

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 90-034

WASTE DISCHARGE REQUIREMENTS
FOR
RIVERSIDE COUNTY SERVICE AREA NO. 51
LAKE TAMARISK
Northeast of Desert Center - Riverside County

The California Regional Water Quality Control Board, Colorado River Basin Region, finds that:

1. Riverside County Service Area No. 51 (hereinafter also referred to as the discharger), P.O. Box 316, Desert Center, California 92239, supplied the updated information on the discharge of waste on January 12, 1990.
2. The discharger presently is discharging a maximum daily flow of 44,000 gallons-per-day of domestic wastewater from a residential development which consists of 70 houses, 150 mobile home spaces, two swimming pools and a hot pool. The wastewater from this development is treated in mechanically aerated oxidation basins and then discharged into four (4) infiltration basins. The discharge site is located in the N $\frac{1}{2}$, NE $\frac{1}{4}$, NE $\frac{1}{4}$ of Section 14, T5S, R15E, SBB&M.
3. Because of the high concentration of fluoride (8.5 mg/l) in the ground water at this site, defluoridation is done at this plant using two activated alumina adsorption columns. Once the fluoride adsorbed reaches the adsorption capacity of activated alumina, the columns are regenerated to restore the adsorption capacity.

During the once a month regeneration cycle, a maximum total daily flow of 215,000 gallons-per-day of defluoridation processed wastewater is discharged. 80,000 gallons-per-day of the processed wastewater containing high concentrations of fluoride (above 8.5 mg/l) is discharged into three 10 mil polyethylene lined impervious basins. The basins are located in the SW 1/4, NE 1/4 of Section 14, T5S, R15E, SBB&M. 135,000 gallons-per-day of the processed wastewater containing low concentrations of fluoride (below 8.5 mg/l) is discharged over desert land, located in the SW 1/4, NE 1/4 of Section 14, T5S, R15E, SBB&M.

4. This discharge has been subject to waste discharge requirements adopted in Board Order No. 85-029.
5. The Water Quality Control Plan for the Colorado River Basin Region of California designates the beneficial uses of ground and surface waters in this Region.

*Superseded
by Bd. Ord. # 95-048
June 28, 1995*

6. The beneficial uses of ground waters in the Chuckwalla Hydrologic Unit are:
 - a. Municipal supply (MUN)
 - b. Industrial supply (IND)
 - c. Agricultural supply (AGR)
7. There are no domestic wells within 500 feet of the discharge facilities described in Finding No. 2 (above).
8. The Board has notified the discharger and all known interested agencies and persons of its intent to update waste discharge requirements for this discharge.
9. The Board in a public meeting heard and considered all comments pertaining to this discharge.
10. In accordance with Section 15301, Chapter 3, Title 14, of the California Code of Regulations, the issuance of these waste discharge requirements, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.).

IT IS HEREBY ORDERED, that the discharger shall comply with the following Specifications:

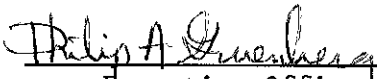
1. The increase in concentration of the fluoride constituent in the infiltration basins shall not be more than 0.6 mg/l above the average value of the water delivered for domestic purposes.
2. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050(1) and 13050(m) of Division 7 of the California Water Code.
3. No wastewater other than domestic wastewater shall be discharged into the sewage disposal system described in Finding No. 2 (above).
4. A minimum depth of freeboard of two (2) feet shall be maintained at all times in basin.
5. Treated or untreated sludge, or similar solid waste materials, shall be disposed only at locations approved by the Regional Board's Executive Officer.
6. Adequate measures shall be taken to assure that unauthorized persons are effectively excluded from contact with the wastewater.
7. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.

8. There shall be no surface flow of wastewater away from the designated disposal areas.
9. Disposal by ponding shall be conducted in such a manner that there shall be no stranded or exposed sewage solids.
10. A surface aerobic environment shall be maintained in each basin.
11. Infiltration facilities (basins) shall be maintained and operated so as to maximize infiltration and minimize the increase in salinity of the infiltrating wastewater by evaporation.
12. Facilities shall be available to keep the plant in operation in the event of commercial power failure.
13. During the defluoridation regeneration cycle, the discharge of wastewater to other than impervious basins whose permeability does not exceed 1×10^{-8} cm/sec is prohibited.
14. No wastewater other than defluoridation process wastewater, as described in Finding No. 3 (above), shall be discharged into impervious basins.
15. Sludge or wastewater shall be removed from the impervious basins periodically to maintain two (2) feet freeboard and discharged at a location approved by the Regional Board's Executive Officer.
16. Upon termination of the defluoridation operations, the discharger shall submit a closure plan to the Regional Board's Executive Officer for approval; and shall cleanup and otherwise restore the area in accordance with said approved plan.
17. The discharger shall comply with "Monitoring and Reporting Program No. 90-034", and future revisions thereto, as specified by the Regional Board's Executive Officer.
18. Prior to any modifications in this facility which would result in material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the discharger shall report all pertinent information in writing to the Regional Board.
19. Prior to any change in ownership or management of this operation, the discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.
20. Adequate protective works shall be provided to assure that a flood which would be expected to occur on a frequency of once in a 100-year period would not erode or otherwise render portions of the treatment and discharge facilities inoperable.

21. The discharger's wastewater treatment plant shall be supervised and operated by persons possessing certification of appropriate grade pursuant to Subchapter 4, Chapter 4, Title 23 of the California Code of Regulations.
22. The discharger shall implement acceptable operational and maintenance practices at the wastewater treatment plant so that needed repairs and maintenance are performed in a timely manner.

IT IS FURTHER ORDERED that Board Order No. 85-029 be superseded by this Board Order.

I, Philip A. Gruenberg, 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, Colorado River Basin Region, on March 14, 1990.



Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 90-034
FOR
RIVERSIDE COUNTY SERVICE AREA NO. 51

Location of Discharge: Infiltration Basins - N $\frac{1}{2}$, NE $\frac{1}{4}$, NE $\frac{1}{4}$ of Section 14, T5S, R15E, SBB&M

Impervious Basins - SW $\frac{1}{4}$, NE $\frac{1}{4}$ of Section 14, T5S, R15E, SBB&M

Discharge to Land - SW $\frac{1}{4}$, NE $\frac{1}{4}$ of Sections 14, T5S, R15E, SBB&M

SEWAGE EFFLUENT

1. Sewage wastewater discharged to infiltration basins shall be sampled at the point of discharge to said basins. The sewage effluent shall be monitored for the following:

| <u>Constituent</u> | <u>Unit</u> | <u>Type of Sample</u> | <u>Sampling Frequency</u> |
|------------------------|-------------|-----------------------|---------------------------|
| Total Dissolved Solids | mg/l | Grab | Monthly |
| Fluoride (F) | mg/l | Grab | Monthly |
| Flow | Gallons/Day | Average Daily | Monthly |

DEFLUORIDATION PROCESS WASTEWATER DISCHARGED TO LAND

1. The wastewater discharged over desert land during each regeneration cycle shall be sampled for fluoride prior to the discharge to determine compliance with Discharge Specification No. 1 of this Board Order.
2. The volume of wastewater discharged over desert land during each regeneration cycle shall be recorded.
3. This monitoring data shall be submitted quarterly.

OPERATION AND MAINTENANCE

| <u>Activity</u> | <u>Reporting</u> |
|--|------------------|
| To inspect and document any operational and maintenance problems by reviewing each unit process. | Yearly |

DEFLUORIDATION PROCESS WASTEWATER DISCHARGED TO IMPERVIOUS BASINS

| <u>Constituent</u> | <u>Unit</u> | <u>Sampling Frequency</u> |
|--------------------------------------|-----------------------|---------------------------|
| Liquid surface in each basin | Acres | Quarterly |
| Liquid depth in each basin | Feet | Quarterly |
| Wastewaters discharged to each basin | Acre Feet/ Quarter | Quarterly |
| Total Dissolved Solids in each basin | mg/l | Annually |
| Wastes removed from each basin | Gallons | Annually |

WATER SUPPLY

The water supply shall be monitored for the following:

| <u>Constituent</u> | <u>Unit</u> | <u>Type of Sample</u> | <u>Sampling Frequency</u> |
|--------------------|-------------|-----------------------|---------------------------|
| Fluoride (F) | mg/l | Grab | Quarterly |

REPORTING

Monthly and daily monitoring reports shall be submitted to the Regional Board by the 15th day of the following month. Quarterly monitoring reports shall be submitted to the Regional Board by January 15, April 15, July 15, and October 15 of each year. Annual reports shall be submitted by January 15 of the following year.

Submit monitoring reports to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-271 Highway 111, Suite 21
Palm Desert, CA 92260

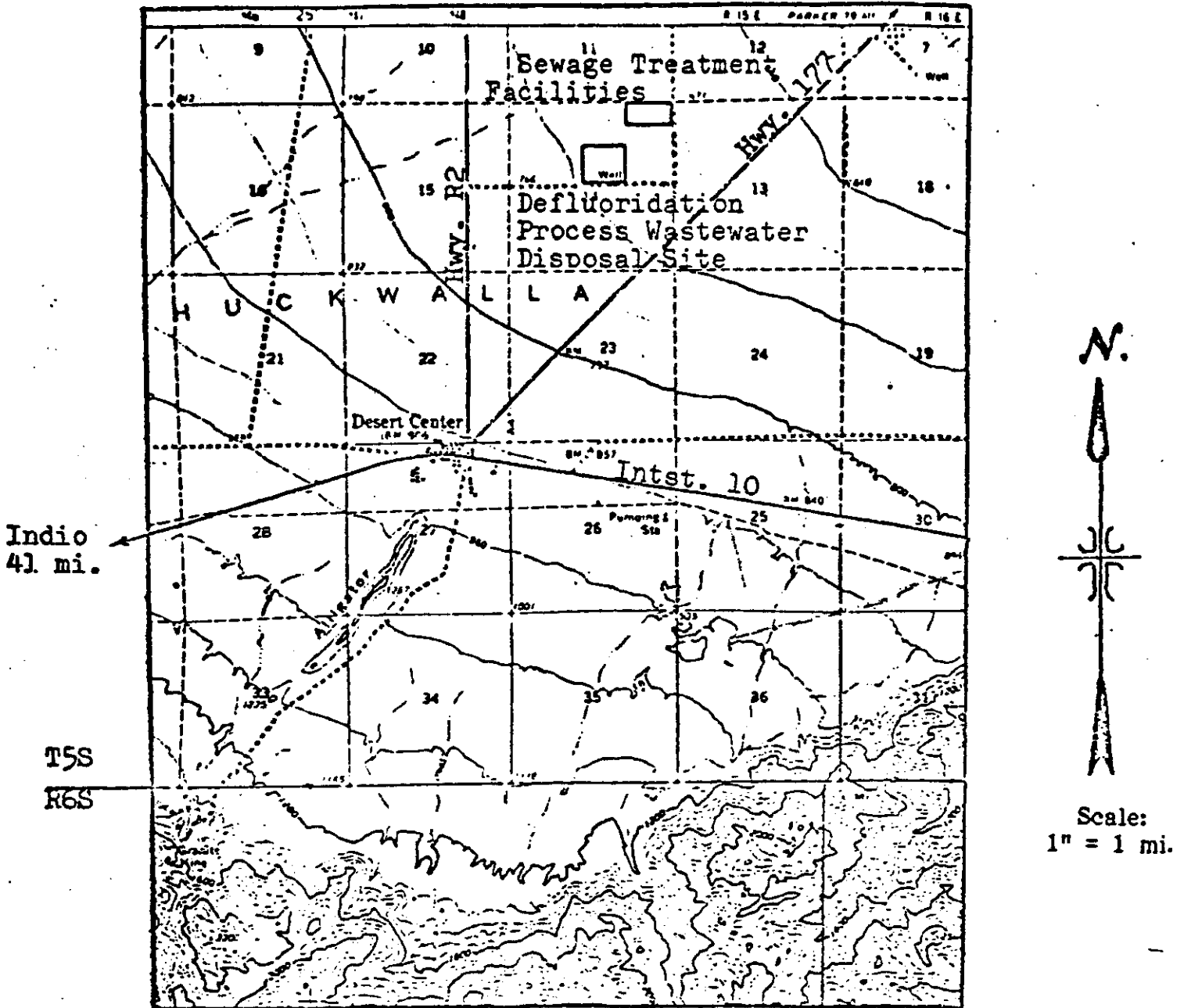
ORDERED BY:

Philip A. Greenberg
Executive Officer

March 14, 1990

Date

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SITE MAP

RIVERSIDE COUNTY SERVICE AREA NO. 51
LAKE TAMARISK

Northeast of Desert Center - Riverside County

Location of Discharges:

Infiltration Basins - NW $\frac{1}{4}$, NE $\frac{1}{4}$, NE $\frac{1}{4}$, Section 14, T5S, R15E, SBB&M

Impervious Basins - SW $\frac{1}{4}$, NE $\frac{1}{4}$, of Section 14, T5S, R15E, SBB&M

Discharge to Land: SW $\frac{1}{4}$, NE $\frac{1}{4}$ of Section 14, T5S, R15E, SBB&M

USGS Chuckwalla Mountains 15 min. Topographic Map