

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401**

PROPOSED WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2006-0005

Waste Discharger Identification No. 3 270104001

FOR

**CITY OF GONZALES
WASTEWATER TREATMENT PLANT
Monterey County**

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

SITE OWNER AND LOCATION

1. The City of Gonzales (hereafter "Discharger" or "City") owns and operates the Gonzales Wastewater Treatment Plant (hereafter "Facility").
2. The Facility is located at the end of Short Road, which intersects River Road next to the Salinas River, approximately two miles southwest of City of Gonzales, as shown in Attachment "1."

PURPOSE OF ORDER

3. On June 8, 2005, the City of Gonzales submitted a complete Report of Waste Discharge for authorization to expand and improve the City of Gonzales Wastewater Treatment Plant, and continue discharging treated domestic wastewater within the Salinas River groundwater sub-basin.
4. Order No. R3-2006-0005 revises waste discharge requirements for the Facility and is intended to:
 - a. allow the discharge described in the Discharger's Report of Waste Discharge;

- b. approve the planned expansion and improvement of the Facility;
- c. uphold State water quality standards, and;
- d. revise the Monitoring and Reporting Program.

FACILITY DESCRIPTION

5. The Discharger provides sewage service to the City of Gonzales and has direct responsibility for the wastewater collection and transport system.
6. The Facility is located on approximately 62 acres with pretreatment headworks, an emergency overflow pond, eight treatment ponds, and three infiltration basins, as shown in Attachment "2."

Discharge Type

7. The Facility discharges treated domestic and industrial wastewater.

Design and Current Capacity

8. The Discharger's May 19, 1998 Final Report, Evaluation of Wastewater Treatment Facility, determined that the Facility has capacity to handle an annual monthly average of 0.763

million gallons per day (mgd). The Discharger is proposing design improvements in phases. Phase 1 will increase design capacity to 1.3 mgd. Phase 2 improvements are expected to increase design capacity to 3.0 mgd.

9. Current pretreatment occurs at the headworks and consists of two parallel grinders with overflow and bypass through a manual, vertical screen bar rack, as shown in Attachment "C."
10. The wastewater is treated biologically and physically in oxidation ponds and infiltration basin. Additional biological and physical treatment occurs within the soil column below the Facility.
11. Current treatment consists of six, approximately two-acre, aerated facultative ponds in parallel; two, approximately five-acre, polishing ponds in parallel; and followed by three, approximately seven-acre, infiltration basins used on an alternating basis, as shown in Attachment "3."
12. Wastewater disposal occurs by percolation and evaporation within the ponds and infiltration basins.
13. Phase 1 expansion of pretreatment capability will include a grit removal system to reduce wear and tear on pumps and grinders, and a larger new headworks with two grinders capable of handling flows up to 1.3 mgd and the ability to expand in the future to 3 mgd plus peak flows.
14. Phase 1 expansion of treatment capability will include modifying operations from six parallel ponds to two parallel sets of three ponds in series, addition of two 15 hp aerators to ponds 1 and 2, reconditioning or replacement of all 7.5 hp aerators to improve efficiency, and addition of 7.5 hp aerators to ponds 3 and 4.
15. The Facility from January 2004 through December 2004 treated an average flow of 0.524 mgd. The peak monthly average flow

occurred during October of 2004 and was 0.624 mgd.

Treatment Efficiency

16. Analysis of the City water supply in September 2005, yielded the following water quality information:

Constituent	mg/L
Total Dissolved Solids	264
Sodium	19
Chloride	16
Sulfate	64
Boron	0.33
Nitrate (as N)	1.4

17. A review of the influent data collected during 2004, submitted indicates the following:

Constituent	Influent 2004 Ave. (mg/l)
BOD ₅	212
TSS	395

18. A review of the City's wastewater effluent data collected during 2004, indicates the following:

Constituent	Treated Wastewater Effluent 2004 Ave. (mg/l)
BOD ₅	81
TSS	77
TDS	784
Sodium	178
Chloride	208
Sulfate	110
Boron	0.3
Nitrate (as N)	1.5
TKN (as N)	21.5
Total Nitrogen (as N)	23

Geology and Land Use

19. The treatment ponds and infiltration basins are located on relatively level topography consisting of alluvial (sand and silt) soils to a depth of at least 10 feet.

20. The Facility is surrounded, except to the southeast, by agricultural land that has traditionally been used in row crop production. Immediately southeast of the Facility is an active auto wrecking and salvage yard.

Surface and Groundwater

21. The Salinas River is located near the southwestern edge of the Facility and flows in a northwesterly direction and toward Monterey Bay. The Facility has levees designed to protect the ponds from a 100-year flood event.
22. Groundwater beneath the Facility and near the discharge point is unconfined and is a source of recharge for lower confined aquifers to the northwest.
23. Depth to groundwater below the Facility ranges from 10 feet to 15 feet. The groundwater gradient is northwesterly but can vary greatly due to river flow and local agricultural pumping practices. A review of shallow groundwater monitoring during September 2005, indicates the following:

Constituent (mg/l)	MW - 1 (mg/L)	MW - 2 (mg/L)	MW - 3 (mg/L)
Total Dissolved Solids	816	748	496
Sodium Chloride	158	134	32
Sulfate	250	199	38
Boron	51	97	132
Boron	0.51	0.52	0.42
Nitrate (as N)	1.8	2.0	N.D.

The Discharger added three groundwater-monitoring wells in November of 2005. All six groundwater monitoring well locations are shown in Attachment "2".

MONITORING PROGRAM

24. Monitoring reports are due quarterly, January, April, July, and October. An annual report summarizing the year's events and monitoring is due in January.

BASIN PLAN

25. The Water Quality Control Plan, Central Coast Basin (Basin Plan) incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State waters.
26. Present and anticipated beneficial uses of the Salinas River downstream of the Facility include:
- Municipal and Domestic Supply
 - Agricultural Supply
 - Industrial Process Supply
 - Industrial Service Supply
 - Groundwater Recharge
 - Water Contact Recreation
 - Non-Contact Water Recreation
 - Wildlife Habitat
 - Cold Freshwater Habitat
 - Warm Freshwater Habitat
 - Migration of Aquatic Organisms
 - Spawning, Reproduction, and/or Early Development
 - Rare, Threatened, or Endangered Species
 - Freshwater Replenishment
 - Commercial and Sport Fishing
27. The Basin Plan lists the following present and anticipated beneficial uses of groundwater near the Facility:
- Municipal and Domestic Supply
 - Agriculture Supply
 - Industrial Supply

ENVIRONMENTAL ASSESSMENT

28. The Discharger adopted a negative declaration for the proposed phase one improvements to the Gonzales Wastewater Treatment Facility in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) and the California Code of Regulations, on June 20, 2005.
29. The State Board established California's anti-degradation policy in State Board

Resolution 68-16, which incorporates the requirements of the federal anti-degradation policy. Resolution 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings.

GENERAL FINDINGS

30. The discharge has been regulated by Waste Discharge Requirements Order No. 01-39, adopted by the Regional Board on May 18, 2001. The Regional Board has regulated this discharge since 1951.
31. 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 any potential adverse changes in water quality due to discharge.
32. On December 30, 2005, the Regional Water Board notified the Discharger, interested agencies, and persons of its intent to revise Waste Discharge Requirements for the discharge and has provided them with a copy of the proposed Order and an opportunity to submit written views and comments.
33. In a public hearing on March 24, 2006, the Regional Board heard and considered all public comments pertaining to the discharge and found this Order consistent with the above findings.

IT IS HEREBY ORDERED, pursuant to authority in Section 13263 of the California Water Code, the City of Gonzales, its agents, successors, and assigns may discharge wastes from the Gonzales Wastewater Treatment Plant, providing compliance is maintained with the following:

Note:

- Other prohibitions and 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.)

A. PROHIBITIONS

1. Discharge of treated wastewater to areas other than the designated disposal area and the wastewater ponds as shown on Attachment "2," is prohibited unless approved by the Executive Officer.
2. Discharge of any wastes including sludge, overflow, bypass, seepage, and overspray; from transport, treatment, storage, or a disposal system to the Salinas River, any adjacent drainageways, or adjacent properties is prohibited.
3. Bypass of the treatment facilities and discharge of untreated or partially treated wastes directly to designated disposal areas is prohibited, unless approved by the Executive Officer.

B. SPECIFICATIONS

Effluent

1. Daily flow averaged over each month shall not exceed 0.763 mgd. Upon completion of Phase 1 improvements as described by this Order, or an engineered alternative approved by the Executive Officer, daily flow averaged over each month shall not exceed 1.3 mgd.
2. Effluent discharged shall not have a pH less than 6.5 or greater than 8.3.
3. Effluent shall not be discharged within 100 feet of any existing water supply wells or surface waters.

Groundwater

4. The discharge shall not cause nitrate concentrations in groundwater downgradient of the disposal area to exceed 10 mg/L nitrate (as N).
5. The discharge shall not cause a significant increase of chemical, mineral, or organic constituent concentrations in underlying groundwater, as determined by comparison of samples collected from wells located upgradient and downgradient of the disposal areas.
6. Effluent discharged to percolation ponds or infiltration basins shall not cause underlying groundwater to exceed the following limits:

Constituent	Units	Maximum
Total Dissolved Solids	mg/L	1500
Sodium	mg/L	250
Chloride	mg/L	250
Sulfate	mg/L	600
Boron	mg/L	0.5
Nitrate	mg/L	10

7. The discharge shall not cause 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.

System Operation

8. Treatment and disposal areas shall be fenced and posted (English and Spanish) to advise the public that the facility contains domestic wastewater.
9. Treatment ponds shall have a freeboard of at least two feet at all times unless lesser freeboard greater than one foot, is certified in writing by a California registered civil engineer as adequate to prevent overtopping, overflows, or levee failures.

10. To determine pond freeboard identified in Specification B.9, the Discharger shall install and maintain permanent markers with calibration indicating the water level at design capacity and available operational freeboard.
11. Infiltration basin use shall be cycled to permit emptying for maintenance activities.
12. Infiltration basins shall be maintained at least annually.
13. Surface water drainage shall be excluded from the treatment ponds and infiltration basins.

Solid Waste

14. All solids generated from the screening and/or treatment process must be reclaimed or disposed of in a manner acceptable to the Executive Officer.

Storm Water

15. All storm water contacting domestic wastewater shall be treated and disposed onsite.

Inflow/Infiltration

16. Best management practices shall be implemented to minimize the inflow and infiltration of storm water into the Facility.

Salts Management

17. The Discharger shall maintain an ongoing salts management program with the intent of reducing mass loading of salts in treated effluent to a level that will ensure compliance with effluent limitations and not negatively impact beneficial uses of groundwater.
18. Salt reduction measures shall focus on all potential salt contributors to the collection system, including water

supply, residential, commercial, and industrial dischargers. The Discharger shall evaluate the applicability of AB 334 and implement it as appropriate and feasible to reduce salt loading from the domestic use of water softeners.

19. The salt management plan shall also address the concentration of salts in the wastewater treatment process as a result of hydraulic retention times and evaporation rates.

C. PROVISIONS

1. The requirements prescribed by this Order No. R3-2006-004 supersedes requirements prescribed by Order No. 01-039, adopted by the Regional Board on May 18, 2001. Order No. 01-039, Waste Discharge Requirements for the City of Gonzales Wastewater Treatment Plant, Monterey County, is hereby rescinded.
2. The Discharger shall comply with the attached Monitoring and Reporting Program No. R3-2006-0005, as specified by the Executive Office
3. The Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January 1984.
4. All technical and monitoring reports submitted pursuant to this Order are required pursuant to Section 13267 of the California Water Code. The technical and monitoring reports are necessary to determine compliance with the requirements of this Order and to determine the discharge's effect, if any, on receiving waters. Evidence in support of these requirements may be found in the Discharger's Report of Waste Discharge and the Regional Board's files related to the Facility. Failure to submit reports in

accordance with schedules established by this Order, attachments to this Order, or failure to submit a report of sufficient technical quality acceptable to the Executive Officer, may subject the discharger to enforcement action pursuant to Section 13268 of the California Water Code.

5. Technical and monitoring reports shall be stamped and signed by a civil engineer who is familiar with the wastewater treatment plant operations and discharge.
6. The Discharger shall submit a Long-term Wastewater Management Plan (LWMP) to the Executive Officer, **by March 1, 2008**. The LWMP shall address facility expansion beyond 1.3 mgd and include the following:
 - a. Current treatment and disposal capacity.
 - b. Projected wastewater flows for ten years.
 - c. An evaluation of recycling and reuse.
 - d. Proposed capacity, treatment, and disposal improvements.
 - e. A hydrogeologic study with a recommendation for improvements to the groundwater-monitoring system.
 - f. Timeline for implementation of proposed improvements.
 - g. Documentation of financial resources to complete the plan.

At a minimum, expansion of capacity above 1.3 mgd shall include lined treatment ponds with a relatively impermeable membrane (i.e., two feet of soil with a permeability of less than 10^{-6} centimeters per second, or an engineered alternative approved in writing by the Executive Officer), improved treatment to secondary standards, nitrogen removal, and appropriate expansion of the disposal

area. The groundwater-monitoring system shall be designed to monitor unimpacted upgradient groundwater and downgradient groundwater outside the disposal area.

7. The Discharger shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or waste management activities that may result in noncompliance with this Order.
8. This Order may be reopened to address any changes in State or Federal plans, policies, or regulations that would affect the quality requirements for the discharges.
9. Pursuant to Title 23, Division 3, Subchapter 9, of the California Code of Regulations, the Discharger must submit a written report to the Executive Officer not later than March 24, 2016 that addresses the following:
 - a. Whether there will be changes in the continuity, character, location, or volume of the discharge;
 - b. Whether, in their opinion, there is any portion of the Order that is incorrect, obsolete, or otherwise in need of revision; and
 - c. A summary of all violations of Waste Discharge Requirements, Order No. R3-2006-0005, which occurred since adoption of the order along with a description of the cause(s) and corrective action taken.

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 March 24, 2006.

Roger W. Briggs, Executive Officer