CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. 94-187

WASTE DISCHARGE REQUIREMENTS
FOR

CITY OF DIXON
WASTEWATER TREATMENT AND DISPOSAL FACILITY
SOLANO COUNTY

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

1. The City of Dixon (hereafter Discharger) submitted a Report of Waste Discharge, dated 20 December 1993, for their wastewater treatment and disposal facility. The property is owned by the City of Dixon.

2. Waste Discharge Requirements Order No. 86-026, adopted by the Board on 24 January 1986, prescribes requirements for a discharge from the facility to land.

3. Order No. 86-026 is neither adequate nor consistent with current plans and policies of the Board.

4. The wastewater treatment system consists of 13 facultative ponds. The Discharger proposes to treat 1.2 mgd of municipal wastewater with winter storage and summer disposal of effluent to the disposal fields. The Discharger presently flood irrigates approximately 40 acres to dispose of the wastewater. Due to the increase in the flow to the facility, the City intends to utilize all 120 acres of its existing disposal fields during the irrigation season. Ground water under the disposal fields is monitored monthly.

5. The facility is in Section 6 and 7, T6N, R2E, and Section 1, T6E, R1E, MDB&M, with surface water drainage to Cache Slough, as shown in Attachment A, which is attached hereto and part of the Order by reference.


7. The beneficial uses of Cache Slough are municipal, industrial, and agricultural supply; recreation; aesthetic enjoyment; fresh water replenishment; and preservation and enhancement of fish, wildlife, and other aquatic resources.

8. The beneficial uses of underlying ground water are domestic, industrial, and agricultural supply.
9. The action to update waste discharge requirements for this facility is exempt from the provisions of the California Environmental Quality Act (CEQA), in accordance with Title 14, California Code of Regulations (CCR), Section 15301.

10. This discharge is exempt from the requirements of Title 23, CCR, Section 2510, et seq. (hereafter Chapter 15). The exemption, pursuant to Section 2511(b), is based on the following:
   a. The Board is issuing waste discharge requirements, and
   b. The discharge complies with the Basin Plan, and
   c. The wastewater does not need to be managed according to 22 CCR, Division 4, Chapter 30, as a hazardous waste.

11. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

12. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED** that Order No. 86-026 is rescinded and the City of Dixon, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. **Discharge Prohibitions:**
   1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
   2. Discharge to the disposal fields is prohibited from 1 November through 31 March.
   3. Bypass or overflow of untreated or partially treated waste is prohibited.
   4. Discharge of waste classified as 'hazardous' or 'designated', as defined in Sections 2521(a) and 2522(a) of Chapter 15, is prohibited.

B. **Discharge Specifications:**
1. The monthly average dry weather discharge flow shall not exceed 1.2 million gallons/day.

2. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal areas.

3. The discharge shall remain within the designated disposal area at all time.

4. As a means of discerning compliance with Discharge Specification No. 2, the dissolved oxygen content in the upper zone (1 foot) of wastewater in ponds shall not be less than 1.0 mg/l.

5. The wastewater for field disposal shall be managed to minimize erosion, runoff, and movement of aerosols from the disposal area.

6. The wastewater shall be applied during irrigation season (1 April through 31 October).

7. The wastewater shall not cause the ponds to have a pH less than 6.5 or greater than 8.5.

8. There shall be no standing water in the disposal area 96 hours after wastewater is applied.

9. Ponds shall be managed to prevent breeding of mosquitos. In particular,
   a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.
   b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
   c. Dead algae, vegetation, and debris shall not accumulate on the water surface.

10. Public contact with wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.

11. Ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration during the nonirrigation season. Freeboard shall never be less than two feet measured vertically to the lowest point of overflow.
12. On or about 1 October of each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specification 11.

C. Sludge Disposal:

1. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with Chapter 15, Division 3, Title 23, of the California Code of Regulations and approved by the Executive Officer.

2. Any proposed change in sludge use or disposal practice from a previously approved practice shall be reported to the Executive Officer and U.S. Environmental Protection Agency (EPA) Regional Administrator at least 90 days in advance of the change.

3. Use and disposal of sewage sludge shall comply with existing Federal and State laws and regulations, including permitting requirements and technical standards included in 40 CFR 503.

If the State Water Resources Control Board and the Regional Water Quality Control Boards are given the authority to implement regulations contained in 40 CFR 503, this Order may be reopened to incorporate appropriate time schedules and technical standards. The Discharger must comply with the standards and time schedules contained in 40 CFR 503 whether or not they have been incorporated into this Order.

4. Within 60 days of the adoption of this Order, the Discharger shall submit a sludge disposal plan describing the annual volume of sludge generated by the plant and specifying the disposal practices.

D. Ground Water Limitations:

The discharge shall not cause underlying ground water to:

1. Contain waste constituents in concentrations statistically greater than receiving water limits, where specified below, or background water quality where not specified.

2. Contain chemicals, heavy metals, or trace elements in concentrations that adversely affect beneficial uses or exceed maximum contaminant levels specified in 22 CCR, Division 4, Chapter 15.
WASTE DISCHARGE REQUIREMENTS
CITY OF DIXON
WASTEWATER TREATMENT AND DISPOSAL FACILITY
SOLANO COUNTY

3. Exceed a most probable number of total coliform organisms of 2.2/100 ml over any seven-day period.

4. Exceed concentrations of radionuclides specified in 22 CCR, Division 4, Chapter 15.

5. Contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

6. Contain concentrations of chemical constituents in amounts that adversely affect agricultural use.

E. Provisions:

1. The Discharger shall comply with the Monitoring and Reporting Program No. 94-187, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.

2. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and by reference a part of this Order. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."

3. In the event of any change in control or ownership of land or waste discharge facilities described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.

4. At least 90 days prior to termination or expiration of any lease, contract, or agreement involving disposal or reclamation areas or off-site reuse of effluent, used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.

5. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
6. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.

7. The Board will review this Order periodically and will revise requirements when necessary.

I, WILLIAM H. CROOKS, 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 Valley Region, on 24 June 1994.

WILLIAM H. CROOKS, Executive Officer
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 94-187

FOR
CITY OF DIXON
WASTEWATER TREATMENT AND DISPOSAL FACILITY
SOLANO COUNTY

**INFLUENT**

The following shall constitute the influent monitoring program:

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>20°C BOD₃</td>
<td>mg/l</td>
<td>Grab</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Suspended Solids</td>
<td>mg/l</td>
<td>Grab</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Flow</td>
<td>mgd</td>
<td>Cumulative</td>
<td>Daily</td>
</tr>
<tr>
<td>Specific Conductivity</td>
<td>μmhos/cm</td>
<td>Grab</td>
<td>Quarterly</td>
</tr>
</tbody>
</table>

**EFFLUENT MONITORING**

Effluent samples shall be collected just prior to discharge to the disposal field. Effluent samples should be representative of the volume and nature of the discharge. Samples collected from the outlet structure of ponds will be considered adequately composited. Time of collection of a grab sample shall be recorded. The samples shall be collected during the irrigation season (April-October). Effluent monitoring shall include at least the following:

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>20°C BOD₃</td>
<td>mg/l</td>
<td>Grab</td>
<td>Monthly</td>
</tr>
<tr>
<td>Settleable Matter</td>
<td>ml/l</td>
<td>Grab</td>
<td>Monthly</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/l</td>
<td>Grab</td>
<td>Monthly</td>
</tr>
<tr>
<td>Specific Conductivity</td>
<td>μmhos/cm</td>
<td>Grab</td>
<td>Monthly</td>
</tr>
<tr>
<td>Flow</td>
<td>mgd</td>
<td>Cumulative</td>
<td>Daily</td>
</tr>
</tbody>
</table>
GROUND WATER MONITORING

Samples shall be obtained from the wells and analyzed for the following:

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Units</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/l</td>
<td>Monthly</td>
</tr>
<tr>
<td>Nitrates-N</td>
<td>mg/l</td>
<td>Monthly</td>
</tr>
<tr>
<td>Specific Conductivity</td>
<td>μmhos/cm</td>
<td>Monthly</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>mg/l</td>
<td>Annually</td>
</tr>
<tr>
<td>pH</td>
<td>pH Unit</td>
<td></td>
</tr>
<tr>
<td>Elevation</td>
<td>feet</td>
<td>Monthly</td>
</tr>
</tbody>
</table>

REPORTING

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly the compliance with waste discharge requirements.

Monthly monitoring reports shall be submitted to the Regional Board by the 20th day of the following month.

The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Board.

Upon written request of the Board, the Discharger shall submit a report to the Board by 30 January of each year. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the Discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the waste discharge requirements.

The Discharger shall implement the above monitoring program as of the date of this Order.

Ordered by: WILLIAM H. CROOKS, Executive Officer

24 June 1994

(Date)
The Dixon Wastewater Treatment Plant is owned and operated by the City of Dixon. The facility is four miles south of the City at the intersection of Casey and Pedrick Roads. The facility presently discharges at a dry weather monthly average of 0.925 million gallons per day (mgd) to a 40 acre disposal field. The City in the past has been disposing of wastewater during the non-irrigation months to maintain a safe freeboard.

The wastewater treatment system consists of 13 facultative ponds. The City proposes to discharge at the monthly average rate of 1.2 mgd from 1 April through 30 October to the disposal fields. Due to the increase in the inflow to the plant, the City intends to utilize all 120 acres of its existing disposal fields. Ground water under the disposal fields is monitored monthly.

The sludge in the primary ponds has been accumulating for several years. The City does not anticipate having to dispose of this sludge in the near future.