CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

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

ORDER NO. 95-23

WATER DISCHARGE REQUIREMENTS FOR

CALIFORNIA UTILITIES SERVICE, INC. AND INDIRECT DISCHARGES MONTEREY COUNTY

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

- California Utilities Service, Inc. (CUS), P.O. Box 5100, Salinas, CA (hereafter Discharger), owns and operates a wastewater collection, treatment, and disposal system to provide sewage service to Toro Area of Monterey County, as shown on Attachment "A".
- 2. On November 8, 1994, Robert T. Adcock, President, submitted a complete application for reissuance of Waste Discharge Requirements to incorporate changes in the sewage treatment system. Waste Discharge Requirements Order No. 87-124, adopted by the Board on July 10, 1987, is being revised pursuant to §13260 of the California Water Code as a result of significant changes in wastewater treatment capacity and processes.
- The Discharger's wastewater treatment system was formerly owned and operated by Salinas Utility Services and Toro Management Services. The ownership was transferred to the Discharger in March, 1986:
- 4. The Discharger is directly responsible for wastewater collection, transport, treatment, and disposal from each user connected to the system. It is incumbent upon the Discharger to protect the environment to the greatest degree possible and insure its system is protected and utilized properly. This responsibility includes preventing overflows and may include restricting sewer connections to the system.

- Wastewater treatment consists of screening, two Sequencing Batch Reactors, an aerobic sludge digester, and a chlorine disinfection system.
- 6. California Utilities Services's wastewater treatment plant has a 300,000 gallons per day (1,137 m³/day) average daily flow design capacity and a peak daily flow capacity of 450,000 gallons per day. Treated effluent is discharged to 31.5 acres of spray disposal fields adjacent to the Salinas River, as shown on Attachment "A". A total of 45 acres, owned by the discharger, is designated and available for development as effluent disposal area.
- Digested sludge produced from the facility is dewatered and disposed to the Marina landfill.
- 8. An area wide waste treatment management plan, entitled Water Quality Management Plan for the Monterey Bay Area (208 Plan), was adopted by the Association of Monterey Area Governments, a designated 208 agency, on July 12, 1978, and subsequently certified by the State Water Quality Control Board on September 21, 1978. The 208 Plan recommends investigations of municipal treatment and disposal methods within the Salinas Valley for alternatives that would reduce nitrates discharges to ground waters. The CUS treatment system has shown significant nitrogen removal capability from influent wastewater.
- Soils in the irrigation area consist of river silts which readily absorb wastewater. Depth to ground water varies seasonally depending on rainfall and river state. Depth to ground water was 18 feet in

Item No. 14, Attachment 3
February 9, 2007 Board Meeting
California Utilities Service, Inc.

February 1992. Saline ground water condition exists in the vicinity of the irrigation areas due to saltwater intrusion from the Monterey Bay.

- 10. The Water Quality Control Plan, Central Coast Basin (Basin Plan) was adopted by the Board on November 17, 1989, and approved by the State Water Resources Control Board on August 16, 1990. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State waters.
- 11. Present and anticipated beneficial uses of the ground water in the vicinity of the discharge include:
 - a. agricultural water supply;
 - b. municipal and domestic water supply,
 - c. industrial use.
- 12. The present and potential beneficial uses of the Salinas River include:
 - a. Water Contact Recreation.
 - b. Non-contact Water Recreation,
 - c. Agricultural Water Supply,
 - d. Warm Freshwater Habitat,
 - e. Migration of Aquatic Organisms,
 - f. Wildlife Habitat.
- 13. These waste discharge requirements are for an existing facility and must comply with the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) in accordance with Section 15101, Chapter 3, Title 14, of the California Code of Regulations.
- 14. 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.

- 15. On December 9, 1994, the Board notified the Discharger and interested agencies of its intent to issue waste discharge requirements for the discharge, provided them with an opportunity to submit their written views and recommendations, and scheduled a public hearing.
- 16. In a public hearing on February 10, 1995, the Board heard and considered all 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, that California Utilities Service, Inc., its agents, successors, and assigns, may discharge waste from its Reservation Road wastewater facility providing they comply with the following:

(General permit 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 D.3. of this Order.)

Requirements specified in the proposed Order are based on staff's professional judgement and the:

A = Basin Plan.

Throughout the proposed Orders and Monitoring and Reporting Program (MRP), footnotes are included to indicate the source of specified requirements. Requirements not referenced are based on professional judgement.

A. DISCHARGE PROHIBITIONS

 Discharge of any wastewater from transport, treatment, or disposal systems (including overflow, bypass, and overspray) to the Salinas River, the Salinas River Channel, drainageways, and adjacent properties, is prohibited. Discharge to any location other than the spray disposal area shown on Attachment "A", is prohibited.

Constituent	Units	Monthly <u>Average</u>	Daily <u>Maximum</u>
Total Dissolved Solids	mg/l	1000	1500
Settleable Solids	m1/1	•	0.5

- Discharge within 100 feet of any well used for domestic supply is prohibited.^A
- 4. Discharge of any waste other than treated domestic-type sewage wastewater from the service area as described in Finding No.1 is prohibited.
- Discharge of any runoff from the sludge drying areas to the Salinas River, the Salinas River Channel, drainageways, and adjacent properties, is prohibited.
- 6. Discharge of waste sludge within the floodplain is prohibited.^A

B. EFFLUENT LIMITATIONS

- The discharge to the irrigation areas shall be secondary wastewater and shall not exceed the following limits:^A
- 2. Volume discharged shall not exceed average annual flow of 300,000 GPD (1,137 m³/day).
- 3. The discharge shall not have a pH of less than 6.5 or greater than 8.3.^A
- 4. The discharge shall contain at least 1.0 mg/l Dissolved Oxygen at all times.^A
 - Freeboard shall exceed 0.5 meters (20 in.) in wastewater ponds and wastewater discharge area shall be completely diked with at least 0.5 meters (20 in.) above adjacent grade.^A
- 6. Extraneous surface drainage shall be excluded from wastewater ponds and irrigation areas.

- Free chloride residual shall equal or exceed one (1) mg/l, as measured within the chlorine contact zone.
- Existing wastewater facilities shall retain wastewater flows, sewer infiltration or inflow, and precipitation from a 100-year rainfall season and allow for six days extra storage for spray field drying and repairs.
- 9. Wastewater loading rates (pounds of pollutants/acre/day and gallons of wastewater/acre/day) of land areas shall be based on rational engineering considerations and shall assure that wastewater percolate meets the terms of this Order. For duration of this Order, the daily wastewater application rate shall not exceed 17,000 gallons-per-acre-per day.
- Wastewater disposal areas shall be managed to rest successively one-third of the area at any time.
- Wastewater disposal areas shall be posted in English and in Spanish, around the perimeter of the discharge area to warn: Wastewater Disposal Area - Access Restricted.
- 12. Discharge to wastewater disposal areas shall cease and all wastewater shall be diverted immediately to the emergency storage reservoir if:
 - a. Disinfection of wastewater ceases at any time; or
 - Discharge specifications are violated or are threatened with violation.
- 12. Wastewater application to disposal areas shall not exceed the infiltration rates of the underlying soils after adjustment for slopes. Ponding in the discharge area shall not occur.
- No wastewater discharge shall occur when it is raining or the discharge area is flooded.
- 14. Discharge to the spray disposal areas shall occur only when there is at least two (2) feet separation between the surface and the ground water.

C. GROUND WATER LIMITATIONS

- 1. The discharge shall not cause nitrate concentrations in the ground water downgradient of the irrigation area to exceed 8 mg/l (as N). A
- 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 irrigation area.^A
- 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, 4.5, 5, and 5.5 of the California Code of Regulations.^A
- 4. The discharge shall not cause a violation of any applicable water quality standard for ground waters adopted by the Regional Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder.^A

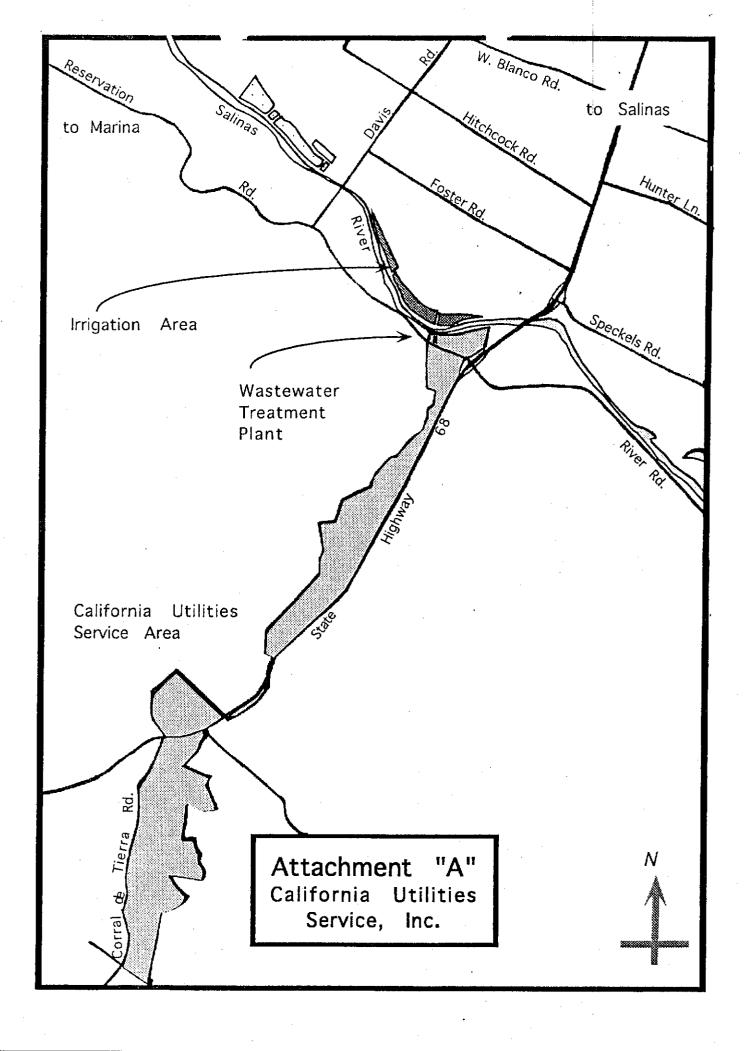
D. PROVISIONS

- Order No. 87-124, "Waste Discharge Requirements for California Utilities Services and Indirect Dischargers, Monterey County," adopted by the Board on July 10, 1987, is hereby rescinded.
- The Discharger shall comply with "Monitoring and Reporting Program No. 95-23," as ordered by the Executive Officer.

- 3. The Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," (also referred to as "Standard Provisions") dated January, 1984. In the Standard Provisions, "disposal ponds" and "disposal areas" as used therein shall mean "storage reservoirs" and "spray disposal areas," respectively.
- 4. The discharger shall prepare and follow operation and contingency plans (see standard provisions A.24. and A.25.). The plans and its revisions are subject to review and approval by the Executive Officer.
- Standby power with automatic switch-over devices shall be provided to assure a continuous power source to all sewage system components that are dependent upon power or proper functioning.
- 6. The Discharger shall maintain an ongoing sewer infiltration and inflow correction program.
- 7. Pursuant to Title 23, Chapter 3, Subchapter 9, of the California Code of Regulations, the Discharger must submit a written report to the Executive Officer not later than September 1, 1999, addressing:
 - a. Whether there will be changes in the continuity, character, location, or volume of the discharge; and,
 - b. Whether, in its 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 February 10, 1995.

Executive Officer



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

MONITORING AND REPORTING PROGRAM NO. 95-23

FOR CALIFORNIA UTILITIES SERVICE, INC. AND INDIRECT DISCHARGERS MONTEREY COUNTY

Water Supply monitoring

Representative samples of the domestic water supply shall be collected and analyzed annually for the following constituents:

Constituent	<u>Units</u>	Type of Sample	Minimum Frequency of Sampling and Analysis
Total Dissolved Solids	mg/l	Grab	Annually, August
Sodium	mg/l	Grab	. 4 11
Chloride	mg/l	Grab	n n
Sulfate	mg/l	Grab	11 H
Boron	mg/l	Grab	ч "

Effluent Monitoring

Representative samples of the effluent discharged to the spray disposal area shall be collected and analyzed for the constituents and at the frequencies specified below:

Constituent	<u>Units</u>	Type of Sample	Minimum Frequency of Sampling and Analysis
Flow Volume	gallons	metered	Daily
Maximum Daily Flow	gallons per day		Monthly
Mean Daily Flow	gallons per day	Calculated	Monthly
Settleable Solids	ml/l	Grab	3 times per week (MWF)
Total Coliform Organisms	MPN/100ml	Grab	Weekiy
Dissolved Oxygen	mg/l	Grab	Every Other Week
рН	pH units	Grab	Monthly

Constituent	<u>Units</u>	Type of Sample	Minimum Frequency o Sampling and Analysis	
Total Kjeldahl Nitrogen (as N)	mg/l	Grab	Monthly	
Nitrate (as N)	mg/l	Grab	Monthly	
Total Dissolved Solids	mg/l	8-hr Composite	Semi-Annually (February and August)	
Sodium	mg/l	8-hr Composite	.	H
Chloride	mg/l	8-hr Composite	и	*
Sulfate	mg/l	8-hr Composite		н
Boron	mg/l	8-hr Composite	н	41

Receiving Water Monitoring

Samples of groundwater shall be collected from shallow wells located upgradient and downgradient of the disposal area. After depth to ground water has been measured, the wells shall be purged and samples shall be collected for each of the following:

Constituent	<u>Units</u>	Type of Sample	Minimum Frequency of Sampling and Analysis	
Depth to Groundwater	feet	Measured	Semi-Annually (February and August)	
Total Kjeldahl Nitrogen (as N)	mg/l	Grab		н
Nitrate (as N)	mg/l	Grab	N	II
Total Dissolved Solids	mg/l	Grab	ii .	n
Sodium	mg/l	Grab	н	. II
Chloride	mg/l	Grab	Pł	n
Sulfate	mg/l	Grab	я	u .
Boron	mg/l	Grab	#	

Disposal Area Inspection

The Discharger shall make at least weekly inspections of the spray disposal area. In making the inspection, the Discharger shall note compliance status with this Order, particularly Discharge Prohibition A.1. and applicable Discharge Specifications. A log of these inspections shall be maintained. A summary of observations made during the inspection shall be submitted with each monthly monitoring report.

Sludge Monitoring

Sludge samples shall be taken annually and analyzed for the following metals:

Arsenic Copper Nickel
Cadmium Lead Selenium
Chromium Mercury Zinc

The results of the analysis shall be submitted with the annual report and should include sludge quantities and destination of sludge disposal.

Reporting

Quarterly monitoring reports shall be submitted by the dates listed in the following:

Sampling and Analyzing Frequency

Daily, Weekly, and Monthly

Semi-Annual Monitoring

Report Due

last Day of Each Month

last Day of March and September

Annual Monitoring

last Day of September

ORDERED BY

February 10, 1995

Date