

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. R4-2009-XXXX

WASTE DISCHARGE REQUIREMENTS
FOR
VENTURA COUNTY WATERWORKS DISTRICT NO. 16
(PIRU WASTEWATER TREATMENT FACILITY)
(File No. 08-164)

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

BACKGROUND

1. Domestic and some commercial wastewater from fruit washing produced from the community of Piru is treated at a wastewater treatment plant commonly known as Piru Wastewater Treatment Plant (PWTP). The PWTP is owned by Ventura County Waterworks District No. 16 (hereafter Discharger) and operated by the Ventura Regional Sanitation District (VRSD) under contract with Discharger. The final effluent is discharged to the groundwater through two percolation ponds under a Waste Discharge Requirements (WDRs) Order No. R4-2004-0032, adopted by the Regional Board on January 29, 2004. The PWTP is located at 2815 East Telegraph Road, in an unincorporated area of Ventura County, California (Plate 1). The PWTP was originally constructed in 1974, and serves the community of Piru, which has a population of approximately 2,250.
2. The Discharger will construct and operate a new wastewater treatment plant (Plant) at the same location of the existing facility to serve the same Community of Piru. The final effluent will be discharged to the groundwater through the two existing percolation ponds. The Discharger anticipates that the new Plant be constructed, tested, and be in operation by February 28, 2010. The existing PWTP will be decommissioned after the new Plant is placed in operation.

PURPOSE OF ORDER

3. On September 18, 2008, the Discharger filed a Report of Waste Discharge (ROWD) and applied to the Regional Board for new WDRs for disposal of treated wastewater from a new Plant. The new Plant's capacity is expected to meet the demand for treatment and disposal of municipal wastewater from the forecasted 2,030 population of the community of Piru estimated to be 3,620.
4. Following a review of the ROWD, Plant design criteria, and inspections of the site, Regional Board staff have developed WDRs to reflect the future wastewater treatment process and to include additional findings, effluent limitations, prohibitions, provisions, and an expanded monitoring and reporting program.

December 22, 2008

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5. The WDRs are issued pursuant to Chapter 9, Division 3, Title 23, California Code of Regulations (CCR) and therefore eligible for a section 20090(a) exemption from CCR Title 27. The discharge authorized herein and the treatment and storage facilities associated with the discharge of treated municipal wastewater, except for discharges of residual sludge and solid waste, are exempt from the requirements of Title 27, CCR, section 20005 et seq. (hereafter Title 27). The exemption, pursuant to section 20090(a) of Title 27, is based on the following factors: that the waste consists primarily of domestic sewage and treated effluent; that the waste discharge requirements are consistent with water quality objectives; and that the treatment and storage facilities described herein are associated with a municipal wastewater treatment facility.

FACILITY AND TREATMENT PROCESS DESCRIPTION

6. Municipal wastewater produced from the community of Piru has been collected and treated at the existing PWWTP since 1974. The existing PWWTP is a secondary wastewater treatment plant and currently has a design capacity of 260,000 gallons per day (gpd). The new Plant will use the oxidation ditch process for secondary treatment and will have a treatment capacity of an average daily dry weather flow of 500,000 gpd and the peak day wet hydraulic design capacity of 1.75 million gallons per day (mgd). The new Plant will mainly consist of the following facilities (See Plate 2):

- Influent pump station,
- Influent flow measurement,
- Mechanical screen,
- Splitter boxes,
- Oxidation ditch secondary treatment,
- Secondary clarifiers,
- Aerobic digesters,
- Sludge drying area,
- Effluent flow equalization basin,
- Effluent pump station, and
- Control and operations building.

Treated effluent from the new Plant will be discharged into the two existing percolation ponds located approximately 4,000 feet southwest from the Plant. These ponds are approximately 500 feet away from the Santa Clara River (Plate 3).

7. Waste sludge will be treated onsite by aerobic digesters, and then moved to the geotubes sludge drying system. Dried sludge will be hauled offsite and disposed at a legal disposal facility on a periodic basis.
8. The Plant and percolation ponds are located in Section 35, Township 4N, Range 19W, San Bernardino Base & Meridian (Latitude is 34° 23' 30", Longitude is 118° 50' 00").
9. Two groundwater monitoring wells, MW-1 and MW-2, are located at the northeast and southwest corners, respectively, of the percolation ponds (Plate 3). According to

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groundwater monitoring of the wells from March 21, 2002 to September 16, 2008, the groundwater depth at the disposal site ranges from a depth of 10.60 to 49.55 feet below ground surface. The bottoms of the two ponds were constructed several feet below natural grade. Therefore, the vertical separation from the bottom of the ponds to historical groundwater elevations is lower than the groundwater depth range measured at the two groundwater monitoring wells. The ponds have berms of several feet high from natural grade. Seasonal fluctuations of groundwater levels beneath the site may occur from varying amounts of rainfall. The new Plant site and associated project components are located in the Santa Clara River Valley, directly north of the confluence of the Santa Clara River and west of Piru Creek.

10. There are no drinking water supply wells within one mile of the property. Potable water is provided by Warring Water Company. The potable water quality data from 2002 to 2007 indicated that total dissolved solids (TDS) ranges from 815 to 1,090 milligrams per liter (mg/L), sulfate from 327 to 485 mg/L, chloride from 38 to 64.7 mg/L, nitrate from 2.8 to 12.2 mg/L, and boron from 0.40 to 0.70 mg/L.
11. Effluent monitoring data from the existing PWWTP from January 2002 to March 2008 indicated that TDS ranges from 740 to 1,200 milligrams per liter (mg/L), sulfate from 100 to 480 mg/L, chloride from 46 to 160 mg/L, total nitrogen from 9.1 to 43.0 mg/L, and boron from 0.38 to 1.10 mg/L.
12. The Discharger is planning to upgrade the new Plant to produce recycled wastewater for future landscape irrigation and agricultural use on tree crops. While the new Plant will not include all of the elements needed to produce recycled wastewater that will comply with Title 22, California Code of Regulation (CCR). Separate phases of construction are planned for future upgrade/expansion to the new Plant to produce recycled wastewater. This WDR will be revised to include Title 22 CCR requirements when the upgrade/expansion is completed.
13. The new Plant will provide nitrification and de-nitrification for collected wastewater prior to discharge to the percolation ponds. The new Plant will produce an effluent better than that currently produced by the existing secondary treatment processes as required by the United States Environmental Protection Agency (USEPA) for Publicly Owned Treatment Works (POTWs) treating municipal wastewater. The Discharger indicated that the new Plant will be designed to produce the following anticipated effluent water quality:

<u>Constituent</u>	<u>Units*</u>	<u>Concentration</u>
Average biochemical oxygen demand (BOD ₅)	mg/L	20
Average total suspended solids (TSS)	mg/L	20
Average oil and grease	mg/L	15
Total nitrogen -N	mg/L	8
Daily maximum total dissolved solids	mg/L	1,200
Daily maximum sulfate	mg/L	600
Daily maximum chloride	mg/L	100

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Daily maximum Boron mg/L 1.5
 mg/L: milligrams per liter

However, the anticipated effluent characteristics indicate that chloride levels in treated effluent could exceed the groundwater quality objective of 100 mg/L.

14. The Discharger is conducting a groundwater-monitoring program for the existing PWTP according to the WDR Order No. R4-2004-0032. Two groundwater monitoring wells (MW-1 and MW-2) were constructed at the northeast and southwest corners of the percolation ponds in 2,000. Groundwater quality from MW-1 and MW-2 wells from third quarter 2000 to second quarter 2008 are shown in the table below:

Constituents	Units	Range of Concentrations at groundwater wells (MW-1 and MW-2)		Groundwater Quality Objectives (Basin Plan)
		For MW-1	For MW-2	
Nitrate-N	mg/L	0.35 - 46.8	0.46 - 10.6	10 (including Nitrite-N)
Boron	mg/L	0.23 - 1.3	0.33 - 0.76	1.5
TDS	mg/L	836 - 1,536	758 - 1,412	1,200
Chloride	mg/L	20.8 - 204	32 - 144	100
Sulfate	mg/L	358 - 620	300 - 630	600

Based on the above data, constituents including chloride, nitrate, sulfate, and TDS have exceeded water quality objective for groundwater on several occasions. Board staff considers that such exceedance could be attributed to historic waste discharge into the percolation ponds.

APPLICABLE LAWS, PLANS, POLICIES AND REGULATIONS

15. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). Subsequently, amendments to the Basin Plan have been adopted by the Regional Board in 1997 (Resolution No. 97-02); 1998 (Resolution No. 1998-018); 1999 (Resolution No. 1999-013); 2000 (Resolution No. 2000-010); 2001 (Resolution Nos. 2001-013, 2001-014, 2001-018); 2002 (Resolution Nos. 2002-004, 2002-011, 2002-017, 2002-022); and 2003 (Resolution Nos. 2003-001, 2003-009, 2003-010, 2003-011, 2003-012, 2003-015). The Basin Plan (i) designates beneficial uses for surface waters and groundwater, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State antidegradation policy, and (iii) describes implementation programs to achieve and maintain water quality standards contained in the Basin Plan in order to protect all waters in the Region. In addition, the Basin Plan incorporates by reference applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. This Order implements the plans, policies and provisions of the Regional Board's Basin Plan.

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16. State Water Resources Control Board (State Board) Resolution No. 68-16 (hereafter Resolution 68-16 or the "Antidegradation" Policy) requires the Regional Board in regulating the discharge of waste to maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Board's policies (e.g., quality that exceeds water quality objectives).
17. The Regional Board staff has not determined any degradation of groundwater beneath the PWTP and Use Area at this time. There are only two groundwater monitoring wells at the Facility and according to the self monitoring reports, groundwater samples from MW-1 have exceeded the TDS and chloride Basin Plan water quality objectives on several occasions whereas, samples from MW-2 indicate improvement in groundwater quality. Therefore, there is insufficient data to determine whether the operational activities at the PWTP has caused or will continue to cause any degradation of groundwater quality. An enhanced groundwater monitoring program that includes additional monitoring wells is required to insure that effluent discharges do not exceed Basin Plan objective for the protection of groundwater quality.
18. This Order establishes effluent limitations that will not threaten present and anticipated beneficial uses or result in receiving groundwater quality that exceeds water quality objectives set forth in the Basin Plan. This means that where the stringency of the limitations for the same waste constituent differs according to beneficial use, the most stringent applies as the governing limitation for that waste constituent. This Order contains tasks for assuring that best practicable treatment and control and the highest water quality consistent with the maximum benefit to the people of the State will be achieved. Accordingly, the discharge is consistent with the antidegradation provisions of Resolution 68-16. Based on the results of the scheduled tasks, the Regional Board may reopen this Order to reconsider groundwater limitations and other requirements to comply with Resolution 68-16.
19. The Plant is located west of Piru Creek in the Piru Creek Hydrologic area and overlies the Ventura Central Groundwater Basin. The water quality objectives for this hydrological unit are 1,200 mg/L for TDS, 600 mg/L for sulfate, 100 mg/L for chloride, and 1.5 mg/L for boron. The Basin Plan designates beneficial uses for this Piru Creek Hydrologic Area and Ventura Central Groundwater Basin water body as following:

Groundwater (Lower Area West of Piru Creek):

Existing: Municipal and Domestic Supply, Industrial Service Supply, Industrial Process Supply, and Agricultural Supply.

20. The Discharger expects to achieve compliance with all the effluent limitations listed in this Order and will not discharge any wastewater to surface water from the new Plant when the new Plant becomes operational.

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21. The Regional Board adopted a total maximum daily load (TMDL) to address chloride impairments of the Upper Santa Clara River (USCR) on May 6, 2004 (Resolution 04-004). The TMDL was approved by the State Water Resources Control Board (State Board), Office of Administrative Law (OAL) and United States Environmental Protection Agency (USEPA), and became effective on May 4, 2005. The TMDL applies to reaches 5 and 6 of the Santa Clara River, upstream of the Plant and requires the Santa Clarita Valley Sanitation Districts of Los Angeles County (Districts) to implement special studies and actions to reduce chloride loadings from their Saugus and Valencia Water Reclamation Plants (WRPs). Currently, TMDL studies are completed, including a groundwater and surface water interaction (GWSI) model study to provide information for the Regional Board to consider if a Site Specific Objective (SSO) for chloride and/or groundwater objective revisions is appropriate. The TMDL studies include reach 4A and 4B of the Santa Clara River. Based on these studies, the Regional Board adopted conditional site specific objectives for chloride in reaches 4B, 5, and 6 and underlying groundwater basins, and adopted interim Waste load Allocations for sulfate and TDS for Saugus and Valencia WRPs on December 11, 2008 Regional Board meeting. The effluent discharge limitation contained in these WDRs may be revised to implement site specific objectives for chloride.
22. Section 13523 of the California Water Code (CWC) provides that a Regional Board, after consulting with, and receiving the recommendations of the State Department of Public Health (SDPH), and after any necessary hearing, shall, if it determines such action to be necessary to protect the public health, safety, or welfare, prescribe water reclamation requirements for water which is used, or proposed to be used, as reclaimed water. With respect to the future use of the treated wastewater, the Discharger will be required to comply with SDPH requirements for CCR Title 22 Recycling Water Criteria.
23. The new Plant will provide secondary treatment for wastewater prior to discharge to the percolation ponds. Section 301(b)(1)(B) of the Federal Clean Water Act requires publicly owned treatment works (POTWs) to meet effluent limitations based upon secondary treatment. These effluent limits are established in the Code of Federal Regulations, 40 CFR 125.3, which also requires secondary treatment as a technology-based standard for POTWs. The minimum effluent levels for treatment for POTWs as established in Part 133.102 of 40 CFR are:

<u>Constituent</u>	<u>Units*</u>	<u>Monthly Average</u>	<u>7-Day Average</u>
BOD ₅	mg/L	30	45
Total suspended solids (TSS)	mg/L	30	45

* mg/L: milligrams per liter.

This Order requires the Discharger to meet the effluent limitations at the end of pipe prior to the discharge of any wastewater to the percolation ponds. The existing PWTP can not produce an effluent similar in quality to that produced by secondary treatment processes as required by the USEPA for POTWs.

24. The Discharger has reported the analytical results of the domestic water supplied to the Piru area. Regional Board staff found that the levels of minerals in the supplied water would not be expected to cause violations for the current water quality objectives for the receiving groundwater quality. Consequently, Regional Board staff have eliminated the groundwater compliance point for the limits and are now requiring the Discharger to meet Basin Plan limits and the water quality objectives for minerals prior to disposal of treated wastewater to the percolation ponds. This Order also prohibits the discharge of water softener regeneration brines from new connections or industrial wastewater subject to the Prohibited Discharge Standard listed in 40 CFR 403.5.

CEQA and NOTIFICATION

25. In accordance with the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq.), the Discharger prepared and circulated a Mitigated Negative Declaration (MND) for public comments. The Ventura County certified the MND document on September 21, 2004.
26. The Regional Board has notified the Discharger and interested agencies and persons of the intent to issue WDRs for this discharge, and has provided them with an opportunity to submit their written views and recommendations for the requirements.
27. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED that the Discharger, Ventura County Waterworks District No. 16, shall be responsible for and shall comply with the following requirements in all operations and activities at the new Piru wastewater treatment plant:

A. INFLUENT LIMITATIONS

1. Waste received by the wastewater treatment plant ("influent") shall be limited to domestic and some commercial wastewater from fruit washing. The Discharger shall not allow new wastewater softener regeneration brines to be discharged to the wastewater treatment plant. Industrial wastewater subject to the Prohibited Discharge Standards listed in 40 CFR 403.5 shall not be accepted by wastewater treatment plant.
2. The influent shall not exceed a daily average flow of 0.5 mgd. The flow limitations also apply to effluent discharged to the percolation ponds.

B. EFFLUENT LIMITATIONS

1. Effluent (wastewater discharged from the wastewater treatment plant or treated wastewater to be discharged through the disposal system) shall not contain heavy metals, or cyanide, or other pollutants designated Priority Pollutants by the USEPA

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in concentrations exceeding the limits contained in the SDPH Drinking Water Standards.

2. Radioactivity shall not exceed the limits specified in the CCR title 22, chapter 15, section 64441 (Attachment A-2) et seq., or subsequent revisions.
3. Effluent shall not contain organic chemicals, inorganic chemicals (i.e., heavy metals, or cyanide) in concentrations exceeding the limits contained in the current California Drinking Water Standards, CCR title 22, sections 64431 (Attachment A-1) and 64444 (Attachment A-3) or subsequent revisions.
4. The pH in the effluent shall at all times be from 6.5 to 8.5 pH units.
5. Effluent discharged from the new Plant shall not contain constituents in excess of the following limits:

<u>Effluent Limitations Constituent</u>	<u>Units¹</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
BOD ₅	mg/L	30	45
Suspended solids	mg/L	30	45
Ammonia plus Nitrate plus Nitrite plus Organic Nitrogen as nitrogen	mg/L	--	10
Nitrite-Nitrogen	mg/L	--	1.0
Oil and grease	mg/L	--	15
Total Dissolved Solids (TDS)	mg/L	--	1,200
Sulfate	mg/L	--	600
Chloride	mg/L	--	100
Boron	mg/L	--	1.5

¹ mg/L: milligrams per liter

6. Effluent discharges to the percolation/evaporation ponds that have a minimum vertical separation of five-feet between the bottom of the percolation ponds and water table (saturated zone) shall not exceed a most probable number (MPN) of 23 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria shall not exceed an MPN of 240 per 100 milliliters in more than one sample in any 30 days period.

C. GROUNDWATER LIMITATIONS

1. The Discharger shall periodically dry out the percolation ponds in order to maintain vertical separation between the bottom of the percolation ponds and the water table (saturated zone). For treated wastewater that meets effluent

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limitations listed in section B.5, this vertical separation shall be at least 10 feet. For treated wastewater that meets effluent limitations listed in section B.6, the Discharger may reduce the vertical separation to five feet. Within 180 days prior to initial discharge, the Discharger shall submit, for Executive Officer approval, a proposed strategy for periodically drying out the ponds to maintain the vertical separation specified above, and for measuring compliance with this groundwater vertical separation limitations.

2. The concentration of total coliform in receiving groundwater shall not exceed 1.1 most probable number (MPN) per 100 milliliters.
3. Concentrations of contaminants in receiving water shall, at all times, not exceed the following Maximum Contaminant Levels (MCLs) limits specified in the following provisions of Title 22 of the California Code of Regulations. These limits are prospective; new state and federal MCLs will be added as they are adopted. In case of a violation of any MCL, the Discharger shall notify the Regional Board and submit a report according to Provision F.18 of this Order.

Primary MCLs specified in the Drinking Water Quality and Monitoring Requirements, Chapter 15, Title 22, California Code of Regulations (CCR):

- a. Inorganic chemicals in Section 64431, Table 64431-A, except for nitrogen compounds, Attachment A-1 of this Order;
 - b. Radionuclides in Section 64443, Table 4, Attachment A-2 of this Order;
 - c. Organic Chemicals in Section 64444, Tables 64444-A, Attachment A-3 of this Order.
4. The discharged treated wastewater from the wastewater treatment plant shall not cause the receiving water (groundwater) to exceed the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Maximum</u>
Total Dissolved Solids (TDS)	mg/L	1,200
Sulfate	mg/L	600
Chloride	mg/L	100
Boron	mg/L	1.5
Ammonia plus Nitrate plus Nitrite plus Organic		
Nitrogen as nitrogen	mg/L	10
Nitrite-N	mg/L	1

D. GENERAL REQUIREMENTS

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1. Standby or emergency power facilities and/or sufficient capacity shall be provided for treated wastewater storage during rainfall or in the event of plant upsets or outages, and at times when irrigation cannot be practiced.
2. Adequate facilities shall be provided to protect the new Plant, treatment system devices, sewer collection system and recycling/disposal facilities from damage by storm flows and runoff or runoff generated by a 100-year storm.
3. The treatment system, including the collection system that is a part of the treatment system and the disposal system, shall be maintained in such a manner that prevents sewage from surfacing or overflowing at any location.
4. A minimum of two feet of freeboard shall be maintained in the percolation ponds to ensure that direct rainfall will not cause overtopping.

E. PROHIBITIONS

1. There shall be no waste overflows or discharge of partially-treated wastes from the new Plant's treatment, storage or disposal facilities to adjacent drainage ways, adjacent properties or waters of the State at any time.
2. Wastes discharged shall not impart adverse tastes, odors, color, foaming or other objectionable characteristics to the receiving groundwater.
3. There shall be no onsite permanent disposal of sludge. Sludge-drying activities are allowed, but only as an intermediate treatment prior to off-site disposal. Any offsite disposal of sewage or sludge shall be made only to a legal point of disposal. For purposes of this Order, a legal disposal site is one for which requirements have been established by a regional water quality control board or comparable regulatory entity, and which is in full compliance therewith. Any sewage or sludge handling shall be in such a manner as to prevent its reaching surface waters or watercourses.
4. No part of the disposal system shall be closer than 100 feet to any water well.
5. Sewage odors from the wastewater treatment plant shall not be detectable at property line.
6. Wastes discharged from the wastewater treatment plant shall at no time contain any substances in concentrations toxic to human, animal, or plant life.
7. The discharge of waste shall not create a condition of pollution, contamination, or nuisance.
8. Nutrient materials in the waste discharged to the percolation ponds shall not cause objectionable aquatic growth or degrade indigenous biota.

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9. The direct or indirect discharge of any wastewater to surface waters or surface water drainage courses is prohibited without a NPDES permit.
10. The percolation ponds shall not contain floating materials, including solids, foams or scum in concentrations that cause nuisance, adversely affect beneficial uses, or serve as a substrate for undesirable bacterial or algae growth or insect vectors.
11. The percolation ponds, drying beds and the berms surrounding the ponds shall not contain plants, shrubs, or bushes that may damage the berms and the ponds.
12. Bypass (the intentional diversion of waste stream from any portion of a treatment facility) is prohibited. The Regional Board may take enforcement action against the Discharger for bypass unless:
 - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that cause them to become inoperable, or substantial and permanent loss in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production);
 - (b) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that could occur during normal periods of equipment downtime or preventive maintenance; and
 - (c) The Discharger submitted a notice at least 48 hours in advance of the need for a bypass to the Regional Board.
 - (d) Any discharge of wastewater from the treatment system (including the wastewater collection system) at any point other than specifically described in this Order is prohibited and constitutes a violation of this Order.
13. No part of the treatment system and the percolation ponds shall extend to a depth below ground where wastes may deleteriously affect an aquifer that is usable for domestic purposes. At all times, a minimum of 10 feet of vertical separation between the disposal system and the highest historical groundwater elevation or the water table must be maintained.

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14. Wastes shall not be disposed of in geologically unstable areas or so as to cause earth movement.
15. Adequate facilities shall be provided to divert surface and storm water away from the treatment plant and disposal system and from areas where any potential pollutants are stored.
16. Wastes discharged shall at no time contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
17. Any discharge of wastewater from the treatment system (including the wastewater collection system) at any point other than specifically described in this Order is prohibited and constitutes a violation of this Order.

F. PROVISIONS

1. A copy of this Order shall be maintained at the Plant so as to be available at all times to operating personnel.
2. The Discharger shall file with the Regional Board technical reports on self-monitoring work performed according to the detailed specifications contained in Monitoring and Reporting Program No. CI-5714 attached hereto and incorporated herein by reference, as directed by the Executive Officer. The results of any monitoring done more frequently than required at the location and/or times specified in the Monitoring and Reporting Program shall be reported to the Regional Board. The Discharger shall comply with all of the provisions and requirements of the Monitoring and Reporting Program.
3. Monitoring and Reporting Program No. CI-5714 contains requirements, among others, specifying that a groundwater monitoring program for the new Plant shall be established so that the groundwater downgradient and upgradient from the percolation ponds can be measured, sampled, and analyzed to determine if discharges from the percolation ponds are impacting water quality. A background and downgradient groundwater quality shall be established at the discharge ponds areas based on the first year groundwater monitoring data. The Discharger shall submit a revised technical workplan as required in Section III of new Monitoring and Reporting Program No. CI-5714 that is part of this WDR for the new Plant.
4. The Discharger shall monitor the background of the receiving groundwater quality as it relates to its effluent discharges. Should the constituent concentrations in any downstream monitoring well exceed the receiving water quality objectives in the Basin Plan and the increase in constituents is attributable to the existing or new Discharge's Plant and effluent disposal practices, the Discharger must develop a source control plan including a detailed source identification and pollution minimization plan, together with the time schedule of

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- implementation, and must be submitted within 120 days of recording the exceedance.
5. Should effluent monitoring data indicate possible contamination of groundwater attributable to Discharger's effluent, the Discharger shall submit, within 120 days after discovery of the problem, plans for measures that will be taken, or have been taken, to mitigate any long-term effects that may result from the discharge(s).
 6. The Discharger shall participate in the implementation of the Watershed-wide Monitoring Program if the Executive Officer determines that a surface water monitoring program for the Santa Clara River is needed to fully evaluate the impact from Discharger's effluent discharge on groundwater. The Regional Board may require the Discharger to participate with the Regional Board, Santa Clara River Enhancement and Management Plan Steering Committee, and other stakeholders, in the development and implementation of a watershed-wide monitoring program.
 7. Should the nitrate and nitrite-nitrogen concentration in effluent of new Plant exceed 15 mg/L in three (monthly sampling plus two additional sampling events for result verification) consecutive samples taken within one month, the Discharger must submit an investigation plan (Plan) to the Executive Officer for approval within 90 days from the occurrence. The Plan must contain a detailed description of pollutant minimization strategies and prevention measures proposed, together with the time schedule of implementation.
 8. In accordance with section 13260(c) of the California Water Code, the Discharger shall file a report of any material change or proposed change in the character, location, or volume of the discharge.
 9. The Discharger shall operate and maintain its wastewater collection, treatment and disposal facilities in a manner to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, to provide adequate and reliable transport, treatment, and disposal of all wastewater from future wastewater sources under the Discharger's responsibilities. Anyone employed in the operation of the wastewater treatment plant must be certified pursuant to CWC sections 13625-13633.
 10. The Discharger shall submit to the Regional Board an Operations and Maintenance Manual (O & M Manual) for the new Plant and disposal facilities prior to startup of the new Plant. The Discharger shall maintain the O & M Manual in useable condition, and available for reference and use by all applicable personnel. The Discharger shall regularly review, and revise or update as necessary, the O & M Manual(s) in order for the document(s) to remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and revisions or updates shall be completed as necessary and submitted to the Regional Board.

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11. In event that the new Plant employs UV disinfection, the Discharger shall establish an operation manual including quartz sleeve cleaning frequencies that ensure the minimum required UV dose delivery is consistently met, and file the operation manual with the Regional Board within 30 days after commissioning the UV disinfection system. The new Facility using UV disinfection shall comply with the National Water Research Institute/American Water Works Association Research Foundation UV Disinfection Guidelines specifying design and performance of US systems.
12. The Discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
13. The Discharger shall ensure that the capacity of the disposal area is adequate for the discharge and that adequate steps are taken to accommodate system failures and/or to deal with loss of the soil assimilative capacity.
14. The Discharger shall cause the treatment and disposal systems to be inspected annually during the life of this Order by an inspector to be retained by the Discharger. The inspector shall specify the condition of the treatment system and the disposal system. The inspector should also assess the capacity of the percolation ponds system and waste sludge drying beds system.
15. The Discharger shall file a written report with the Regional Board within 90 days after the average dry-weather flow for any month equals or exceeds 90 percent of the design capacity of the waste treatment and/or disposal facilities. The report shall detail provisions to cope with flows in excess of 90 percent of the design capacity.
16. The Discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
17. For any violation of requirements in this Order, the Discharger shall notify the Regional Board within 24 hours of knowledge of the violation either by telephone or electronic mail. The notification shall be followed by a written report within one week. The Discharger in the next monitoring report shall also confirm this information. In addition, the report shall include the reasons for the violations or adverse conditions, the steps being taken to correct the problem (including dates thereof), and the steps being taken to prevent a recurrence.
18. This Order does not relieve the Discharger from the responsibility 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.

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19. After notice and opportunity for a hearing, this Order may be terminated or modified for causes including, but not limited, to:
 - a) Violation of any term or condition contained in this Order;
 - b) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts; or
 - c) A change in any condition, or the discovery of any information, that requires either a temporary or permanent reduction or elimination of the authorized discharge.
20. The Discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.
21. This Order includes the attached *Standard Provisions Applicable to Waste Discharge Requirements* which are incorporated herein by reference. If there is any conflict between provisions stated herein and the *Standard Provisions Applicable to Waste Discharge Requirements*, the provisions stated herein will prevail.
22. 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) Entry upon the Discharger 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 locations.
23. The WDRs contained in this Order will remain in effect for a period of 10 years. Should the Discharger wish to continue discharging to groundwater for a period

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of time in excess of 10 years, the Discharger must file an updated Report of Waste Discharge with the Regional Board no later than 140 days in advance of the 10th-year anniversary date of the Order for consideration of issuance of new or revised waste discharge requirements. Any discharge of waste ten years after the date of adoption of this Order, without filing an updated Report of Waste Discharge with the Regional Board, is a violation of CWC section 13264. The Regional Board is authorized to take appropriate enforcement action for any noncompliance with this provision including assessment of penalties.

24. In accordance with the Governor's Executive Order requiring any proposed activity to be reviewed to determine whether such activity will cause additional energy usage, Regional Board staff believe that implementation of these new WDRs would not cause a considerable increase in energy usage.
25. All discharges of waste into the waters of the State are privileges, not rights. In accordance with Water Code section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification.

G. REOPENER

1. The Regional Board may modify, or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order will cause, have the potential to cause, or will contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters.
2. This Order may be reopened to include additional or modified requirements to address Discharger's expansion or mitigation plans, TMDL or Basin Plan mandates, or groundwater limitation compliance with Resolution 68-16.

H. PETITION TO REVIEW ORDER

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth days following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copy of the law and regulations applicable to filing petitions may be found on the internet at: http://www.waterboards.ca.gov/public_notice/petitions/water_quality or will be provided upon request.

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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 February 5, 2009.

Tracy J. Egoscue
Executive Officer

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Attachment A-1

Table 64431-A: Inorganic Chemicals	
Constituent	Maximum Contamination Levels (mg/L)
Aluminum	1
Antimony	0.006
Arsenic	0.05
Barium	1
Beryllium	0.004
Cadmium	0.005
Chromium	0.05
Cyanide	0.2
Fluoride	2
Mercury	0.002
Nickel	0.1
Selenium	0.05
Thallium	0.002

California Code of Regulation (CCR) Title 22, Section 64431
Nitrate, Nitrate plus nitrite have been removed from this Table.

Attachment A-2

Constituent	Maximum Contamination Levels (pCi/L)
Combined Radium-226 and Radium-228	5
Gross Alpha Particle Activity (Including Radium-226 but Excluding Radon and Uranium)	15
Tritium	20000
Strontium-90	8
Gross Beta Particle Activity	50
Uranium	20

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

Attachment A-3

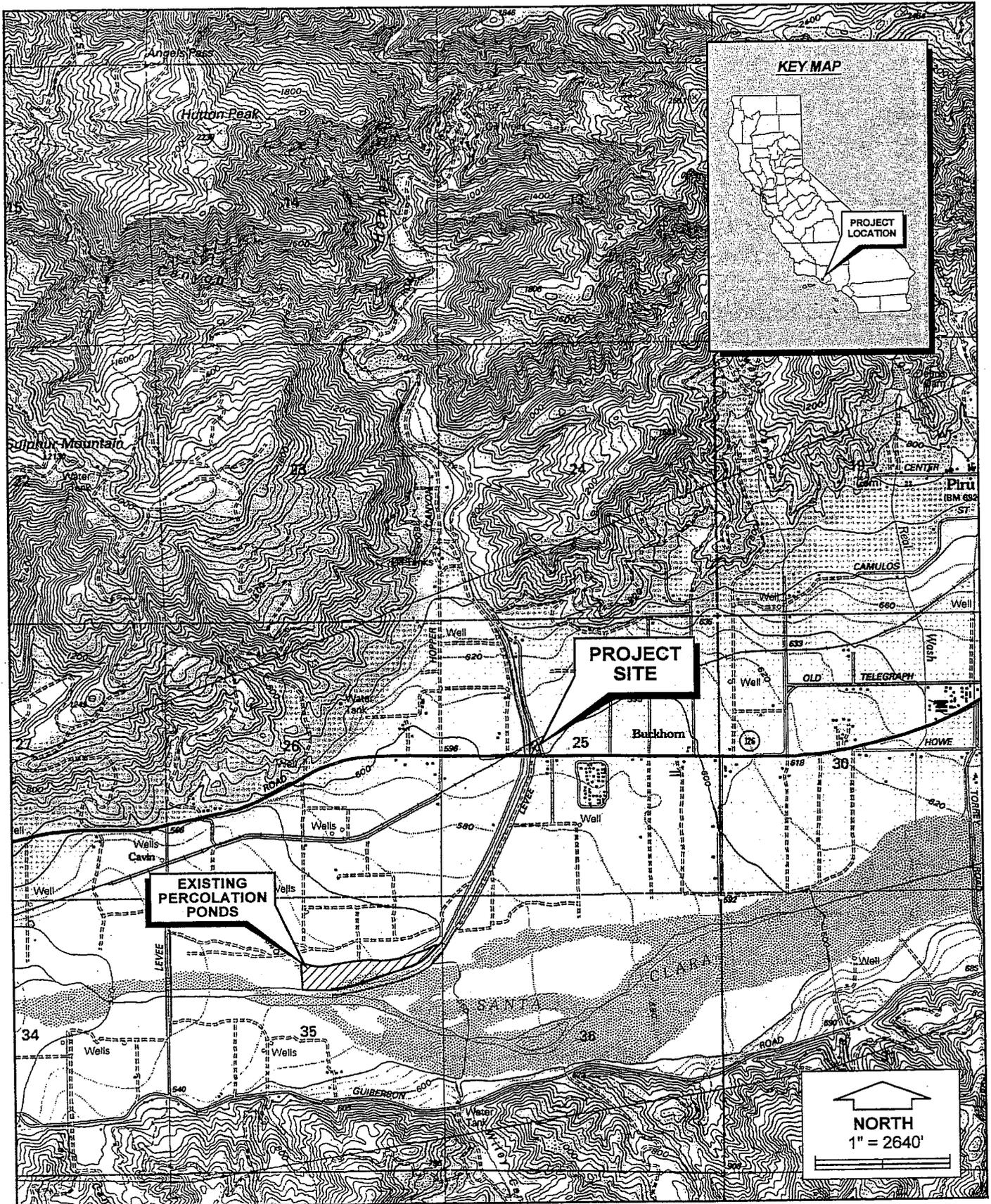
Table 64444-A – Organic/Regulated Chemicals	
Constituent	Maximum Contamination Levels (mg/L)
Volatile Organic Chemicals	
Benzene	0.001
Carbon Tetrachloride (CTC)	0.0005
1,2-Dichlorobenzene	0.6
1,4-Dichlorobenzene	0.005
1,1-Dichloroethane	0.005
1,2-Dichloroethane (1,2-DCA)	0.0005
1,1-Dichloroethene (1,1-DCE)	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	0.7
Methyl-tert-butyl-ether	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	0.07
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
Non-Volatile synthetic Organic Chemicals	
Alachlor	0.002
Atrazine	0.003
Bentazon	0.018
Benzo(a)pyrene	0.0002
Carbofuran	0.018
Chloradane	0.0001
2,4-D	0.07
Dalapon	0.2
1,2-Dibromo-3-chloropropane	0.0002

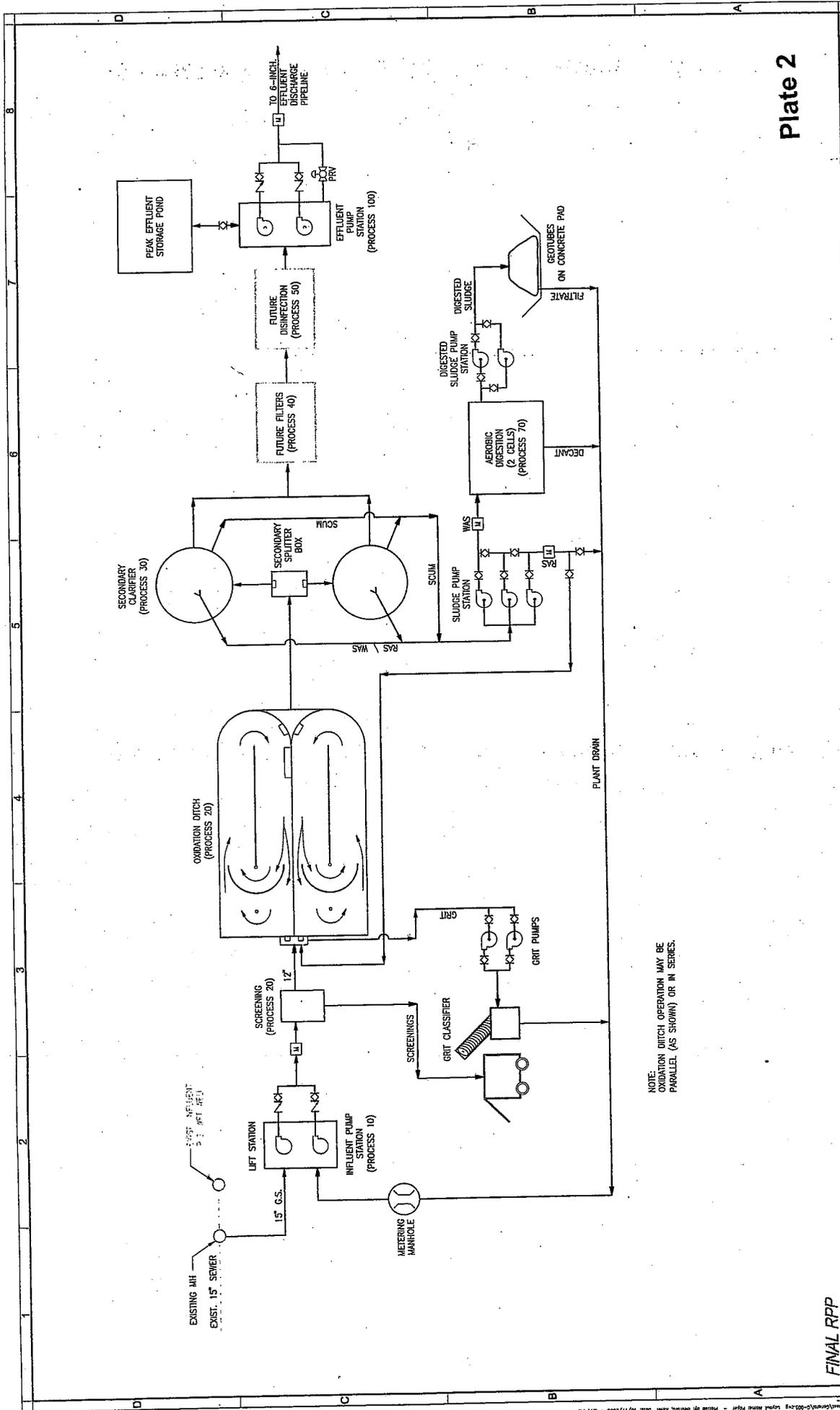
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Table 64444-A – Organic/Regulated Chemicals	
Constituent	Maximum Contamination Levels (mg/L)
Non-Volatile synthetic Organic Chemicals	
Di(2-ethylhexyl)adipate	0.4
Di(2-ethylhexyl)phthalate	0.004
Dinoseb	0.007
Diquat	0.02
Endothall	0.1
Endrin	0.002
Ethylene Dibromide (EDB)	0.00005
Glyphosate	0.7
Heptachlor	0.00001
Heptachlor Epoxie	0.00001
Hexachlorobenzene	0.001
Hexachlorocyclopentadiene	0.05
Lindane	0.0002
Methoxychlor	0.04
Molinate	0.02
Oxamyl	0.2
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



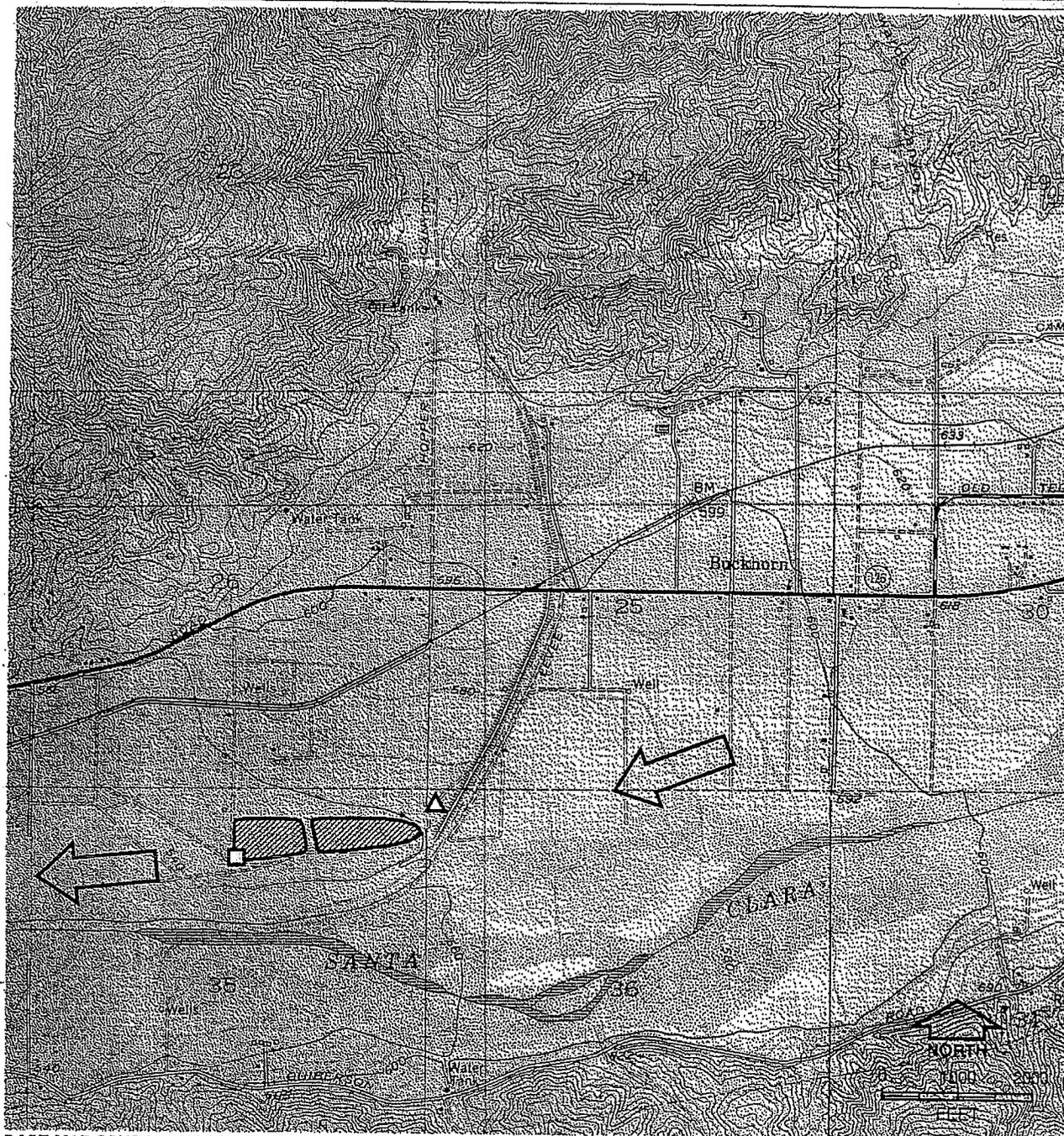


NOTE
OXIDATION DITCH OPERATION MAY BE
PARALLEL (AS SHOWN) OR IN SERIES.

Plate 2

FINAL RPP
10/17/08

PROJECT: DESIGN-BUILD OF PIRU WASTEWATER TREATMENT PLANT SHEET: 5 OF 34 SHEETS		DISTRICT: VENTURA COUNTY WATERWORKS DISTRICT #18		PROJECT NUMBER: 17280.00.002 DATE: 10/17/08	
BOYLE AECOM BOYLE & AECOM 2001 L. COMPTON BLVD., SUITE 100 FOLSOM, CA 95630 TEL: 916.243.7000 WWW.BOYLEAECOM.COM		BOYLE		DATE: 10/17/08	
VERIFY SCALES DRAWN BY: ECH CHECKED BY: KBD DATE: 10/17/08	PROJECT NUMBER: 17280.00.002	DATE: 10/17/08	BOYLE	DATE: 10/17/08	BOYLE



BASE MAP SOURCE: USGS 7.5' Piru, California quadrangle map (photorevised 1988).

LEGEND



Principal Direction of Shallow Alluvial Aquifer Groundwater Flow



Approximate Location of PWTP Percolation Pond



Approximate Location of Upgradient Monitoring Well



Approximate Location of Downgradient Monitoring Well

MONITORING WELL MAP
Piru Wastewater Treatment Plant