## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

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#### WASTE DISCHARGE/RECYCLED WATER REQUIREMENTS

#### ORDER NO. R3-2005-0015

(Waste Discharger Identification No. 3 420103001)

For

# CITY OF GUADALUPE WASTEWATER FACILITY Santa Barbara County

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

#### PURPOSE OF ORDER

1. The purpose of the Order is to reissue new Waste Discharge and Recycled Water Requirements for the City of Guadalupe (hereafter Discharger). The Discharger submitted a report of waste discharge on November 18, 2004, for reauthorization to continue discharging treated municipal wastewater from the Discharger's upgraded wastewater facilities serving the City of Guadalupe, in Santa Barbara County. The purpose of the Discharger's Wastewater Facilities is to collect, treat, reuse and dispose of domestic and municipal wastewater.

### FACILITY OWNER AND LOCATION

 The Discharger's Wastewater Treatment Plant is located on property owned by the Discharger at 5125 West Main Street, Guadalupe (Latitude N 3457.738, Longitude W 12035.451), as shown on Attachment A, included as part of this Order.

#### FACILITY/SITE DESCRIPTION

3. **Treatment** - The wastewater treatment system consists of grit removal and biological treatment using aerated ponds (Swanson Advanced Integrated Pond System). Solids are

- anaerobically digested in cells at the bottom of the ponds, and ultimately disposed of at an approved biosolids disposal site. Biosolids disposal is expected to be infrequent based upon need (up to ten or more years between disposal events). The treatment plant design capacity is 1.0 million gallons per day (MGD), current flows average approximately 0.5 MGD. A diagram of the treatment processes is shown on Attachment B, included as part of this Order
- 4. **Disposal and Reuse** Treated municipal wastewater is discharged to approximately 71 acres of spray fields (irrigated pastures) adjacent to the Santa Maria River. Effluent is stored in a 40 acre pond adjacent to the treatment facility prior to disposal and during wet weather, when spray field use is limited. Effluent storage pond and disposal areas are depicted on Attachment A of this Order.
- 5. Geology, Soils and Ground Water The vicinity of the discharge is characterized by fairly level topography consisting of sandy soils overlying poor quality shallow ground water. Depth to ground water ranges from two to eight feet below ground surface. Based upon monitoring data provided by the Discharger, the underlying shallow ground water includes the following characteristics:

Total Dissolved Solids	1600 mg/l
Sodium	260 mg/l
Chloride	270 mg/l
Nitrate (as N)	0.2 mg/l

6. Watershed and Surface Waters - The Santa Maria River flows in a westerly direction between the treatment plant and effluent storage pond on the south bank and the disposal spray fields on the north bank.

#### **BASIN PLAN**

- 7. The Water Quality Control Plan, Central Coast Basin (Basin Plan), was adopted by the Board on and approved on September 8, 1994. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of surface and ground waters in the vicinity of the discharge.
- 8. **Surface Water Beneficial Uses** Present and anticipated beneficial uses of the Santa Maria River include:
  - a. Municipal,
  - b. Agricultural,
  - c. Industrial Service Supply,
  - d. Ground Water Recharge,
  - e. Water Contact Recreation,
  - f. Non-contact Water Recreation,
  - g. Wildlife Habitat,
  - h. Cold Fresh Water Habitat,
  - i. Warm Fresh Water Habitat,
  - i. Migration of Aquatic Organisms,
  - k. Rare, Threatened or Endangered Species,
  - l. Fresh Water Replenishment, and
  - m. Commercial and Sport Fishing
- 9. **Ground Water Beneficial Uses -** Present and anticipated beneficial uses of ground water in the vicinity of Guadalupe include:
  - a. Municipal,
  - b. Domestic.
  - c. Agricultural and
  - d. Industrial supply.

- 10. Recycled Water Title 22, Division 4, Chapter 3 of the California Code of Regulations specifies State Department of Health Services' criteria for use of recycled water. Water Code section 13523 authorizes the Regional Board to issue reclamation requirements for water that is proposed to be reclaimed (recycled). The Regional Board has consulted with the State and County Health Departments regarding these reuse requirements. The State Department of Health Services (DHS) has evaluated the proposed project description and these waste discharge requirements and provided comments and recommendations. which have been incorporated into this Order. DHS has determined that this Order is consistent with DHS's requirements, recommendations and policies regarding use of recycled water and protection of water quality and public health.
- 11. **Stormwater -** Federal Regulations stormwater discharges were promulgated by the U.S. EPA on November 19, 1990. regulations [40 Code of Federal Regulations (CFR) Parts 122, 123, and 124] require specific categories of industrial activities including Publicly Owned Treatment Works (municipal wastewater treatment facilities) with capacity in excess of one million gallons per day, which discharge stormwater to obtain a NPDES permit and to implement Best Technology Economically Available Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to control pollutants in industrial stormwater discharges.
- 12. Stormwater flows from the wastewater treatment facility process areas are directed to the head works and commingled with wastewater thus becoming wastewater. These blended flows are treated through the facility, therefore no industrial stormwater is discharged and separate permitting is not needed.

## MONITORING PROGRAM

13. Monitoring and Reporting Program (MRP) No. R3-2005-0015 is part of this Order. The MRP requires routine wastewater influent, effluent and receiving water (ground water) sampling and analysis to verify compliance with this Order. Monitoring reports are required monthly and an annual summary report is required by January 30<sup>th</sup> of each year.

## CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

14. These waste discharge requirements are for an existing facility and therefore are exempt from provisions of the California Environmental Quality Act in accordance with Section 15301 of the California Water Code.

#### **GENERAL FINDINGS**

- 15. Discharge of waste is a privilege, not a right, and authorization to discharge is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should assure this and mitigate for any potential adverse changes in water quality due to the discharge.
- 16. On April 22, 2005, the Board notified the Discharger and interested agencies and persons of its intent to consider adoption of waste discharge requirements for the discharge and has provided them with a copy of the proposed Order and an opportunity to submit written comments and scheduled a public hearing.
- 17. In a public hearing on **September 9, 2005**, the Board heard and considered all comments pertaining to the discharge, all evidence in the record, and the applicable law and found this Order consistent with the above findings.
- **IT IS HEREBY ORDERED**, pursuant to authority in Section 13263, 13267 and 13523 of the

California Water Code, that the City of Guadalupe, its agents, successors, and assigns, may discharge waste from the Guadalupe Wastewater Facility providing compliance is maintained with the following:

All technical and monitoring reports submitted pursuant to this Order are required pursuant to Section 13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order or attachments to this Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer, may subject the Discharger to enforcement action pursuant to Section 13268 of the California Water Code.

(Note: General order conditions, definitions and the method of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," dated January 1984, referenced in paragraph E.2. of this Order.)

Throughout these requirements footnotes are listed to indicate the source of requirements specified. Requirement footnotes are as follows:

WC = Water Code BP = Basin Plan

T22 = California Code of Regulations, Title 22, Recycled Water Criteria

Requirements without footnotes are based on staff's professional judgment.

#### A. PROHIBITIONS

- Discharge to areas other than the wet weather storage pond and spray field disposal area depicted on Attachment A of this Order, is prohibited. WC, T22
- 2. Discharge to the spray fields when standing water is present or during rain events is prohibited.

3. Discharge of any wastes including overflow, bypass and runoff from transport, treatment or disposal systems to the Santa Maria River, adjacent drainage ways or adjacent properties is prohibited. WC, T22

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- 4. Bypass of the treatment facilities and discharge of untreated or partially treated wastewater is prohibited. WC, T22
- Discharge of wastewater within 150 feet of any well used for domestic supply or irrigation of food crops is prohibited. T22

## B. DISCHARGE/RECYCLED WATER SPECIFICATIONS

- 1. Daily flow averaged over each month shall not exceed 0.96 million gallons (3,634 m<sup>3</sup>).
- 2. Effluent discharged from the treatment ponds shall not exceed the following limitations:

Monthly

Daily

	(30-Day)	Maxi
<u>Units</u>	<b>Average</b>	<u>mum</u>
mL/L	0.2	0.5
mg/L	60	100
mg/L 60	1	.00
mg/L	1500	
mg/L	230	
mg/1230		
within tl	ne range 6.5	$5 - 8.4^{BP}$
	mL/L mg/L mg/L 60 mg/L mg/L mg/1230	Units Average mL/L 0.2 mg/L 60 mg/L 1500 mg/L 230

- 3. Personnel involved in producing, transporting or using recycled water shall be informed of possible health hazards that may result from contact and use of recycled water. T22
- 7. Use of recycled water shall occur at a time and in a manner to prevent or minimize public contact with recycled water and to prevent ponding in irrigation areas. T22
- 8. Areas irrigated with recycled water shall be posted in English and Spanish to warn the public that recycled water is being used. Signs

- shall be no less than four inches high by eight inches wide and include the wording "RECYCLED WATER DO NOT DRINK". T22
- 9. Recycled water valves shall be of a design to prevent public access. T22
- 10. Proper backflow and cross-connection protection for domestic water services and irrigation wells shall be provided. T22
- 11. Recycled water systems shall be properly labeled and regularly inspected to assure proper operation, absence of leaks, and absence of illegal connections. T22

## C. RECEIVING WATER LIMITATIONS (Ground Water Limitations)

(Receiving water quality is a result of many factors, some unrelated to the discharge. This order considers these factors and is designed to minimize the influence of the discharge to receiving waters.)

### The discharge shall not cause:

- Significant increase of mineral constituent concentrations in underlying ground water, as determined by comparison of samples collected from wells upgradient and downgradient from the discharge.
- 2. Concentrations of chemicals and radionuclides in ground water to exceed limits set forth in Title 22, Chapter 15, Articles 4 and 5 of the California Code of Regulations. BP, WC

### **D.** BIOSOLIDS SPECIFICATIONS

(Note: "Biosolids" refers to non-hazardous sewage sludge as defined in 40 CFR 503.9. Sewage sludge that is hazardous as defined in 40 CFR 261 must be disposed in accordance with RCRA. Sludge with PCB levels > 50 mg/kg must be disposed in accordance with 40 CFR 761.

- 1. All biosolids generated by the Discharger shall be used or disposed of in compliance with the applicable portions of:
  - a. 40 CFR 503: for biosolids that are land applied, placed in surface disposal sites (dedicated land disposal sites or monofills), or incinerated:
  - b. 40 CFR 258: for biosolids disposed in municipal solid waste landfills;
  - c. 40 CFR 257: for all biosolids use and disposal practices not covered under 40 CFR 258 or 503.
  - 40 CFR 503 Subpart B (land application) applies to biosolids applied for the purpose of enhancing plant growth or for land reclamation. Section 503 Subpart C (surface disposal) applies to biosolids placed on the land for the purpose of disposal.

The Discharger is responsible for ensuring that all biosolids produced at its facility are used or disposed of in accordance with these rules, whether the discharger uses or disposes of the biosolids itself or transfers them to another party for further treatment, use, or disposal.

### **E. PROVISIONS**

- Dissolved oxygen concentration in treatment ponds shall be no less than 1 mg/L at the water surface.
- Discharger shall comply with "Monitoring and Reporting Program No. R3-2005-0015" (included as Attachment C of this Order), as ordered by the Executive Officer.
- 3. Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," dated January 1984.
- 4. Treatment and discharge shall not cause pollution or nuisance as defined in Section 13050 of the

- California Water Code. WC
- 5. Treatment, storage and disposal facilities shall be managed to exclude the public and posted to warn the public of the presence of wastewater.
- 6. Freeboard shall exceed two feet in all wastewater ponds unless ponds are specifically designed for a different freeboard.
- The Discharger shall develop and implement a Wastewater Collection System Management Plan. The essential elements of the Wastewater Collection System Management Plan are described on Attachment D of this Order. All elements of the Management Plan outlined in Attachment D shall be clearly labeled and addressed by the Discharger. If any element is not appropriate or applicable to a Discharger's program, the program shall provide rationale for not including the element in the program. The Management Plan shall be submitted to the Executive Officer for approval by September 9, 2006. The Management Plan shall be reviewed and updated (as needed) Summary of findings and changes annually. resulting from annual review of the plan shall be included in the Annual Monitoring Report (due January 30<sup>th</sup>).
- 8. The Discharger shall develop and implement a salts minimization plan in order to minimize concentrations of salts in the discharge. The salts minimization plan shall be submitted with the annual summary report beginning in 2006, with annual reviews and progress summaries included thereafter
- The Discharger shall perform a ground water monitoring well investigation to identify and resolve apparent data inconsistencies associated with Well 7 and implement representative upgradient ground monitoring well facilities. An investigation plan shall be submitted by November 9, 2005. A report of findings, corrective action plan and implementation schedule shall be submitted by January 30, 2006. Necessary improvements to

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## September 9, 2005

- ground water monitoring well facilities shall be completed by May 30, 2006.
- 9. Pursuant to Title 23, Division 3, Chapter 9, of the California Code of Regulations, the Discharger must submit a report to the Executive Officer, no later than **March 9**, **2010**, addressing:
- a. Whether there will be changes in the continuity, character, location or volume of the discharge; and,
- b. Whether, in their opinion, there is any portion of the Order that is incorrect, obsolete or otherwise in need of revision.

**I, Roger W. Briggs, 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 Coast Region, on September 9, 2005.

Roger Briggs, Executive Officer	
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September 9, 2005	
Date	

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