## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

81 Higuera Street, Suite 200 San Luis Obispo, California 93401-5427

**ORDER NO. 92-93** 

# WASTE DISCHARGE REQUIREMENTS AND WATER RECLAMATION REQUIREMENTS FOR LOS ALAMOS COMMUNITY SERVICES DISTRICT SANTA BARBARA COUNTY

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

- Norman R. Rock, Vice President of the Los Alamos Community Services District's Board of Directors, filed a Report of Waste Discharge on March 16, 1992 in accordance with Section 13260 of the California Water Code. The report was filed on behalf of the Los Alamos Community Services District for authorization to discharge treated domestic wastewater within the San Antonio Creek sub-basin. The information supports a request for an expansion of the land disposal spray irrigation system.
- 2. The Los Alamos Community Services District (hereafter Discharger), 405 Bell Street, Post Office Box 675, Los Alamos, CA 93440, owns and operates a wastewater collection, treatment, disposal, and reclamation system approximately one mile northwest of the community. The facilities are in Section 19, T8N, R32W, SB B&M, as shown on Attachment "A" of this Order.
- 3. The facility discharges an average dry weather flow of 70,000 gallons-per-day (gpd) (265 m³/day) of treated wastewater. The treatment facility consists of a lift station, headworks (bar screen and comminutor) and two lined mechanically-aerated oxidation ponds. Wastewater is discharged to an evaporation/percolation pond, which also stores the effluent prior to irrigation, and reclaimed at a 12-acre

- spray irrigation area. The current treatment capacity is 100,000 gpd (378 m³/day) average wet-weather flow. Proposed flows are 135,000 gpd (511 m³/day), average dry weather flow and 176,000 gpd (666 m³/day), average wet-weather flow.
- 4. The Discharger uses a 12-acre land disposal area to accommodate the current wastewater flow in addition to rainfall from a 100-year season. The design capacities of the lift station pump and each of the two ponds are 150,000 gpd (568 m³/day) and 400,000 gpd (1,514 m³/day), respectively. Allowable flow is limited by the spray irrigation system's capacity of 70,000 gpd (265 m³/day).
- 5. To accommodate the increase of allowable flow, the Discharger proposes to add 17.6 acres for spray irrigation, a pump station, and two new catch basins. The catch basins will be piped together and used for storage containment of irrigation water and storm runoff. Additionally, the Discharger proposes to expand the evaporation/percolation pond to 51 acre-feet. Designs show these improvements will increase design capacity to 135,000 gpd, average dry weather flow.
- 6. A containment dike currently impounds wastewater runoff from the site. A new containment dike will capture runoff from the proposed spray reclamation area. Wastewater will be collected behind the dikes and pumped to the spray disposal areas.

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- 7. Subsurface soils underlying the site consist of alluvial deposits (sands and sandy gravels interbedded with occasional clay layers) to 90 feet deep. Beneath the alluvium lies the Paso Robles formation, which extends to 600 feet deep. A low-permeability layer perches the shallow ground water, at approximately 30 feet deep.
- 8. The Discharger supplies water to the community from two wells 510 and 535 feet deep over one-half mile upgradient from the disposal site (shown on Attachment "A"). Ground water quality in the vicinity of the discharge is as follows (concentrations in mg/l):

	Los Alamos Well No. 3	Perched Ground Water Beneath the Site
Total Dissolved	255 d Solids	922
Sodium	39	210
Chloride	62	475
Nitrate (NO³)	12	55
pН	6.3	7.2

- San Antonio Creek is over one mile south of the project site and flows in a westerly direction. The site is outside of the 100-year flood plain.
- 10. These waste discharge requirements are being revised to govern an expanded spray irrigation disposal area. The discharge has been regulated since adoption of Waste Discharge Requirements Order No. 85-97, on July 12, 1985.
- 11. The Water Quality Control Plan, Central Coastal Basin (Basin Plan), was adopted by the Board on November 17, 1989. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State waters.
- 12. Present and anticipated beneficial uses of ground water in the vicinity of the discharge include:

- a. Domestic and Municipal Supply;
- b. Agricultural Supply; and,
- c. Industrial Supply.
- 13. Present and anticipated beneficial uses of San Antonio Creek that could be affected by the discharge include:
  - a. Domestic and municipal supply;
  - b. Water contact recreation;
  - c. Non-contact water recreation;
  - d. Warm fresh-water habitat;
  - e. Ground water recharge;
  - f. Agricultural supply; and,
  - g. Wildlife habitat.
- 14. Proposed uses of reclaimed water include spray irrigation on pasture land.
- 15. State Department of Health Services' criteria for use of reclaimed water is in Title 22, Chapter 3, of the California Code of Regulations. The Board has consulted with the State Department of Health Services regarding the regulation of this discharge. The waste is an oxidized, undisinfected wastewater suitable for irrigation of fodder, food and seed crops.
- 16. The Los Alamos Community Services District certified a final Environmental Impact Report on September 25, 1991 in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) and the California Code of Regulations. environmental impact report identified no significant adverse changes in the environment resulting from the project. Significant impacts which can be feasibly mitigated include the potential to degrade the ground water underlying the site. Mitigation measures include the storage of wastewater and rainwater from at · least the 100-year rainfall season, fenced spray irrigation disposal areas, and limiting irrigation on steep slopes.
- 17. 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 the discharge.

- 18. On September 3, 1992, the Board notified the Discharger and interested agencies and persons of its intent to reissue 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.
- 19. After considering all comments pertaining to this discharge during a public hearing on November 13, 1992, this Order was found consistent with the above findings.

IT IS HEREBY ORDERED, pursuant to authority in Section 13263 of the California Water Code, the Los Alamos Community Services District, its agents, successors, and assigns, may discharge waste at the facility described above, provided 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. Applicable paragraphs are referenced in paragraph E.3. of this Order.)

### A. PROHIBITIONS

- 1. Discharge to areas other than disposal site shown in Attachment "A", is prohibited.
- Discharge of any wastes including overflow, bypass, and seepage from transport, treatment, or disposal systems to San Antonio Creek or adjacent drainageways or adjacent properties is prohibited.

3. Bypass of the treatment facility and discharge of un-treated or partially treated wastes directly to the disposal site is prohibited.

#### B. DISCHARGE SPECIFICATIONS

- 1. Daily flow averaged over each month shall not exceed 176,000 gallons (666 m<sup>3</sup>).
- 2. Surface drainage shall be excluded from disposal areas.
- Freeboard shall exceed two feet in all disposal/storage ponds and one foot in all treatment ponds.
- 4. Discharge shall not occur within 100 feet of any well.

### C. GROUND WATER LIMITATIONS

- 1. The discharge shall not cause nitrate concentrations in the groundwater downgradient of the disposal area to exceed 8 mg/l (as N).
- The discharge shall not cause a significant increase of mineral constituent concentrations in underlying ground waters, as determined by comparison of samples collected from wells located upgradient and downgradient of the disposal area.
- The discharge shall not cause concentrations of chemicals and radionuclides in groundwater to exceed limits set forth in Title 22, Chapter 15, Articles 4 and 5 of the California Code of Regulations.

### D. RECLAMATION SPECIFICATIONS

1. Reclaimed water shall not contain constituents in excess of the following:

Constituent	<u>Units</u>	Monthly Mean	Daily 1/2 Maximum
Biochemical Oxygen Demand Total Non-filterable	mg/l	80	120
Residue	mg/l	80	120
Total Dissolved Solids	mg/l	Water Supply + 300	850
Settleable solids	ml/l	0.3	0.5
Sodium	mg/l	Water Supply + 70	200
Chloride	mg/l	Water Supply + 50	200

- \* As determined from four consecutive samples.
- Reclaimed water shall not have a pH less than 6.5 or greater than 8.4.
- Delivery of reclaimed water to a specific user shall cease during any period the user cannot comply with its water reclamation requirements. Use of reclaimed water may resume when the user can once again comply with its water reclamation requirements.
- 4. Spray irrigation of reclaimed water shall be accomplished at a time and in a manner that minimizes ponding and the possibility of public contact with sprayed materials.
- All reclamation reservoirs and other areas with public access shall be posted (in English and Spanish) to warn the public that reclaimed wastewater is being stored or used.
- Personnel involved in producing, transporting, or using reclaimed water shall be informed of possible health hazards that may result from contact and use of reclaimed water.
- 7. Tank trucks used for transporting reclaimed water shall be appropriately labeled and shall not leak.
- 8. Valves in the reclaimed water irrigation system shall be designed and constructed so unauthorized persons cannot open them.

- 9. Proper backflow and cross-connection protection for domestic water services and irrigation wells shall be provided.
- 10. Reclaimed water systems shall be properly labeled and regularly inspected to assure proper operation, absence of leaks, and absence of illegal connections.

### E. PROVISIONS

- 1. Order No. 85-97 "Waste Discharge and Water Reclamation Requirements for Los Alamos Community Services District," adopted by the Board on July 12, 1985, is hereby rescinded.
- 2. Discharger shall comply with "Monitoring and Reporting Program No. 92-93," as specified 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, except Paragraph C.4.
- 4. By January 1, 1993, Discharger shall submit a technical report describing the locations and complete details of ground water monitoring wells installed and monitored to measure compliance with Ground Water Limitation Nos. C.2, and C.2.

I, WILLIAM R. LEONARD, 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 November 13, 1992.

EXECUTIVE OFFICER

MLH7/sm44:Alamos.WDR

WASTEWATER TREATMENT AND DISPOSAL FACILITIES SITE PLAN LOS ALAMOS COMMUNITY SERVICE DISTRICT WELL NO. 3 **ATTACHMENT A** NO SCALE WELL NO. 2 WELL NO. 1 LOS ALAMOS SEWER GRAVITY MAIN PUMP STATION DISPOSAL SITE SEWER FORCE MAIN **3EATMENT SITE** 

### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

# MONITORING AND REPORTING PROGRAM NO. 92-93 FOR LOS ALAMOS COMMUNITY SERVICES DISTRICT SANTA BARBARA COUNTY

### Water Supply Monitoring

Representative samples of the Community water supply shall be collected and analyzed as follows:

Constituent	<u>Units</u>	Type of Sample	Minimum Sampling and Analyzing Frequency
Total Dissolved Solids	mg/l	Grab	Semi-Annually (April and October)
Sodium Chloride	mg/l mg/l	Grab Grab	11 H

### Flow and Freeboard Monitoring

Influent to the wastewater treatment facility and pond freeboard shall be monitored as follows:

<u>Parameter</u>	<u>Units</u>	Type of <u>Sample</u>	Minimum Sampling and Analyzing Frequency
Daily Flow	mgd	Metered	Daily
Maximum Daily Flow Mean Daily Flow	mgd mgd	 Calculated	Monthly
Pond Freeboard	Feet	Measured	Weekly

### Effluent Monitoring

Representative samples of the effluent discharged to the spray reclamation area shall be collected and analyzed for the following constituents:

Constituent	<u>Units</u>	Type of Sample	Minimum Sampling and Analyzing Frequency
Settleable Solids pH	ml/l pH Units	Grab Grab	Weekly Weekly
Biochemical Oxygen Demand, 5-Day	mg/l	Grab	Weekly

Constituent	<u>Units</u>	Type of <u>Sample</u>	Minimum Sampling and Analyzing Frequency
Suspended Solids	mg/l	Grab	Weekly
Total Dissolved Solids	mg/l	Grab	Quarterly (Jan, Apr, July, Oct)
Sodium Chloride	mg/l mg/l	Grab Grab	H H H

### Sludge Monitoring

The volume of sludge removed from the treatment facilities, along with the date removed and disposal location, shall be recorded and reported annually (January) to the Board.

### Disposal Area Inspection

The Discharger shall make inspections of the wastewater discharge areas at least three days per week. During extended wet-weather periods, more frequent inspections shall be made as needed. In making the inspections, the Discharger shall note compliance status with this Order, particularly with the prohibitions contained in this Order. A log of these inspections shall be maintained, and copies of portions of the log pertaining to the monitoring period shall be included with monthly monitoring reports. The report shall also include dates and times that effluent is applied to the spray reclamation area and estimated volumes reclaimed during the month.

### Reporting

Monitoring reports shall be submitted by the 20th of every month. Reports shall include data collected the preceding month.

ORDERED BY

Everytive Office

November 13, 1992

Date