TREATMENT PROGRAM – NONPOTABLE REUSE PHASE I PROJECT

ISSUED TO

CITY OF OXNARD

The California Regional Water Quality Control Board, Los Angeles Region, (hereinafter, Regional Board), finds:

INTRODUCTION

- The current water supply sources are insufficient to meet the City of Oxnard's (City's) current and growing demand and have limitations with respect to economics and reliability. The City's total water supply sources in 2008 is approximately 27,000 acre-feet per year (AF/Y), and it is projected that the City's demand will near 44,000 AF/Y over the next 20 years. In order to meet the current and future water demand, the City proposes to produce and distribute treated recycled water produced at the Advanced Wastewater Purification Facility (AWPF) from its Groundwater Enhancement and Treatment (GREAT) Program. The GREAT Program is a water resource project that combines wastewater recycling and reuses; groundwater injection, storage, and recovery; and groundwater desalination to provide more efficient uses of existing local water resources. The GREAT Program would provide regional water supply solutions to western Ventura County, allow the groundwater basin to reach safe yield levels sooner (i.e., reducing the effects of groundwater overdraft conditions), and provide the City with needed local water resources. Additional benefits would include increased spare capacity of the City ocean outfall, which could be used toward other beneficial uses and more reliable irrigation water supplies to growers at equal or better quality than its existing irrigation water supplies.
- 2. The GREAT Program contains three sub-projects subject to three different permitting activities. These three sub-projects are:
 - A. **Nonpotable Recycle Project** (Project) reuses AWPF-treated recycled water (recycled water) including landscape and agricultural irrigation, industrial process water, and recreational purposes. These proposed Waste Discharge Requirements and Water Recycling Requirements regulate this use.
 - B. **Groundwater Injection Project** injects recycled water into the aquifers along the coastal area. Groundwater Injection Project will be regulated with a separate future

permit containing the Groundwater Recharge Reuse requirements issued by this Regional Board.

C. Groundwater Desalination Project desalts brackish groundwater for potable uses. Groundwater Desalination Project will be regulated with a drinking water permit issued by the California Department of Public Health (CDPH). The discharge of prine from this activity will be covered under a future NPDES permit.

PROJECT SPONSOR

3. The City owns and operates the Oxnard Wastewater Treatment Plant (Oxnard Plant) and the GREAT Program. The City is the primary purveyor of recycled water, distributed both within and outside of the City, for irrigation, industrial, and recreational, and other non-groundwater recharge uses.

REGULATORY AGENCIES

- 4. The Regional Board is the permitting agency for this Project involving the use of recycled water for nonpotable uses. The Regional Board issues Waste Discharge Requirements (WDRs) and Water Recycling Requirements (WRRs) to assure that this Project does not adversely affect receiving water quality. In addition, the Regional Board is guided by California Department of Public Health's (CDPH's) requirements.
- 5. On June 12, 2008, the CDPH provided the Regional Board with the comments on the Title 22 Engineering Report. These comments have been incorporated into the Order. The CDPH is the agency with the primary responsibility for establishing criteria, under Title 22 and Title 17 of the Code of Regulations, to protect the health of the public using the recycled water and potable water supplies through control of cross-connections with potential contaminants.

PURPOSE OF ORDER

- 6. On January 9, 2007, the City submitted a Report of Waste Discharge (ROWD) and applied for Water Recycling Requirements, pursuant to California Water Code Section 13522.5, for the nonpotable reuse of recycled water.
- 7. This Order is a master water recycling permit issued to the City, pursuant to California Water Code Section 13523.1. This Order prescribes the City responsibilities for the production, distribution and application of recycled water. The City is also responsible for processing individual end-users' applications, inspecting point-of-use facilities, and ensuring end-users' compliance with the water recycling requirements contained in this Order. The actual delivery of recycled water to end-users is subject to approval by the CDPH, and/or its delegated local health agency.

OXNARD WASTEWATER TREATMENT PLANT

8. The City owns and operates the Oxnard Plant, a publicly owned treatment work (POTW). The Oxnard Plant is a secondary treatment facility located at 6001 South Perkins Road, Oxnard, California. Figure 1 provides a map of the area around the Oxnard Plant. The

Oxnard Plant has a dry weather design capacity of 31.7 million gallons per day (mgd). The treatment system consists of bar screening, aerated grit removal, primary clarification, biofiltration, activated sludge, secondary clarification, flow equalization, chlorine disinfection. and dechlorination. Solid fractions recovered from wastewater treatment processes include screenings, grit, primary sludge and skimmings, thickened waste activated sludge. The fine solids (screenings and grit) which are primarily inorganic materials are hauled away to a landfill. The remaining solid fractions (primary sludge, skimmings, and thickened waste activated sludge) are anaerobically digested at the treatment plant. In addition, the City operates the oil and grease program through which it cleans interceptors for food establishments and uses the oil and grease in its digesters to increase methane production. The methane is then used to generate electricity, which occupies approximately 60% of total electricity uses, for the Oxnard Plant. The digested solids are dewatered using belt filter presses. The dewatered cake contains approximately 20% solids (Class B biosolids). The Oxnard Plant generates approximately 500 wet tons of Class B biosolids per week. The biosolids are managed by composting operations in Kern County. Figure 2 shows a flow schematic of the Oxnard Plant.

- 9. Treated wastewater is discharged to the Pacific Ocean off Ormond Beach, a water of the United States, under NPDES Order No. R4-2008-0029, adopted by the Regional Board on May 1, 2008.
- 10. The Oxnard Plant is located at the Oxnard Plain, and the proposed recycled water use areas are the Oxnard Plain and Pleasant Valley located above the Ventura Central Groundwater Basin.

GROUNDWATER ENHANCEMENT AND TREATMENT (GREAT) PROGRAM

11. The City plans to construct an AWPF nearby the Oxnard Plant for the GREAT Program in two phases (See Figure 1), which treats the secondary effluent, for reuse in Nonpotable Reuse and Groundwater Injection Projects. Table 1 presents the proposed quantity of recycled water to be produced for each phase.

Table 1 – Projected Recycled Water Production Capacity				
Phase	Secondary Effluent (mgd)	Product Recycled Water (mgd)		
1 .	8 - 9	6.25		
11.	32 - 36	25		

The AWPF is designed to produce 6.25 mgd and 25 mgd of recycled water for Phases 1 and 2, respectively. At buildout (Phase 2), the treatment equipment will consist of four full treatment trains, each capable of producing 6.25 mgd of recycled water. Thus, the operators have the ability to remove trains from service for maintenance or repair. When a train is out of service, less water will be available for recycled use. Flow that is not treated through the AWPF will be discharged through the ocean outfall.

The use of recycled water will replace imported potable water. The City will be actively pursuing additional users for Phase I. Any additional recycled water produced in future phases may be used for various irrigation, industrial uses, and recreational impoundments.

SOURCE AND TREATMENT OF RECYCLED WATER

- 12. The Oxnard Plant treats wastewater from industrial, commercial and residential sources generated by a population of approximately 220,000 in the City of Oxnard, the City of Port Hueneme, the US Naval Base, Ventura County, and some unincorporated areas of Ventura County. Approximately 20 percent of wastewater comes from industrial source, and the remaining 80 percent from commercial and residential sources. In addition to wastewater, infiltration and inflow of clear water is present in the collection system and is approximately 11 to 20 percent of the total flow depending on the season. In compliance with 40 Code of Federal Regulations part 403 and the NPDES permits for the Oxnard Plant, the City developed and has been implementing a Pretreatment Program. Two of the four primary objectives of the Pretreatment Program are to prevent to pass through of pollutants or to cause interference in the operation of the Oxnard Plant by regulating the discharge of toxic pollutants into the Oxnard Plant. The Pretreatment Program reduces the likelihood of toxic contamination of the effluent and provides reliability in the treatment process.
- 13. For the GREAT Program Phase I, approximately 6 8 mgd of secondary-treated effluent will flow by gravity to the AWPF lift station wet well where lift pumps will feed to the strainers. The remaining secondary treated effluent will continue to be discharged to the Pacific Ocean. Figure 3 depicts the schematic of Phase I AWPF treatment process. The AWPF is comprised of the following:
 - A. **Strainer System:** Strainers installed prior to the microfiltration/ultrafiltration system will remove the fine particles from the secondary effluent.
 - B. Microfiltration/Ultrafiltration (MF/UF) System: MF/UF is a low-pressure filtration process and will be used to pretreat the secondary effluent prior to reverse osmosis (RO). As results of removing particulate and microbial contaminants, including turbidity, *Giardia*, and *Cryptosporidium*, MF/UF increases 'system reliability and reduces RO membrane fouling. The MF units will be periodically back washed to clean the membranes. However, the backwash is not 100 percent effective at removing particulates and foulants accumulating on the membrane surface. Therefore, a chemical cleaning process of feeding sodium hypochlorite to MF/UM is also needed. The chemical cleaning interval is 30 days or greater. The backwash will be sent back to the Oxnard Plant's headworks for reprocessing.
 - C. Reverse Osmosis (RO) System: RO is a pressure-driven membrane-separation process that removes dissolved contaminants (i.e., salts, minerals, metal ions, and organic compounds) and viruses from water. Filtered water will continuously be pumped at elevated pressure to the RO system. RO feed pumps are equipped with variable frequency drives to allow constant flux operation. The RO system will be designed for a finished water production capacity of 6.25 mgd for the AWPF Phase 1 and 25 mgd for Phase 2. It will have three stages to allow water recovery of 80 to 85 percent, where concentrate from the first stage will be applied to a second stage, and concentrate from the second stage will be applied to a third stage. Permeate from the three stages will be blended into a final product water and will constitute the feedwater to the UV/AOX system. Similar to the MF/UF system, the membranes will

foul with accumulation of particulates. Chemicals are used to routinely clean the membranes. Cleaning chemicals are returned to the Oxnard Plant's headworks.

- D. Ultra Violet/Advanced Oxidation and Reduction (UV/AOX) System: UV/AOX process is used for both disinfection and advanced oxidation and reduction of micropollutants at the AWPF. Recycled water destined for groundwater recharge, and agricultural and landscape irrigation will normally undergo UV/AOX treatment at all times. However, in those instances when only UV light disinfection is required, the AWPF will have the capability to apply a lower UV dose required for disinfection of water for "unrestricted reuse," also referred to as "disinfected tertiary recycled water" or "Title 22 recycled water," as defined by the CDPH.
- E. Post-Treatment Systems: The post-treatment systems include decarbonator towers and liquid lime injection downstream of the UV/AOX process. Following UV/AOX, the water quality is projected to be very aggressive with an LSI in the range of -3.3 to -2.5; also, the water will have high concentrations of carbon dioxide, up to 50 mg/L. Lime is needed to increase the pH and achieve an Langelier Saturation Index (LSI) of +2. A portion of the carbon dioxide must be removed to reduce the lime dose needed for stabilization. If the water is not stabilized, it will be very corrosive and will not be suitable for recycled water uses or groundwater recharge. In order to remove carbon dioxide, water is distributed over media packed in the decarbonator towers. Air flow through the media strips the carbon dioxide and other volatile compounds. Liquid lime is then dosed to add calcium and alkalinity, thereby increasing the pH.
- F. Chemical Systems: Chemicals are used throughout the processing of the water. Membrane cleaning systems, water stabilization, and treatment involve chemical usage. Chemicals for this project are split into *continuously fed* chemicals and *batch cleaning* chemicals. Continuously fed chemicals are flow paced. These chemicals include hydrogen peroxide, sulfuric acid, threshold inhibitor, and liquid lime. Batch cleaning chemicals include sodium hypochlorite, sodium hydroxide, citric acid, and sodium bisulfite.

PUMP STATION, AND TRANSMISSION OF RECYCLED WATER

- 14. The finished water pump station will provide the AWPF-treated water to the recycled water transmission lines. Initially, the finished water pump station will have two duty pumps and one standby pump. Each of the finished water pumps will be provided with variable frequency drives. The finished water pump station discharge header also will be provided with a flow meter to monitor the amount of finished water delivered from the AWPF.
- 15. Recycled water will be distributed through a combination of existing and new transmission lines. Figures 4 shows existing water facilities in the Oxnard Plain. Figures 5 and 6 show the proposed locations of the recycled water transmission lines for Phase 1 (initial) and Phase 2 (build-out) respectively. All pipelines and valves will be installed with purple identification tapes or purple polyethylene vinyl wraps according to "Guidelines for Distribution of Nonpotable Water American Water Works Association (AWWA) California-Nevada Section" published in 1992.

A. Transmission Lines of Agricultural Irrigation Uses

The following existing transmission lines will be used to distribute recycled water to agricultural users:

- a. Recycled water will be distributed through the existing United Water Conservation District (UWCD) Pumping Trough Pipeline (PTP) and Pleasant Valley County Water District (PVCWD) irrigation networks for agricultural irrigation by growers served by these networks.
- b. Recycled water will be distributed through either (1) the existing Ocean View Municipal Water District (OVMWD) potable pipeline for agricultural irrigation by growers along this pipeline, or (2) a new parallel pipeline. The supply to meet the potable demand would be replaced by other means if the existing pipeline is converted to nonpotable use.
- c. A transmission system to distribute recycled water to duck clubs has not yet been identified.

For Phase 1 of the GREAT Program, the following recycled water delivery system alternatives are:

- a. Establish recycled water delivery system to 6.25-mgd capacity.
- b. Convert existing OVMWD pipeline from potable to nonpotable use for delivery of recycled water.
- c. Construct new OVMWD potable pipeline 22,300 feet of 12-inch pipeline.
- d. Construct tie-in to former OVMWD pipeline 2,500 feet of 24-inch pipeline.
- e. Construct tie-in to pumping-trough pipeline irrigation system for delivery of recycled water.

Phase 2 of the GREAT Program would expand the recycled water delivery system to a 25-mgd capacity.

- a. Construct Phase 2 recycled water delivery system 25,000 feet of 30-inch pipe, parallel to ocean view pipeline to provide a tie-in to the PVCWD.
- b. Construct tie-in to PVCWD irrigation system.

These recycled water delivery systems are still in the planning stages. The UWCD, PVCWD, and OVMWD will maintain their own pipeline systems in different stages.

B. Transmission Lines of Municipal and Industrial Uses

The GREAT Program did not consider municipal and industrial use within the City for the recycled water. However, the City recently abandoned the Redwood Trunk Sewer line that extended from the northwestern portion of the City to the Oxnard Plant. The abandoned sewer line could potentially carry a pipe from the AWPF to the northwestern portion of the City and serve municipal and industrial facilities along its route. The future project is called the Recycled Water Backbone System (RWBS).

The transmission lines for both phases and the RWBS line are shown in Figure 7. The distribution area for each line is identified in Figure 7, as well.

APPLICABLE PLANS, POLICIES AND REGULATIONS

- 16. Basin Plan The Regional Board adopted a revised Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) on June 13, 1994, and amended by various Regional Board resolutions. This updated and consolidated plan represents the Board's master quality control planning document and regulations. The Basin Plan (i) designates beneficial uses for surface and groundwater, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated (existing and potential) beneficial uses and conform to the State's antidegradation policy, and (iii) includes implementation provisions, programs, and policies to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. This Order implements the applicable plans, policies, and provisions of the Board's Basin Plan.
- 17. The beneficial uses of the Ventura Central Groundwater Basin are municipal and domestic supply, industrial process supply, industrial service supply, and agricultural supply.
- 18. Section 13523 of the California Water Code provides that a Regional Board, after consulting with and receiving recommendations from CDPH or its delegated local health agency, and after any necessary hearing, shall, if it determines such action to be necessary to protect the health, safety, or welfare of the public, prescribe water recycling requirements for water that is used or proposed to be used as recycled water. Section 13523 further provides that the recycling requirements shall include, or be in conformance with, the statewide water recycling criteria established by CDPH pursuant to Water Code section 13521.
- 19. The City proposes to use recycled water for irrigation and other industrial uses. All these reuse applications could affect the health, safety, and welfare of the public; therefore requirements are necessary.
- 20. Pursuant to the California Water Code section 13523, the Regional Board has consulted with the CDPH regarding the proposed recycling project and has incorporated its recommendations in this Order.
- 21. CDPH adopted revised Water Recycling Criteria (Chapter 3, Division 4, Title 22, California Code of Regulations) that became effective on December 2, 2000. Applicable criteria to

this recycling project are prescribed in this Order. The GREAT Program's recycled water is treated through reverse osmosis and disinfection, and exceeds the quality of recycled water required for the applications proposed in this Order.

- 22. The City had prepared an Engineering Report on its proposed production, distribution, and use of recycled water for irrigation in March 2008, as required by Section 60323 of Title 22, California Code of Regulations. On June 12, 2008, the CDPH provided the Regional Board with comments on the Title 22 Engineering Report.
- 23. The requirements contained in this Order are in conformance with the goals and objectives of the Basin Plan and implement the requirements of the California Water Code and Water Recycling Criteria.
- 24. The City prepared and certified the "Final Program Environmental Impact Report", State Clearinghouse No. 2003011045, in compliance with the California Environmental Quality Act (Public Resources Code Section 21000, et seq.). This report was prepared by CH2MHILL for the City of Oxnard in May 2004. The project consists of upgrades to the Oxnard Plant to achieve water recycling and construction of a backbone recycled water distribution system.
- 25. This issuance of water recycling requirements by a regulatory agency for the protection of the environment is exempt from the provisions of Chapter 3 [commencing with Section 21100, et seq., Division 13 (California Environmental Quality Act), Public Resources Code] in accordance with Section 15308, Title 14, California Code of Regulations.
- 26. Pursuant to California Water Code section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, 1001 I Street, Sacramento, California, 95814, within 30 days of adoption of the Order.

The Regional Board has notified the City of Oxnard, interested agencies and persons of its intent to issue Master Water Recycling Requirements for the production, distribution and use of recycled water, and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to these water recycling requirements.

IT IS HEREBY ORDERED that the City of Oxnard shall comply with the following:

I. AWPF INFLUENT SPECIFICATIONS

For purposes of this Order, the AWPF includes Strainer, Microfiltration/Ultrafiltration, Reverse Osmosis, Ultra Violet/Advanced Oxidation and Reduction, Post-Treatment, and Chemical Systems. The influent to the AWPF is secondary treated effluent from the Oxnard Plant.

The influent shall, at all times, be adequately oxidized. The influent shall be considered adequately oxidized when it meets the following characteristics:

- 1. The monthly average Biochemical Oxygen Demand (BOD₅ 20⁰C) value does not exceed 30 mg/L. Compliance shall be determined monthly using the average of the analytical results of all 24-hour composite samples taken at least weekly during the month.
- 2. The monthly average Total Suspended Solids (TSS) concentration does not exceed 30 mg/L. Compliance shall be determined monthly using the average of the analytical results of all 24-hour composite samples taken daily during the month.

II. RECYCLED WATER LIMITATIONS

1. The AWPF-treated recycled water shall not contain constituents with concentrations in excess of the following limits (Table 2):

Table 2 – Recycled Water Limitations			
Constituent	Units	Monthly Average	Daily Maximum
Oil and grease	mg/L	10	15
Total dissolved solids	mg/L		700
Chloride	mg/L		150
Sulfate	mg/L		300
Boron	mg/L		1.0
Total nitrogen*	mg/L		10

Total nitrogen is sum of nitrite-N, nitrate-N, NH₃-N, and organic-N.

- 2. The turbidity of the reverse osmosis product water prior to disinfection shall not exceed 0.2 NTU more than 5 percent of the time within a 24-hour period and 0.5 at NTU at any time. The turbidity shall be continuously measured with at least one reading every 1.2 hours and recorded. When the turbidity requirements are exceeded, delivery of recycled water shall be suspended until such time the cause of the exceedance has been identified and corrected. The City shall notify and submit a report according to Provision VII.8. of this Order.
- 3. Recycled water shall be, at all times, adequately disinfected such that the number of total coliform bacteria shall not exceed any of the following, based on daily grab samples:
 - A. A 7-day median of 2.2 most probable number (MPN) per 100 milliliters;
 - B. 23 MPN per 100 milliliters in more than one sample in any 30 day period prior to delivery of recycled water; and,
 - C. 240 MPN per 100 milliliters in any sample prior to delivery of recycled water.

By March 31, 2011, the City shall send the report to the Regional Board and the CDPH that demonstrates equivalency of UV/AOX disinfection to chlorine disinfection as used in recycled water treatment plants. Equivalency of UV disinfection to a

conventional process used in wastewater recycling and reuse must be demonstrated by the following criteria:

- A. Total coliform count equal to or less than 2.2 MPN/100 ml met with the sample statistical frequency as required for chlorine disinfection; and,
- B. Virus inactivation efficiency equivalent to that achieved with chlorine disinfection 4 log of inactivation (i.e., 99.99 percent reduction), based on plaque-forming units of F-specific bacteriophage MS2 or polio virus in wastewater.
- 4. The pH of the recycled water shall be, at all times, within the range of 6.5 to 8.5 pH units. Excursions from this range shall not be considered a violation provided the duration is not more than 10 minutes in a 24-hour period, and the pH shall at all times be within 6 to 9.
- 5. The recycled water shall not contain trace, toxic and other constituents in concentrations exceeding:,
 - A. The current applicable Maximum Contaminant Levels (MCLs) for drinking water established by the CDPH included in the Attachments A-1 to A-5;
 - B. Any new Federal or State MCL upon adoption; or,
 - C. At levels that adversely affect the beneficial uses of receiving groundwater.
- 6. The radioactivity of the recycled water shall not exceed the limits specified in Sections 64441 and 64443, Article 5, Chapter 15, Title 22 of the California Code of Regulations, or subsequent revisions.
- 7. The recycled water shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect the beneficial uses of the receiving groundwater.
- 8. The recycled water shall not cause a measurable increase in organic chemical contaminants in the groundwater.

III. SPECIFICATIONS FOR USE OF RECYCLED WATER

- 1. The AWPF-treated recycled water may be used for the following:
 - A. Surface irrigation in the following areas:
 - a. Food crops, including all edible root crops, where the recycled water comes into contact with the edible portion of the crop;
 - b. Parks and playgrounds;
 - c. School yards;

- d. Residential and freeway landscaping;
- e. Unrestricted access golf courses; and
- f. Other allowable irrigation applications specified in the Water Recycling Criteria, Chapter 3, Title 22, CCR, provided approval from CDPH and Regional Board Executive Officer are obtained prior to delivery.
- B. Industrial or commercial cooling tower;
- C. Industrial boiler feed, and;
- D. Recreational Impoundments.
- 2. The recycled water shall not be used for any other uses than those specified in section III.1 unless an engineering report has been submitted for such other uses, except for groundwater recharge reuse, and has been approved in writing by the Executive Officer and CDPH.
- 3. Recycled water shall not be used for direct human consumption or for the processing of food or drink intended for human consumption.
- 4. The delivery of recycled water to end-users shall be subject to CDPH approval and/or its delegated local agency.
- 5. The dual plumped system may be used to deliver recycled water to end-users. The detailed dual plumped system requirements are available at Section V. of this Order.

IV. USE AREA REQUIREMENTS

Use area is an area of recycled water use with defined boundaries, which may contain one or more facilities where recycled water is used. The City shall be responsible to ensure that all users of recycled water comply with the following:

- 1. All use areas where recycled water is used that are accessible to the public shall be posted with signs that are visible to the public, in a size no less than 4 inches high by 8 inches wide, that include the following wording: "RECYCLED WATER DO NOT DRINK". Each sign shall display an international symbol similar to that shown in Figure 8 to alert people who do not read English.
- 2. No physical connection shall be made or allowed to exist between any recycled water piping and any piping conveying potable water, except as allowed under Section 7604 of Title 17, California Code of Regulations.
- 3. The portions of the recycled water piping system that are in areas subject to access by the general public shall not include any hose bibbs. Only quick couplers that differ from those used on the potable water system shall be used on the portions of the recycled water piping system in areas subject to public access.

- 4. Recycled water use shall not result in earth movement in geologically unstable areas.
- 5. No impoundment or recycled water holding ponds of disinfected recycled water shall occur within 100 feet of any domestic water wells, potable water reservoirs, and streams used as sources of water supply.
- 6. Whenever a cooling system, using recycled water in conjunction with an air conditioning facility, utilizes a cooling tower or otherwise creates a mist that could come into contact with employees or members of the public, the cooling system shall comply with the following:
 - A. A drift eliminator shall be used whenever the cooling system is in operation.
 - B. A chlorine, or other, biocide shall be used to treat the cooling system recirculating water to minimize the growth of *Legionella* and other microorganisms.
- 7. No irrigation areas with recycled water shall be located within 50 feet of any domestic water supply well unless all of the following conditions have been met:
 - A. A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface;
 - B. The well contains an annular seal that extends from the surface into the aquitard;
 - C. The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities:
 - D. The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well; and,
 - E. The owner of the well approves of the elimination of the buffer zone requirement.
- 8. No irrigation shall take place within 50 feet of any reservoir or stream used as a source of domestic water.
- 9. Use of recycled water shall comply with the following:
 - A. Recycled water shall be applied at such a rate and volume as not to exceed vegetative demand and soil moisture conditions. Special precautions must be taken to: prevent clogging of spray nozzles, prevent over-watering, and minimize the production of run-off. Pipelines shall be maintained so as to prevent leakage;
 - B. Any irrigation runoff shall be confined to the recycled water use area and shall not be allowed to escape as surface flow, unless the runoff does not pose a public health threat and is authorized under a National Pollutant Discharge Elimination

- System (NPDES) permit issued by this Regional Board. For the purpose of this requirement, however, minor amounts of irrigation return water from peripheral areas shall not be considered a violation of this Order;
- C. Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities, and shall not contact any drinking water fountain and public present. Drinking water fountains must be equipped with hoods or covers;
- D. Recycled water shall not be used for irrigation during periods of rainfall and/or runoff.
- E. Recycled water used for irrigation shall not be allowed to run off into recreational lakes unless it meets the criteria for such lakes.
- F. Recycled water use should be limited to times when public is not present.
- 10. All above ground irrigation appurtenances need to be marked appropriately.
- 11. The area using recycled water shall be inspected annually by the City.
- 12. Supervisors must be appointed for the recycled water use areas and their staff must be trained on the hazards of working with recycled water and periodically retrained.
- 13. The City will develop the User Agreements and Ordinances with the potential agricultural, industrial, and recreational users of recycled water. Copies of the User Agreements and Ordinances shall be provided to the Regional Board and the CDPH for review and approval.
- 14. If the recycled water system lateral pipelines are located along the property lines of homeowners, there may be a potential for cross connections. A buffer zone between the recycled water lines and the property owners is necessary. However, if the City cannot maintain adequate control of the recycled water system pipelines, the pipelines will need to be relocated or a physical barrier needs to be installed to prevent this type of potential problem. The homeowners need to be educated on the use of recycled water in the area. The City shall specify a plan to interface with the homeowners as a part of the Rules of Service Agreement in an adjacent property awareness program. The City shall submit this plan to the Regional Board and the CDPH by March 31, 2009 for review and approval.

V. REQUIREMENTS FOR DUAL PLUMBED SYSTEM

1. The public water supply shall not be used as a backup or supplemental source of water for a dual-plumbed recycled water system unless the connection between the two systems is protected by an air gap separation that complies with the requirements of Sections 7602 (a) and 7603 (a) of Title 17, California Code of Regulations.

Air gaps shall be at least twice the pipe diameter and be located above ground.

- 2. The City shall not deliver recycled water for any internal use to any individually-owned residential units, including free-standing structures and multiplexes, with the exception of condominium projects pursuant to Section 13553 of the California Water Code as enacted on October 12, 2007.
- 3. The City shall not deliver recycled water for internal use, except for fire suppression system, to any facility that produces or processes food products or beverages.
- 4. The City shall not deliver recycled water to a facility using a dual plumbed system unless the report required under Section 13522.5 of the Water Code, which meets the requirements set forth in section IV.8 and/or IV.9., has been submitted to, and approved by, the Regional Board and CDPH.
- 5. The City that shall submit a report to CDPH pursuant to Section 13522.5 of the Water Code and Section 60414 of the Health and Safety Code, which shall contain the following information for dual plumbed systems, in addition to the information required by Section 60323 of Title 22 of the California Code of Regulations:
 - A. A detailed description of the intended use site identifying the following:
 - a. The number, location, and type of facilities within the use area proposing to use dual plumbed systems;
 - b. The average number of persons estimated to be served by each facility on a daily basis;
 - c. The specific boundaries of the proposed use site including a map showing the location of each facility to be served;
 - d. The person or persons responsible for operation of the dual plumbed system at each facility; and
 - e. The specific use to be made of the recycled water at each facility.
 - B. Plans and specifications describing the following:
 - a. Proposed piping system to be used;
 - b. Pipe locations of both recycled and potable systems;
 - c. Type and location of the outlets and plumbing fixtures that will be accessible to the public; and
 - d. The methods and devices to be used to prevent backflow of recycled water into the public water system.
 - C. The methods to be used by the City to assure that the installation and operation of the dual plumbed system will not result in cross connections between the recycled water piping system and the potable water piping system. These shall

include a description of pressure, dye or other test methods to be used to test the system every four years.

- 6. Prior to the initial operation of the dual-plumbed recycled water system and annually thereafter, the dual plumbed system within each facility and use site shall be inspected for possible cross connections with the potable water system. The recycled water system shall also be tested for possible cross connections at least once every four years. The testing shall be conducted in accordance with the method described in section III.5.c. above. The inspections and the testing shall be performed by a cross connection control specialist certified by the California-Nevada section of the American Water Works Association or an organization with equivalent certification requirements. A written report documenting the result of the inspection and testing for the prior year shall be submitted to the CDPH within 30 days following completion of the inspection or testing.
- 7. Any backflow prevention device installed to protect the public water system serving the dual-plumbed recycled water system shall be inspected and maintained in accordance with Section 7605 of Title 17, California Code of Regulations.

VI. GENERAL REQUIREMENTS

- 1. Bypass, discharge, or delivery to the use area of inadequately treated wastewater, at any time, is prohibited.
- 2. The recycling facility shall be adequately protected from inundation and damage by storm flows and run-off.
- 3. Adequate freeboard and/or protection shall be maintained in the recycled water storage tanks, process tanks, and impoundments to ensure that direct rainfall will not cause overtopping.
- 4. The wastewater treatment and use of recycled water shall not cause pollution or nuisance.
- 5. The wastewater treatment and use of recycled water shall not result in problems caused by breeding of mosquitoes, gnats, midges, or other pests.
- 6. The use of recycled water shall not impart tastes, odors, color, foaming, or other objectionable characteristics to the receiving groundwater.
- 7. The use of recycled water, which could affect the receiving ground water, shall not contain any substance in concentration toxic to human, animal, or plant life.
- 8. Odors of sewage origin shall not be perceivable beyond the limits of the property owned or controlled by the City and/or recycled water user.

VII. PROVISIONS

- 1. This Order includes the attached "Standard Provisions Applicable to Waste Discharge Requirements". If there is any conflict between provisions stated hereinbefore and said "Standard Provisions", those provisions stated hereinbefore prevail.
- 2. This Order includes the attached Monitoring and Reporting Program. If there is any conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the Monitoring and Reporting Program prevail.
- 3. A copy of these requirements shall be maintained at the water recycling facility so as to be available at all times to operating personnel.
- 4. The City shall furnish each purveyor and user of recycled water a copy of these requirements and ensure that the requirements are maintained at the purveyor and user's facilities so as to be available at all times to operating personnel.
- 5. The City shall be responsible to ensure that all users of recycled water comply with the specifications and requirements for such use.
- 6. The City shall, at all times, properly operate and maintain all treatment facilities and control systems (and related appurtenances) that are installed or used by the City to achieve compliance with the 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).
- 7. The City shall submit to the Regional Board and CDPH, for approval of the Executive Officer, within 90 days of adoption of this Order an operating and maintenance management plan, including a preventive (fail-safe) procedure and contingency plan for controlling accidental discharge and/or delivery to users of inadequately treated wastewater.
- 8. For any violation of requirements in this Order, the City shall notify CDPH and the Regional Board within 24 hours of knowledge of the violation either by telephone or electronic mail. This notification shall be followed by a written report within 5 working days of notification, unless otherwise specified in this Order. The report shall include, but not limited to, the following information, as appropriate:
 - A. Nature and extent of the violation;
 - B. Date and time: when the violation started, when compliance was achieved; and, when delivery was suspended and restored, as applicable.
 - C. Duration of violation;
 - D. Cause/s of violation;

- E. Corrective and/or remedial actions taken and/or will be taken with time schedule for implementation; and
- F. Impact of the violation.
- 9. Supervisors and operators of the wastewater recycling facility shall possess a certificate of appropriate grade as specified in Title 23, California Code of Regulations, Section 3680 or subsequent revisions.
- 10. In accordance with Section 13522.5 of the California Water Code, and Title 22, Division 4, Chapter 3, Article 7, Section 60323 of the California Code of Regulations, the City shall file an engineering report, prepared by a properly qualified engineer registered in California, of any material change or proposed change in character, location or volume of the recycled water or its uses to the Regional Board and to the CDPH.
- 11. For any extension or expansion of the recycled water system or use areas, the City shall submit a report detailing the extension or expansion plan for approval of the CDPH. Following construction, as-built drawings shall be submitted to the CDPH for approval prior to delivery of recycled water. The Executive Officer shall be furnished with as-built drawings and a copy of the CDPH approval.
- 12. The City shall notify the Executive Officer, in writing, at least 30 days in advance of any proposed transfer of ownership and/or operation of the recycling facility and responsibility for complying with this Order. The notice shall include a written agreement between the existing and new recycled water producer indicating the specific date for the transfer of responsibility for compliance with this Order. The agreement shall include an acknowledgement that the City is liable for any violations that occurred up to the transfer date and the new recycled water producer is liable from the transfer date on.
- 13. The City 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 City'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.
- 14. The City must comply with all conditions of these water recycling requirements. 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 requirements.

- 15. These requirements do not exempt the City from compliance with any other laws, regulations, or ordinances that may be applicable; they do not legalize the recycling and use facilities; and they leave unaffected any further constraint on the use of recycled water at certain site/s that may be contained in other statutes or required by other agencies.
- 16. This Order does not alleviate the responsibility of the City to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency. Expansion of the recycling facility shall be contingent upon issuance of all necessary requirements and permits, including a conditional use permit.
- 17. The provisions of these water recycling requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.
- 18. In an enforcement action, it shall not be a defense by the City 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 City 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.
- 19. After notice and opportunity for a hearing, this Order may be modified, revoked and reissued, or terminated for cause, which include but is not limited to: failure to comply with any condition of in this Order; endangerment of human health or environment resulting from the permitted activities in this Order; obtaining this Order by misrepresentation or failure to disclose all relevant facts; acquisition of new information that could have justified the application of different conditions if known at the time of Order adoption.

The filing of a request by the City for modification, revocation and reissuance, or termination of the Order; or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

20. The City shall furnish, within a reasonable time, any information the Regional Board or the CDPH may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The City shall also furnish the Regional Board, upon request, with copies of records required to be kept under this Order.

VIII. EFFECTIVE DATE OF ORDER

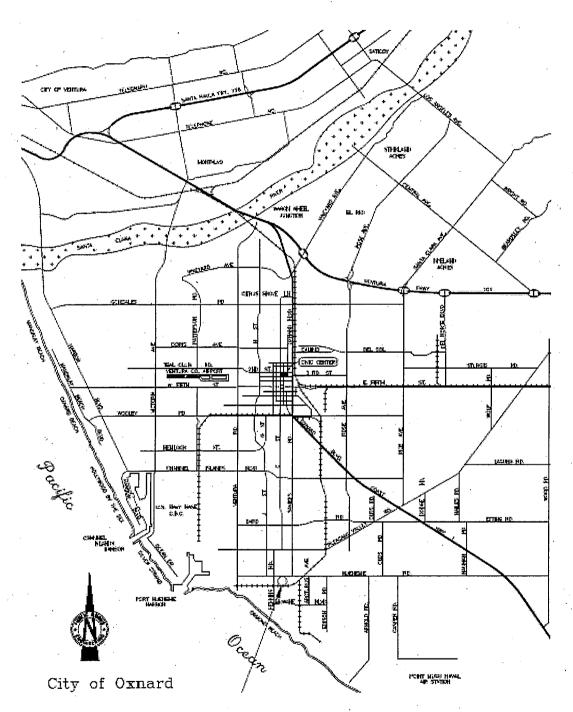
This Order takes effect upon adoption.

I, Tracy J. Egoscue, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on October 2, 2008.

Tracy J. Egoscue Executive Officer

/DTSAI

FIGURE 1 - VICINITY MAP



OXNARD WASTEWATER TREATMENT PLANT AND ADVANCED WASTEWATER PURIFICATION FACILITY

FIGURE 2 - FLOW SCHEMATIC AT OXNARD WASTEWATER TREATMENT PLANT

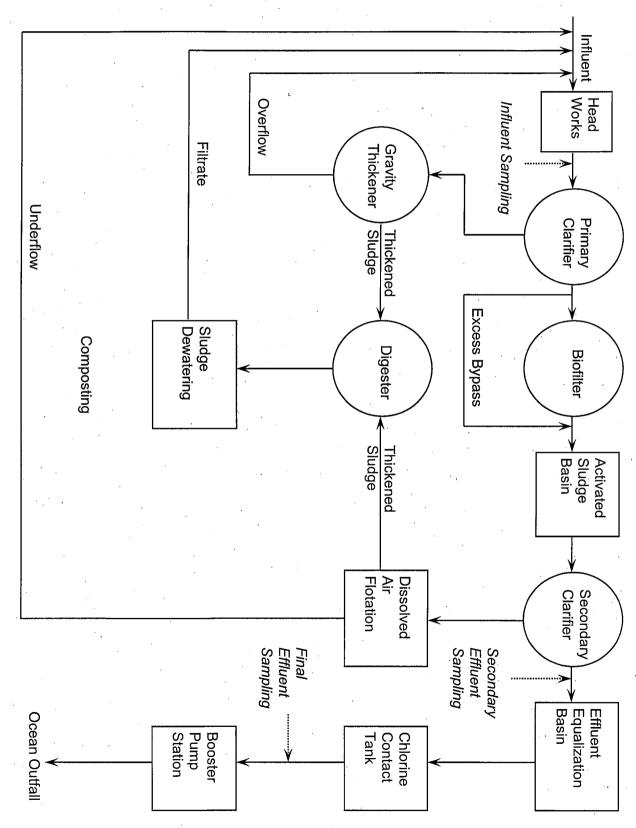


FIGURE 3 - ADVANCED WASTEWATER PURIFICATION PROCESS

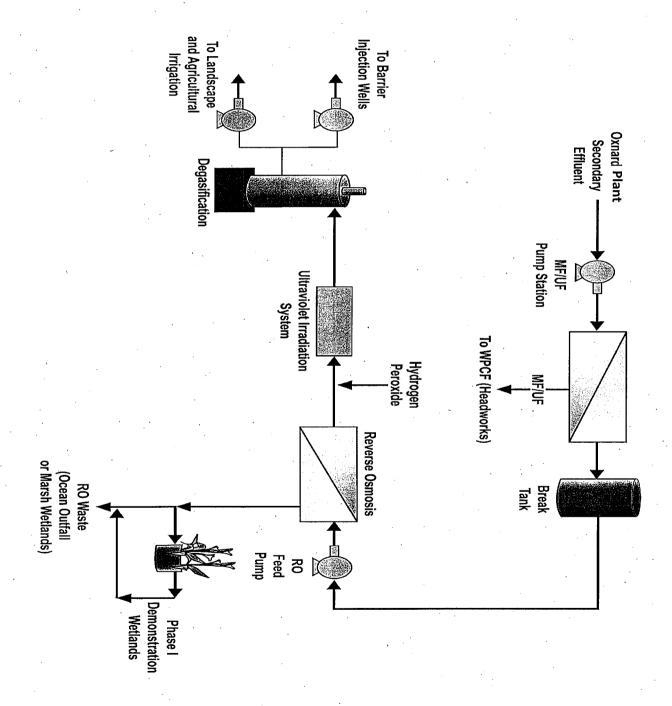


FIGURE 4 – EXISTING WATER FACILITIES IN OXNARD PLAIN

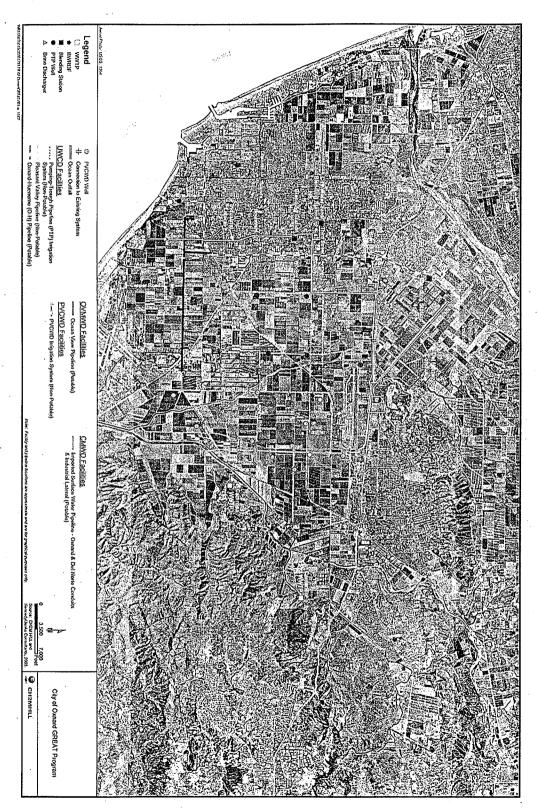


FIGURE 5 - PHASE 1 RECYCLED WATER TRANSMISSION

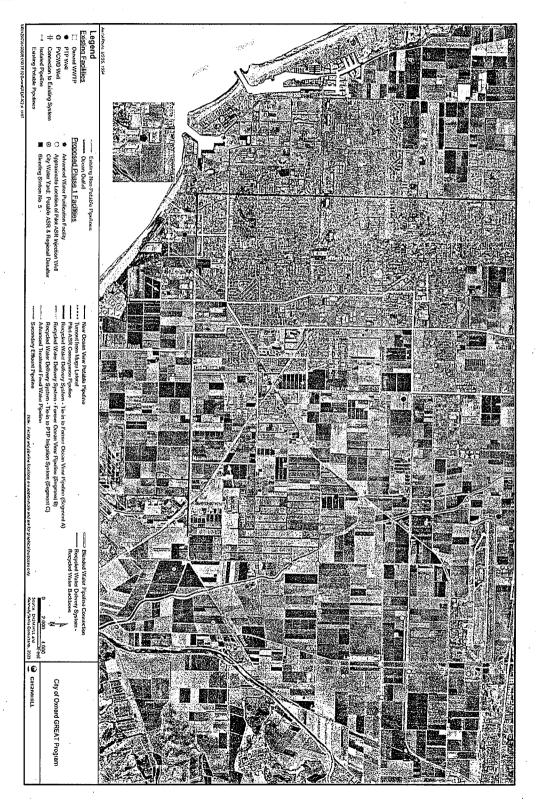


FIGURE 6 - PHASE 2 RECYCLED WATER TRANSMISSION

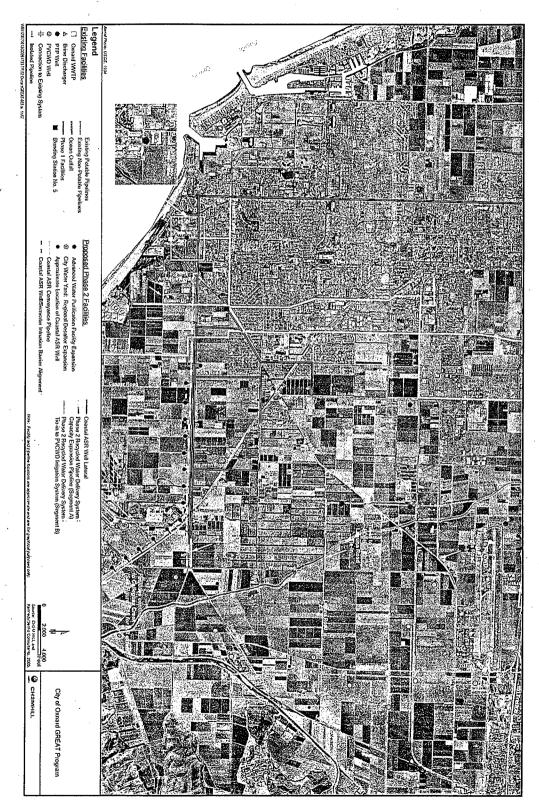


FIGURE 7 - RECYCLED WATER DISTRIBUTION AREA

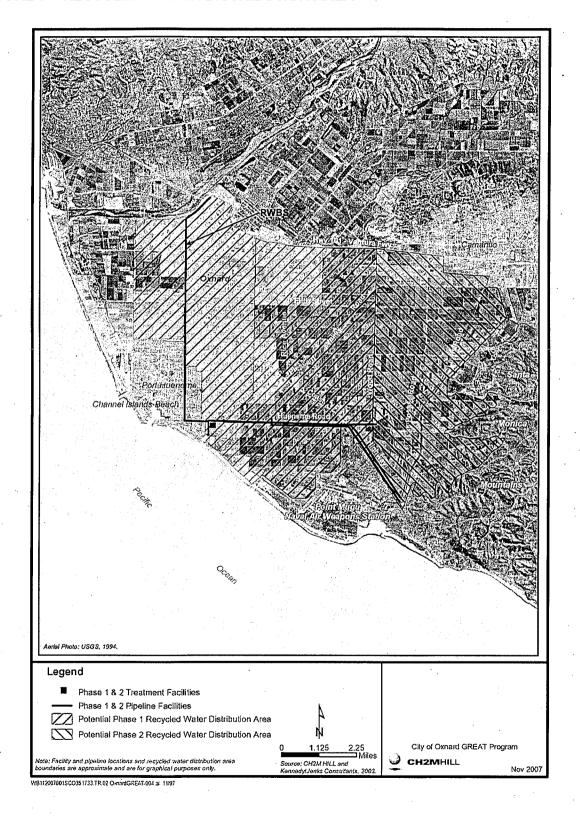


FIGURE 8 – EXHIBITION OF "RECYCLED WATER – DO NOT DRINK"



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

ORDER NO. R4-2008-0083

MONITORING AND REPORTING PROGRAM NO. <u>9456</u> 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.

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 California Department of Public Health, Drinking Water Field Operations, Santa Barbara District Office (CDPH). The reports shall be received at the Regional Board and the CDPH 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 CDPH 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 CDPH by March 1 of each year. The first Annual Summary Report under this program shall cover the monitoring periods from January 2012 to December 2012.
- 2. All monitoring and annual summary reports must be addressed to the Regional Board, <u>Attention: Information Technology Unit</u>. Reference the reports to Compliance File No. CI-9456 to facilitate routing to the appropriate staff and file.
- 3. 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.

4. 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:

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, 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 x for unregulated and regulated chemicals, respectively.
 - D. Quality assurance and control measures.

¹ ELAP is a part of the CDPH.

- 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 (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.
- 5. 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 May14, 1999, or subsequent revision);
 - B. When the method under 40 CFR 136 for the pollutant has a 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.
- 6. 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.
- 7. 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 CDPH 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.
 - 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 AWPF-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 AWPF-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 AWPF-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.

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	
BOD₅20°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.

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

Table M3 – AWPF-Treated Effluent Monitoring			
Constituent	Units	Type of Sample ²	Minimum Frequency of Analysis
Effluent flow	MGD		Continuous
Turbidity ³	NTU		continuous
Total coliform	MPN/100ml	grab	Daily
рН	pH units	Grab	Daily
Settleable solids	mL/L	Grab	Daily
Suspended solids	mg/L	24-hr comp.	Weekly
BOD520°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

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.

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

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

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.

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.

Table M3 – AWPF-Treated Effluent Monitoring			
Constituent	Units	Type of Sample ²	Minimum Frequency of Analysis
Remaining priority pollutants ⁷	μg/L	24-hr comp./Grab	Quarterly
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]

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.

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.

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.

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.

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

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.

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.

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.

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.

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;
 - 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 CDPH 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:

Tracy J. Egoscue Executive Officer

Date: October 2, 2008

/DTSAI

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 $10\mu m$ in length.

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.

Table 64444-A – Organic Chemic	als*	
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.

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

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.

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-Nitrosodiethyamine (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.

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.

- (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) Signification and 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]

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 effect informance, 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]

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 precises 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]

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 that 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 adescription 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

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:

"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 significant

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

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]