

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2009-
FOR
CITY OF WOODLAKE
WASTEWATER TREATMENT FACILITY
TULARE COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board), finds that:

1. Waste Discharge Requirements (WDRs) Order No. 5-01-076, adopted by the Central Valley Water Board on 27 April 2001, for the City of Woodlake (hereafter City or Discharger) and Sentinel Butte Water Company, regulates the City's wastewater treatment facility (WWTF) located in the southeast quarter of Section 36, Township T17S, Range R26E, MDB&M, and less than a mile south of the City of Woodlake in Tulare County.
2. WDRs Order No. 5-01-076 authorizes a discharge of 1.0 million gallons per day (mgd) of undisinfected secondary treated wastewater to four percolation ponds and one emergency pond.
3. The WWTF is on property owned by the City. The City historically has supplied WWTF effluent for reclamation on 35 acres of farmland (Assessor's Parcel Number 060-160-016) (Reclamation Area) owned by Sentinel Butte Water Company, a California Corporation. The recycling of WWTF effluent on the Reclamation Area is regulated by Water Reclamation Requirements (WRRs) Order No. 01-082, which names the City of Woodlake as the producer and Sentinel Butte Water Company as the user of reclaimed water.
4. The WWTF is also regulated by Cease and Desist Order (CDO) No. 5-01-077, which addresses effluent Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) exceedances.
5. In July 2008, the Discharger submitted a Report of Waste Discharge (RWD) for a proposed WWTF upgrade. The RWD indicates that the peak daily flow and peak monthly flow will be approximately 1.87 mgd and 1.38 mgd, respectively, for Phase One and about 2.52 mgd and 1.92 mgd, respectively, for Phase Two.
6. WDRs Order No. 5-01-076 needs to be updated to ensure that the discharge is consistent with Central Valley Water Board plans and policies and prescribe requirements that reflect changes the Discharger has made to its WWTF operation.

Wastewater Treatment Facility

7. The existing WWTF consists of headworks, two bentonite-lined aerated lagoons, four percolation ponds with an approximate total area of 9.6 acres, and one emergency pond (approximately 5.6 acres).
8. For Phase One, the Discharger proposes to construct a new headworks that will include one manual bar screen and one mechanical bar screen, and a new magnetic flow meter. There will be two treatment trains running in parallel. Each treatment train will consist of one 0.60-million-gallon (MG) oxidation ditch, and one 0.20-MG anoxic basin to remove BOD and nitrogen, and one 55-foot-diameter secondary clarifier. The existing aerated lagoons will be converted to asphalt-lined sludge drying beds and two new percolation ponds will be constructed. A schematic plan of the WWTF is shown on Attachment A and a process flow schematic is shown on Attachment B. Both of these are attached hereto and made part of this Order by reference.
9. In Phase Two, the Discharger is proposing to install a third treatment train that will run in parallel with the treatment trains in Phase One. The third treatment train will include an additional oxidation ditch and anoxic basin, which will be the same size as the others. An additional 55-foot-diameter secondary clarifier and one additional asphalt-lined sludge drying bed will be constructed as well.
10. Self-Monitoring data from January 2007 through December 2008 contained in the Discharger's Self-Monitoring Reports (SMRs) characterize the discharge as follows:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Influent</u>	<u>Effluent</u>
Specific Conductance (EC)	µmhos/cm	---	431
BOD	mg/L	84	29
TSS	mg/L	98	59
Settleable Solids	mL/L	4	<1
pH	pH units	10.8	8.1
Total Dissolved Solids (TDS)	mg/L	---	407
Total Kjeldahl Nitrogen (TKN)	mg/L	---	10
Nitrate-Nitrogen (NO ₃ -N)	mg/L	---	7.3
Total Nitrogen (TN)	mg/L	---	16

11. Current data shows low influent BOD and TSS concentrations. This is likely not representative of the wastewater at the WWTF but a result of collecting grab samples of the influent rather than composite samples. According to the RWD, the consultant designed the upgraded WWTF based on influent BOD and TSS concentrations of 240 and 270 mg/L, respectively.

12. According to the RWD, the proposed WWTF will produce an effluent that will meet average BOD and TSS concentrations of 40 mg/L, and an average Total Nitrogen concentration of less than 10 mg/L.

Sanitary Sewer Overflows

13. A “sanitary sewer overflow” is defined as a discharge to ground or surface water from the sanitary sewer system at any point upstream of the treatment facility. Temporary storage and conveyance facilities (such as wet wells, regulated impoundments, tanks, highlines, etc.) may be part of a sanitary sewer system and discharges to these facilities are not considered sanitary sewer overflows, provided that the waste is fully contained within these temporary storage/conveyance facilities.
14. On 2 May 2006, the State Water Resources Control Board (hereafter State Water Board) adopted General Sanitary Sewer Order (State Water Board Water Quality Order No. 2006-0003-DWQ, “General Waste Discharge Requirements for Sanitary Sewer Systems”). The General Order requires all public agencies that own or operate sanitary sewer systems greater than one mile in length to comply with this order. The Discharger’s collection system is greater than one mile in length; therefore, the Discharger applied for, and is covered by, the General Order.

Site-Specific Conditions

15. The WWTF and Reclamation Area are in a semi-arid climate characterized by hot, dry summers and cool winters. The rainy season generally extends from November through April. Occasional rains occur during spring and fall months, but summer months are dry. Average annual precipitation and evaporation are about 14 and 62 inches, respectively, according to information published by the California Department of Water Resources (DWR).
16. Soils in the vicinity of the WWTF are predominately Tujunga Sand, San Emigdio Loam, and San Joaquin Loam, according to the Web Soil Survey published by the United States Department of Agriculture Natural Resources Conservation Service. Tujunga Sand, San Emigdio Loam, and San Joaquin Loam have been assigned land capacity classification of 3s, 1, and 3e, respectively. These soils have limitations that range from slight to severe and restrict their use and choice of plants or that require special conservation practices. These soils also have a hazard of erosion unless close-growing plant cover is maintained. The susceptibility to erosion and past erosion damage is the major soil-related factors affecting these types of soils.
17. According to the Federal Emergency Management Agency maps (map number 06107C0688E) the WWTF is located in Zone A, with a 1% annual chance of flooding and a 26% chance of flooding over a 30-year time period.

18. The Discharger is not required to obtain coverage under a National Pollutant Discharge Elimination System general industrial storm water permit for the WWTF because all storm water runoff is retained onsite and does not discharge to a water of the United States.

Groundwater Considerations

19. Three groundwater monitoring wells (MW-1 through MW-3) were installed in October 2000 near the WWTF. After the groundwater monitoring wells were installed, Central Valley Water Board staff determined the groundwater monitoring well network was inadequate because the wells were monitoring two different groundwater zones. The Discharger did not submit analytical data and never initiated groundwater monitoring. Background quality of first-encountered groundwater beneath the WWTF and disposal area has not been determined.
20. The Discharger submitted a Work Plan dated June 2007 for the installation of an upgraded groundwater monitoring network. The Work Plan proposes to use two of the existing groundwater monitoring wells (MW-2 and MW-3) along with three new wells. If, after the installation of the new wells, MW-2 and MW-3 are not similar and the direction of groundwater cannot be determined from these wells, an additional well will need to be installed.
21. The straight (i.e., not flow-weighted) average source water EC and TDS concentrations based on data contained in the Discharger's SMRs are approximately 385 $\mu\text{mhos/cm}$ and 265 mg/L, respectively. The EC and TDS concentrations from the City of Woodlake's 2007 Annual Drinking Water Quality Report were reported as 326 $\mu\text{mhos/cm}$ and 238 mg/L, respectively.

Basin Plan, Beneficial Uses, and Water Quality Objectives

22. The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition, revised January 2004* (hereafter Basin Plan) designates beneficial uses, establishes narrative and numerical water quality objectives, contains implementation plans and policies for protecting all waters of the Basin, and incorporates, by reference, plans and policies of the State Water Board. Pursuant to Section 13263(a) of the California Water Code (CWC), these requirements implement the Basin Plan.
23. Water in the Tulare Lake Basin is in short supply, requiring importation of surface water from other parts of the State. The Basin Plan encourages recycling on irrigated crops wherever feasible and indicates that evaporation of recyclable wastewater is not an acceptable permanent disposal method where the opportunity exists to replace an existing use or proposed use of fresh water with recycled water.

24. The WWTF is in Detailed Analysis Unit (DAU) No. 242 within the Kaweah Basin hydrologic unit. The Basin Plan identifies the beneficial uses of groundwater in this DAU as municipal and domestic supply, agricultural supply, industrial service and process supply, water contact recreation, and non-contact water recreation.
25. The Basin Plan includes a water quality objective for chemical constituents that, at a minimum, require waters designated as domestic or municipal supply to meet the maximum contaminant levels (MCLs) specified in Title 22 of the California Code of Regulations (CCR). The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.
26. The Basin Plan establishes narrative water quality objectives for Chemical Constituents, Taste and Odors, and Toxicity. The Toxicity objective, in summary, requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial uses. Quantifying a narrative water quality objective requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses.
27. The Basin Plan identifies the greatest long-term problem facing the entire Tulare Lake Basin as the increase in salinity in groundwater, which has accelerated due to the intensive use of soil and water resources by irrigated agriculture. The Basin Plan recognizes that degradation is unavoidable until there is a long-term solution to the salt imbalance. Until then, the Basin Plan establishes several salt management requirements, including:
 - a. The incremental increase in salts from use and treatment must be controlled to the extent possible. The maximum EC shall not exceed the EC of the source water plus 500 $\mu\text{mhos/cm}$. When the source water is from more than one source, the EC shall be a weighted average of all sources.
 - b. Discharges to areas that may recharge good quality groundwater shall not exceed an EC of 1,000 $\mu\text{mhos/cm}$, a chloride content of 175 mg/L, or boron content of 1.0 mg/L.

These effluent limits are considered best practicable treatment or control (BPTC).

28. The Basin Plan requires municipal WWTFs that discharge to land to comply with treatment performance standards for BOD and TSS. WWTFs that preclude public access and are greater than 1 mgd must provide removal of 80 percent or reduction to 40 mg/L, whichever is more restrictive, for both BOD and TSS.

Antidegradation Analysis

29. State Water Board Resolution No. 68-16 (“Policy with Respect to Maintaining High Quality Water of the State”) prohibits degradation of groundwater unless it has been shown that:
 - a. The degradation is consistent with the maximum benefits to the people of the State;
 - b. The degradation will not unreasonable affect present and anticipated future beneficial uses;
 - c. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives, and
 - d. The Discharger employs BPTC to minimize degradation.
30. Degradation of groundwater by some of the typical waste constituents released with discharge from a municipal wastewater utility after effective source control, treatment, and control is consistent with maximum benefit to the people of the State. The technology, energy, water recycling, and waste management advantages of municipal utility service far exceed any benefits derived from a community otherwise reliant on numerous concentrated individual wastewater systems, and the impacts on water quality will be substantially less. Economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State, and therefore sufficient reason to accommodate growth and groundwater degradation provided terms of the Basin Plan are met.
31. Constituents of concern in the discharge that have the potential to degrade groundwater include salts and nutrients. This Order establishes terms and conditions of discharge to ensure that the discharge does not unreasonably affect present and anticipated uses of groundwater and includes groundwater limitations that apply water quality objectives established in the Basin Plan to protect beneficial uses. The discharge will likely not impair the beneficial uses of groundwater because:
 - a. For Salinity, the Basin Plan contains effluent limits of EC of source water plus 500µmhos/cm and 1,000 µmhos/cm maximum for discharges to area that may recharge to good quality groundwater. These limits considered the antidegradation policy when adopted. The current discharge meets the source water plus 500 µmhos/cm limit, and is also less than the lowest numerical limit to protect the most sensitive agricultural use (700 µmhos/cm).
 - b. For nitrogen, the upgraded WWTF will treat to less than 10 mg/L. Therefore, any degradation that may occur from the discharge would not exceed a Water Quality Objective nor impair a Beneficial Use.

Treatment and Control Practices

32. The WWTF described in Finding Nos. 7 through 12, will provide treatment and control of the discharge that incorporates:
- a. secondary treatment, including nitrogen reduction;
 - b. appropriate biosolids handling and treatment for reuse;
 - c. an operation and maintenance (O&M) manual;
 - d. certified operators to ensure proper operation and maintenance; and
 - e. discharge and groundwater monitoring

Water Recycling Criteria

33. Domestic wastewater contains pathogens harmful to humans that are typically measured by means of total or fecal coliform, as indicator organisms. The California Department of Public Health (DPH), which has primary statewide responsibility for protecting public health, has established statewide criteria in Title 22, CCR, Section 60301 et seq. (hereafter Title 22) for the use of recycled water and has developed guidelines for specific uses.
34. A 1988 Memorandum of Agreement (MOA) between DPH and State Water Board on the use of recycled water establishes basic principles relative to the agencies and the regional water boards. In addition, the MOA allocates primary areas of responsibility and authority between these agencies, and provides for methods and mechanisms necessary to assure ongoing, continuous future coordination of activities relative to the use of recycled water in California.
35. State Water Board Resolution No. 77-1 ("Policy with Respect to Water Recycling in California") encourages recycling projects that replace or supplement the use of fresh water, and the Water Recycling Law (CWC Sections 13500-13529.4) declares that utilization of recycled water is of primary interest to the people of the State in meeting future water needs.
36. The Basin Plan encourages recycling on irrigated crops wherever feasible and indicates that evaporation of recyclable wastewater is not an acceptable permanent disposal method where the opportunity exists to replace an existing use or proposed use of fresh water with recycled water. The Basin Plan also requires project reports for new or expanded wastewater facilities shall include plans for wastewater recycling or the reasons why this is not possible.

37. Title 22, Section 60323 requires recyclers of treated municipal wastewater to submit an engineering report detailing the use of recycled water, contingency plans, and safeguards. A Title 22 Engineering Report dated August 2001 was submitted by Quad Knopf, Inc., on behalf of the Discharger.

Other Regulatory Considerations

38. The United States Environmental Protection Agency (EPA) has promulgated biosolids reuse regulations in Title 40, Code of Federal Regulations, Part 503, Standards for the Use or Disposal of Sewage Sludge, which establishes management criteria for protection of ground and surface waters, sets application rates for heavy metals, and establishes stabilization and disinfection criteria. The Discharger may have separate and/or additional compliance, reporting, and permitting responsibilities to EPA.
39. As the discharge consists of treated domestic sewage and incidental discharges from treatment and storage facilities associated with a domestic wastewater treatment plant, and as these discharges are regulated by waste discharge requirements consistent with applicable water quality objectives, the WWTF and its discharge is exempt from containment pursuant to Title 27, section 20090(a).

CEQA

40. A Final Environmental Impact Report (FEIR), State Clearinghouse Number 2009041134, dated June 2009 was adopted by the City of Woodlake for the proposed WWTF upgrade to an ultimate design flow of 1.8 mgd.
41. Central Valley Water Board staff reviewed the FEIR and concurred with the conclusion that the project would be an improvement over the existing discharge and that the discharge would not have a significant impact on water quality. This Order includes effluent limits for salinity, BOD, TSS, and total nitrogen. Compliance with these limits will mitigate any significant impacts to water quality.

General Findings

42. Pursuant to CWC Section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.
43. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.
44. CWC Section 13267(b) states that: "In conducting an investigation specified in subdivision (a), the Central Valley Water Board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political

agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the Central Valley Water Board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the Central Valley Water Board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

45. The technical reports required by this Order and monitoring reports required by the attached Monitoring and Reporting Program (MRP) No. R5-2009-_____ are necessary to assure compliance with these waste discharge requirements. The Discharger operates the WWTF that discharges the waste subject to this Order.
46. The DWR set standards for the construction and destruction of groundwater wells, as described in California Well Standards Bulletin 74-90 (June 1991) and Water Well Standards: State of California Bulletin 94-81 (December 1981). These standards, and any more stringent standards adopted by the State or county pursuant to CWC Section 13801, apply to all monitoring wells.

Public Notice

47. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.
48. The Discharger and interested agencies and persons have been notified of the intent to prescribe waste discharge requirements for this discharge, and they have been provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
49. All comments pertaining to the discharge were heard and considered in a public meeting.

IT IS HEREBY ORDERED that Waste Discharge Requirements Order No. 5-01-076 is rescinded and that, pursuant to Sections 13263 and 13267 of the California Water Code, the City of Woodlake and its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the CWC and regulations adopted thereunder, shall comply with the following:

A. Prohibitions

1. Discharge of waste to surface waters or surface water drainage courses is prohibited.

2. Bypass or overflow of untreated wastes, except as allowed by *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, dated 1 March 1991, E.2 is prohibited.
3. Discharge of waste classified as 'hazardous', as defined in Section 2521(a) of Title 23, CCR, Section 2510 et seq., is prohibited. Discharge of waste classified as 'designated', as defined in CWC Section 13173, in a manner that causes violation of groundwater limitations, is prohibited.

B. Effluent Limitations

1. The discharge shall not exceed the following limitations:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
BOD ₅ ¹	mg/L	40	80
TSS ²	mg/L	40	80
Chloride	mg/L	175	---

¹ Five-day biochemical oxygen demand (BOD₅)
² Total suspended solids (TSS)

The arithmetic mean of BOD₅ and TSS in effluent samples collected over a monthly period shall not exceed 20 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (80 percent removal).

2. The 12-month rolling average EC of the discharge shall not exceed the 12-month rolling average EC of the source water plus 500 µmhos/cm. Compliance with this effluent limitation shall be determined monthly.
3. After the expansion of the WWTF is complete and Provision 19 has been satisfied, the Total Nitrogen of the discharge shall not exceed a monthly average of 10 mg/L unless Provision 22 is satisfied.

C. Discharge Specifications

1. The monthly average discharge flow shall not exceed:
 - a. 1.0 mgd until Provision 19 is satisfied.
 - b. 1.38 mgd after Provision 19 has been satisfied.
 - c. 1.92 mgd after Provision 20 has been satisfied.

2. All conveyance, treatment, storage, and disposal units shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
3. Public contact with effluent (treatment works, ponds) shall be precluded through such means as fences, signs (in accordance with Title 22, CCR Section 60310(g)), or acceptable alternatives.
4. Objectionable odors shall not be perceivable beyond the limits of the WWTF property at an intensity that creates or threatens to create nuisance conditions.
5. Effluent storage ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration during the winter. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
6. On or about **1 October** of each year, available disposal pond storage capacity shall at least equal the volume necessary to comply with Discharge Specification C.5.
7. Ponds shall be managed to prevent breeding of mosquitoes. In particular,
 - a. An erosion control plan should assure that coves and irregularities are not created around the perimeter of the water surface.
 - b. Weeds shall be minimized through control of water depth, harvesting, and herbicides.
 - c. Dead algae, vegetation and other debris shall not accumulate on the water surface.
 - d. Vegetation management operations in areas in which nesting birds have been observed shall be carried out either before or after, but not during, the 1 April to 30 June bird nesting season.
8. No waste constituent shall be released or discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of groundwater limitations.

D. Sludge Specifications

Sludge in this document means the solid, semisolid, and liquid residues removed during primary, secondary, or advance wastewater treatment processes. Solid waste refers to grit and screening material generated during preliminary treatment. Residual sludge means sludge that will not be subject to further treatment at the WWTF. Biosolids refers

to sludge that has undergone sufficient treatment and testing to quality for reuse pursuant to federal and state regulations as a soil amendment for agriculture, silviculture, horticulture, and land reclamation.

1. Sludge and solid waste shall be removed from screens, sumps, aeration basins, ponds, clarifiers, etc. as needed to ensure optimal plant operation.
2. Treatment and storage of sludge generated by the WWTF shall be confined to the WWTF property.
3. Any handling and storage of residual sludge, solid waste, and biosolids on property of the WWTF shall be temporary (i.e., no longer than two years) and controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate groundwater limitation of this Order.
4. Residual sludge, biosolids, and solid waste shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27. Removal for further treatment, disposal, or reuse at sites (i.e., landfill, composting sites, soil amendment sites) operated in accordance with valid waste discharge requirements will satisfy this specification.
5. Use of biosolids as a soil amendment shall comply with valid waste discharge requirements issued by a Regional Water Board or the State Water Board or a local (e.g., county) program authorized by a Regional Water Board. In most cases, this means the General Biosolids Order (State Water Board Water Quality Order No. 2004-12-DWQ, "General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities"). For a biosolids use project to be authorized by the General Biosolids Order, the Discharger must file a complete Notice of Applicability for each project.
6. Any proposed change in sludge use or disposal practice shall be reported in writing to the Executive Officer at least 90 days in advance of the change.

E. Groundwater Limitations

1. Release of waste constituents from any treatment or storage component associated with the discharge shall not cause or contribute to groundwater:
 - a. Containing constituent concentrations in excess of the concentrations specified below or natural background quality whichever is greater:
 - (i) Nitrate as nitrogen of 10 mg/L.

- (ii) Total Coliform Organisms of 2.2 MPN/100 mL.
 - (iii) For constituents identified in Title 22, the MCLs quantified therein.
- b. Containing taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.

F. Provisions

1. The Discharger shall comply with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, dated 1 March 1991, which are part of this Order. This attachment and its individual paragraphs are referred to as Standard Provision(s).
2. The Discharger shall comply with MRP No.R5-2009-____, which is part of this Order, and any revisions thereto as adopted by the Central Valley Water Board or approved by the Executive Officer. The submittal dates of Discharger self-monitoring reports shall be no later than the submittal dates specified in the MRP.
3. The Discharger shall keep at the WWTF a copy of this Order, including its MRP, Information Sheet, attachments, and Standard Provisions, for reference by operating personnel. Key operating personnel shall be familiar with its contents.
4. The Discharger shall not allow pollutant-free wastewater to be discharged into the WWTF collection, treatment, and disposal systems in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means storm water (i.e., inflow), groundwater (i.e., infiltration), cooling waters, and condensates that are essentially free of pollutants.
5. The Discharger must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This Provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Discharger only when the operation is necessary to achieve compliance with the conditions of this Order.
6. All technical reports and work plans required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code Sections 6735, 7835, and 7835.1. To demonstrate compliance

with Sections 415 and 3065 of Title 16, CCR, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports and work plans must bear the signature(s) and seal(s) of the registered professionals(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

7. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Accordingly, the Discharger shall submit to the Central Valley Water Board on or before each report due date the specified document or, if an action is specified, a written report detailing evidence of compliance with the date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board by letter when it returns to compliance with the time schedule. Violations may result in enforcement action, including Central Valley Water Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
8. In the event of any change in control or ownership of land or waste treatment and storage facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board.
9. To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the address and telephone number of the persons responsible for contact with the Central Valley Water Board and a statement. The statement shall comply with the signatory paragraph of Standard Provision B.3 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. If approved by the Executive Officer, the transfer request will be submitted to the Central Valley Water Board for its consideration of transferring the ownership of this Order at one of its regularly scheduled meetings.
10. As a means of discerning compliance with Discharge Specifications C.4, the dissolved oxygen (DO) content in the upper one foot of any wastewater pond shall not be less than 1.0 mg/L for three consecutive days. Should the DO be below 1.0 mg/L during a weekly sampling event, the Discharger shall take all reasonable steps to correct the problem and commence daily DO monitoring in the affected ponds until the problem has been resolved. If unpleasant odors originating from affected ponds are noticed in developed areas, or if the Discharger received one or more odor complaints, the Discharger shall report the findings in writing within 5 days of the date and shall

include a specific plan to resolve the low DO results to the Central Valley Water Board within 10 days of that date.

11. The pH of the discharge shall not be less than 6.5 or greater than 8.5 pH units for more than three consecutive sampling events. In the event that the pH of the discharge is outside of this range for more than three consecutive sampling events, the Discharger shall submit a technical evaluation in its monthly SMRs documenting the pH of the discharge to the ponds or reclamation area, and if necessary demonstrate that the effect of the discharge on soil pH will not exceed the buffering capacity of the soil profile.
12. The Discharger shall maintain and operate all ponds sufficient to protect the integrity of containment levees and prevent overtopping or overflows. Unless a California civil engineer certifies (based on design, construction, and condition of operation and maintenance) that less freeboard is adequate, the operating freeboard in any pond shall never be less than two feet (measured vertically). As a means of management and to discern compliance with this Provision, the Discharger shall install and maintain in each pond permanent markers with calibration that indicates the water level at design capacity and enables determination of available operational freeboard.
13. The Discharger shall submit the technical reports and work plans required by this Order for Central Valley Water Board staff consideration and incorporate comments they may have in a timely manner, as appropriate. The Discharger shall proceed with all work required by the following provisions by the due dates specified.
14. The Discharger shall obtain coverage under, and comply with, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ.
15. The Discharger shall evaluate land disposal options and conduct studies to promote new or expanded wastewater recycling and reclamation opportunities. If the studies show that year-round or continuous reuse of all the wastewater is not practicable, consideration must be given to partial reuse of the flow and seasonal reuse. **By 1 January 2010**, and periodically thereafter (but not less than once every five years) the Discharger shall document its efforts to promote new or expanded wastewater recycling and reclamation opportunities.
16. **By 1 June 2010**, the Discharger shall complete the installation of proposed groundwater monitoring wells in accordance with the Work Plan described in Finding No. 20, and commence groundwater monitoring in accordance with the Monitoring and Reporting Program No. R5-2009-_____.

17. **By 1 July 2010**, the Discharger shall submit a monitoring well installation report that meets the requirements of Attachment C, which is attached hereto and made part of this Order by reference.
18. **By 1 January 2010**, the Discharger shall submit a technical report describing a work plan and time schedule for the construction of berms, or other engineering controls, that will prevent inundation of the WWTF during a 100-year event.
19. Upon completion of the proposed Phase I WWTF expansion work as described in Finding No. 8, the Discharger shall submit engineering certification that the Phase 1 work has been completed as designed and that the WWTF has sufficient treatment, storage, and disposal capacity to comply with the other terms and conditions of this Order. This provision will be considered satisfied following written acknowledgement from the Executive Officer that the criteria have been met.
20. Upon completion of the proposed Phase II expansion work as described in Finding No. 9, the Discharger shall submit engineering certification that the Phase 2 work has been completed as designed and that the WWTF has sufficient treatment, storage, and disposal capacity to comply with the other terms and conditions of this Order. This provision will be considered satisfied following written acknowledgement from the Executive Officer that the criteria has been met.
21. **By 1 January 2010**, the Discharger shall submit a technical report containing final design report and performance demonstration of the lined sludge drying beds. The performance demonstration shall include permeability of the constructed liner.
22. **One year after the completion of the WWTF and no later than 1 January 2013**, the Discharger shall comply with the Effluent Nitrogen Limitation (Effluent Limitation B.4), or alternatively, the Discharger shall submit a technical report demonstrating that soils underlying effluent storage ponds have sufficient capacity to attenuate nitrogen to levels that will not cause underlying groundwater to contain nitrate in concentrations exceeding 10 mg/L as nitrogen.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____.

PAMELA C. CREEDON, Executive Officer

Order Attachments:

- A Site Location Map
- B Flow Schematic
- C Monitoring Well Installation Report Requirements
Monitoring and Reporting Program No. R5-2009-_____
Information Sheet
Standard Provisions (1 March 2009)

DMS/DKP: 8/06/2009