

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2005-0704

CLEANUP AND ABATEMENT ORDER NO.

FOR
LAKE COUNTY SANITATION DISTRICT
SOUTHEAST REGIONAL WASTEWATER SYSTEM
LAKE COUNTY

This Order is issued to Lake County Sanitation District (hereafter Discharger) and is based on provisions of California Water Code Section 13304 which authorize the Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Board) to issue a Cleanup and Abatement (C&A) Order.

The Executive Officer of the Regional Board finds, with respect to the Discharger's acts, or failure to act, the following:

1. The Discharger owns and operates the Southeast Regional wastewater collection, treatment and disposal system that serves the City of Clearlake, extending northwest including Pirates Cove and south including the community of Lower Lake. The treatment plant is in Sections 9, 10, 15, and 16, T13N, R7W, MDB&M.
2. Waste Discharge Requirements (WDRs) Order No. 96-166 prescribes requirements for secondary treatment of 4.2 million gallons per day (mgd) of domestic wastewater with storage in a 176 million gallon effluent storage reservoir. The wastewater is subsequently combined with make-up water from Clear Lake and pumped into the Southeast Geysers Pipeline for transport to, and disposal by injection into, the geothermal resource.
3. The District's sewage collection system has historically experienced overflows that are the result of inflow/infiltration problems within the collection system; grease blockages; and equipment failures, including lift stations. The District lacks an up-to-date maintenance/replacement schedule for the collection system components; and has an inadequate inspection/repair program for the Southeast Geysers Pipeline.

Previous Enforcement

4. The Southeast Regional facility has had a long history of sewage spills and overflows. On 22 March 1991, the Regional Board adopted Cease and Desist Order (CDO) No. 91-084, establishing a time schedule for the Discharger to achieve compliance with WDRs Order No. 88-009 and imposing a connection restriction. Following requests by the Discharger for a time extension, on 22 November 1991 the Regional Board adopted CDO No. 91-202 which allowed the Discharger an extended time schedule for the construction of projects to eliminate sewage overflows and spills, and continued the connection restriction.
5. On 6 December 1996, the Regional Board adopted Amended CDO No. 91-202, which extended the schedule for completion of the treatment plant expansion and reconstruction of the main lift stations (Pump Stations 1 and 2). The Discharger made a number of additional system improvements, including replacing Pump Station No. 4 (1995), placing the Southeast Geysers Pipeline into service

(1997), reconstructing the wastewater treatment facility (1998), and replacing Pump Station No. 3 and portions of the 18-inch gravity line along Lakeshore Drive (1999). The Regional Board subsequently rescinded CDO No. 91-202 on 28 January 2000.

Recent Sewage Spills

- 6. Discharge Prohibition No. A.1 of WDRs Order No. 96-166 states: *“Discharge of wastes, effluent, recycled water or injection water to surface waters or surface water drainage courses is prohibited.”*
- 7. Discharge Prohibition No. A.2 of WDRs Order No. 96-166 states: *“Bypass or overflow of untreated or partially treated effluent is prohibited.”*
- 8. Between March 2002 and April 2004, the Discharger reported 32 spills of raw sewage (860,550 gallons) from its collection system and two spills of treated wastewater (383,790 gallons) from the Southeast Geysers Pipeline. These spills are a violation of Discharge Prohibitions Nos. A.1 and A.2, and are summarized below.

<u>Date of Spill</u>	<u>Volume Discharged (Gallons)</u>	<u>Discharge to Surface Water Drainage Course?</u>	<u>Type of Waste</u>	<u>Cause of Spill</u>
22 March 02	12,000	Yes	Treated	Southeast Geyser Pipeline break
10 July 02	400	Yes	Raw sewage	Debris blockage in sewer line
14 Dec 02	9,600	Yes	Raw sewage	I/I problems caused by heavy rains
16 Dec 02	10,500	Yes	Raw sewage	Pipe wall deterioration in force main
20 Dec 02	2,025	Yes	Raw sewage	I/I problems from heavy rains
31 Dec 02	1,125	Yes	Raw sewage	I/I problems caused by heavy rains
20 Feb 03	150	Yes	Raw sewage	Grease blockage collection line
23 Feb 03	60	Yes	Raw sewage	Grease blockage collection line
3 Mar 03	500	No	Raw sewage	Blockage in service lateral
10 Mar 03	1,000	Yes	Raw sewage	Blockage in manhole from vandalism
17 Mar 03	198	Yes	Raw sewage	Roots and grease blockage
24 Mar 03	27	Yes	Raw sewage	Roots and grease blockage
16 Jan-11 Apr 03	371,790	Yes	Treated	Southeast Geyser Pipeline leak
27 Apr 03	800	Yes	Raw sewage	Blockage in sewer line
8 May 03	1,880	Yes	Raw sewage	Grease blockage in collection system
20 May 03	300	Yes	Raw sewage	Pump station failure
23 May 03	300	Yes	Raw sewage	Pump station failure
23 July 03	1,000	Yes	Raw sewage	Grease blockage in sewer collector
4 Aug 03	180	No	Raw sewage	Grease blockage in sewer collector
16 Aug 03	12,765	No	Raw sewage	Underground surge tank failure
15 Oct 03	595	Yes	Raw sewage	Grease blockage in collection system
9 Nov 03	600	No	Raw sewage	Grease blockage in main collector
6 Dec 03	1200	No	Raw sewage	Grease blockage in main collector
14 Dec 03	444,000	No	Raw sewage	Two broken force mains
17 Dec 03	1,130	Yes	Raw sewage	Grease blockage in collection line

<u>Date of Spill</u>	<u>Volume Discharged (Gallons)</u>	<u>Discharge to Surface Water Drainage Course?</u>	<u>Type of Waste</u>	<u>Cause of Spill</u>
24 Dec 03	144,000	Yes	Raw sewage	Pump malfunction at pump station.
24 Dec 03	9,000	Yes	Raw sewage	I/I problems caused by heavy rains
29 Dec 03	27,000	Yes	Raw sewage	I/I problems caused by heavy rains
16,18 Feb 04	107,925	Yes	Raw sewage	I/I problems caused by heavy rains
25 Feb 04	6,480	Yes	Raw sewage	Pump Station No. 2 malfunction
25,26 Feb 04	75,600	Yes	Raw sewage	I/I problems caused by heavy rains
16 Apr 04	210	No	Raw sewage	Grease blockage in lateral

9. The spills are further described in Administrative Civil Liability (ACL) Complaint No. R5-2004-0521, which was issued by the Executive Officer on 17 May 2004.
10. ACL Complaint No. R5-2004-0521 was issued for \$300,000. The Discharger proposed settlement of the ACL Complaint by agreeing to (a) pay \$210,000 (in two installments) and (b) comply with this Cleanup and Abatement Order.
11. On 21 July 2004, staff from both the Regional Board and the State Water Resources Control Board inspected the Discharger’s operation and maintenance records for the Southeast Regional facility. A 28 September 2004 inspection report documents a number of shortcomings, which are addressed in this Order.

Regulatory Considerations

12. The Regional Board’s Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan) designates beneficial uses, includes water quality objectives to protect the beneficial uses, and includes implementation plans to implement the water quality objectives.
13. Surface water drainage from the facility and collection system is to Clear Lake and Cache Creek. The beneficial uses of Clear Lake and Cache Creek, as stated in the Basin Plan, are municipal and domestic supply; agricultural supply; industrial service supply; water contact recreation; noncontact water recreation; warm freshwater habitat, cold freshwater habitat; spawning, reproduction, and/or early development; and wildlife habitat. Surface water drainage from the Southeast Geysers Pipeline also includes Putah Creek or its tributaries. Putah Creek is tributary to Lake Berryessa. The beneficial uses of Lake Berryessa, as stated in the Basin Plan, are municipal and domestic supply; agricultural supply; power generation; water contact recreation; noncontact water recreation; warm freshwater habitat; cold freshwater habitat; spawning, reproduction and/or early development; and wildlife habitat.
14. The beneficial uses of the underlying groundwater are municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply.
15. Section 13304(a) of the California Water Code provides that: “Any person who has discharged or discharges waste into waters of this state in violation of any waste discharge requirements or other order or prohibition

issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the water of the state, and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board clean up the waste or abate the effects of the waste, or, in case of threatened pollution or nuisance, take other necessary remedial action, including but not limited to, overseeing cleanup and abatement efforts. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.

16. Section 13267(b) of the California Water Code states: "In conducting an investigation specified in subdivision (a), the regional 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 regional 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 regional 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."
17. The technical reports required by this Order are necessary to assure compliance with WDR Order No. 96-166 and to assure protection of public health and safety. The Discharger operates the facility that discharges the waste subject to this Order.
18. The issuance of this Order is an enforcement action by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act, pursuant to Section 15321(a)(2), Title 14, California Code of Regulations.
19. Any person affected by this action of the Regional Board (except the Lake County Sanitation District which has waived its right to petition this Order) may petition the State Water Resources Control Board to review the action in accordance with Section 2050 through 2068, Title 23, California Code of Regulations. The petition must be received by the State Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the Regional Board action took place. Copies of the law and regulations applicable to filing petitions are available at www.swrcb.ca.gov/water_laws/index.html and also will be provided upon request.

IT IS HEREBY ORDERED that pursuant to Sections 13304 and 13267 of the California Water Code, Lake County Sanitation District, its agents, successors, and assigns, shall cleanup and abate the discharges of waste from the Southeast Regional wastewater collection, treatment and disposal system such that all requirements prescribed in WDRs Order No. 96-166 are met.

1. The Discharger shall **immediately** comply with all aspects of WDRs Order No. 96-166 (or subsequent WDRs that rescind and replace Order No. 96-166).
2. The Discharger shall **immediately** implement its existing January 2000 *Operation and Maintenance Manual* and by **15 March 2005** shall submit a technical report documenting that implementation. The technical report shall verify that the Discharger's maintenance management system includes the

following components:

1. A written work order system that tracks all corrective maintenance;
 2. An equipment history file for each major piece of equipment such as pumps, motors, generators and vehicles;
 3. A written schedule of preventive maintenance, which shall be broken down into weekly, monthly and annual inspections;
 4. A written summary or check sheet documenting at least the date and type of preventive maintenance work actually performed;
 5. A calibration schedule and records for all instruments and flow measuring devices;
 6. Written emergency response guidelines;
 7. A logbook for the operators and maintenance workers in which to document both the routine tasks and any unusual observations.
 8. A system to track the time and cost for major repairs
 9. A prioritization system for corrective maintenance
 10. A list of work orders noting progress/completion status; and
 11. A list of specialized or periodic tests or analyses performed on critical equipment.
3. By **1 March 2005**, the Discharger shall submit a report showing that it has installed two new manholes along the 18-inch gravity collection main pipeline between Bay Street and Pump Station No. 3, and has completed the line cleaning/video inspection of the 4,500 feet of main 18-inch gravity collection pipeline between Bay Street and Pump Station No. 3.
4. By **1 March 2005**, the Discharger shall submit a workplan for smoke testing and/or video surveying those segments of the collection system known to exhibit significant inflow and infiltration (I/I) that are in critical capacity areas, including those areas subject to flooding from Clear Lake. Critical capacity areas may be determined through system modeling and/or examination of sanitary sewer overflow history. The timeline for completion of work shall not exceed three years.
5. By **30 March 2005**, the Discharger shall submit an *EMT Staffing Report* documenting the steps taken to fill the three currently vacant electromechanical technician (EMT) positions and if filled, shall document that these employees are completing the tasks assigned to these EMT positions. The EMT staffing report shall demonstrate due diligence in the pursuit of filling these positions. If the positions are not filled by this date, then the Discharger shall describe how the system will be fully maintained while the positions remain vacant.
6. By **1 July 2005**, the Discharger shall submit a *Manhole Rehabilitation Report* documenting that all six manholes at the outlet of the 10-inch and 14-inch force mains from Pump Station No. 2 (numbered by the Discharger as 1, 2, 3, 1A, 1B, and 1C) have been repaired and lined to resist sulfide corrosion.
7. By **1 August 2005**, the Discharger shall submit a *Revenue Plan* that describes the costs and funding source associated with maintaining its collection system such that it complies with this C&A Order and with the WDRs Order No. 96-166. Should the Revenue Plan show that there are inadequate funds, the Discharger must also include a proposed implementation schedule that shows how they will raise the necessary funds.

8. By **1 August 2005**, the Discharger shall submit a technical report describing an *Operation and Maintenance Staffing Analysis*. The analysis shall include a review of current staffing levels, allocation of staff tasks, an analysis of whether current staff allocation is adequate, and if necessary, describe shortfalls and make recommendations for future staffing needs. If the analysis indicates additional staff are necessary, then the report shall also include a *Staffing Contingency Plan* describing the steps the Discharger shall take in the short term and long term to assure that it has enough staff (either directly working for the district or under contract) to implement its January 2000 Operation and Maintenance Manual. If the analysis indicates additional staff are necessary, the *Staffing Contingency Plan* shall also contain a proposed timeline for acquiring the necessary staff.
9. By **1 December 2006**, the Discharger shall submit a report showing that it has developed a *Hydraulic Capacity Model* that will be used to assess the capacity of the existing sewer system and identify areas where future capital improvements can have the greatest impact on system capacity. The model will also be used to forecast improvements from new development, and provide a hydraulic analysis of system improvements.
10. By **1 July 2008**, the Discharger shall submit an *AD 1-6 Manhole Rehabilitation Report* documenting that it has repaired the 470 selected manholes in the AD 1-6 area, described as "Program A2" in the October 1994 Inflow/Infiltration Report. The Discharger shall utilize all available modern methods and technology, including chemical grout sealing, to repair the inflow and infiltration problems at these manholes as well as any other problem manholes it identifies in other areas. At least 25% (i.e., 118) of the manholes shall be repaired each year, beginning in 2005. If a specific manhole is not in need of repair then the Discharger shall provide documentation showing a repair is not necessary. Technical reports shall be submitted by **1 July 2005, 1 July 2006, and 1 July 2007**, documenting that at least 25% of the manholes were repaired during the previous year.
11. By **1 January 2008**, the Discharger shall submit a report describing the results of the smoke testing and/or video surveying program required by Item No. 4, above. If the program results show that certain collection system components need repair the report shall also contain a proposed schedule for those repairs.
12. **Beginning 1 May 2005**, and by the first day of the second month following each calendar quarter (i.e., by **1 February, 1 May, 1 August, and 1 November each year**), the Discharger shall submit a progress report describing the work completed to date regarding each of the reporting requirements described above.

This Order in no way limits the authority of this Regional Board to require additional investigation and cleanup at the facility consistent with the California Water Code. This Order may be revised by the Executive Officer as additional information becomes available.

In addition to the above, the Discharger shall comply with all applicable provisions of the California Water Code that are not specifically referred to in this Order. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all technical reports shall be prepared by, or under the

supervision of, a California Registered Engineer or Registered Geologist and signed by the registered professional.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability.

Failure to comply with this Order or with the WDRs may result in the assessment of Administrative Civil Liability up to \$1,000 or up to \$10,000 per day of violation, depending on the violation, pursuant to the California Water Code, including sections 13268, 13350 and 13385. The Regional Board reserves its right to take any enforcement actions authorized by law.

This Order is effective upon the date of signature.

THOMAS R. PINKOS, Executive Officer

8 February 2005

(Date)

GJC/WSW