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


2. The City of Sanger wastewater treatment facility (WWTF) currently provides for treatment and disposal of both domestic and industrial wastewater from the City of Sanger. The existing WWTF has parallel treatment trains, each with a screen, a grit removal basin, primary clarifier, activated sludge aeration basin, and a secondary clarifier. In addition, the WWTF also has a roughing filter with a secondary clarifier. Industrial wastewater currently flows through one of the grit chambers, one of the primary clarifiers, and the roughing filter and its secondary clarifier. Domestic wastewater flows through one of the grit chambers, one of the primary clarifiers, the aeration basins, and the two secondary clarifiers. Treated domestic and industrial wastes are combined and discharged to an approximately 180-acre disposal area used for planting and harvesting crops. The combined wastestream is discharged to the disposal field in excess of crop nutrient requirements. Thirty-four acres of evaporation/percolation ponds are available for when the disposal field hydraulic capacity is reached. The Discharger is improving the WWTF and separating the industrial from the domestic wastewater. The existing thirty-four acres of evaporation/percolation ponds will be abandoned. The Discharger will be considering suitable options for use of the pond acreage. The industrial wastewater discharge will be regulated by separate waste discharge requirements.

3. Waste Discharge Requirements Order No. 91-037, adopted by the Board on 25 January 1991 for the City of Sanger WWTF, prescribes requirements for a monthly average daily dry weather discharge of 1.8 million gallons for the domestic plant and 1.1 million gallons for the industrial plant to disposal fields and ponds.

4. Because of organic and hydraulic overloading of both industrial and domestic units, the Board adopted Cease and Desist Order (Order No. 96-002) that includes a time schedule to complete modifications necessary to comply with requirements. The Report of Waste Discharge describes the necessary WWTF modifications, which include the expansion of WWTF capacity to 1.3 mgd and the discharge of treated domestic wastewater to new property on Lincoln Avenue.
5. Several small industries that reportedly generate little wastewater will remain connected to the domestic wastewater collection system. Glacier Foods, Gibson Winery, and Sanger Dehydrator, all have high organic strength wastes and discharge to the IWTF. The Discharger is in the process of developing pretreatment requirements for all industrial users that will specify limitations for flow, BOD, total dissolved solids, suspended solids, specific electrical conductance at 25°C (EC), and required screen sizes.

6. The WWTF will consist of headworks, primary clarifiers, activated sludge unit, secondary clarifiers, disinfection unit, sludge thickener, anaerobic sludge digester, sludge drying beds, and rapid infiltration disposal basins. Dried sludge will be hauled off-site for land application at a permitted facility. The Report of Waste Discharge describes the wastewater effluent discharge as follows:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Monthly Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow</td>
<td>3.0 mgd</td>
</tr>
<tr>
<td>BOD</td>
<td>30 mg/l</td>
</tr>
<tr>
<td>Suspended Solids</td>
<td>30 mg/l</td>
</tr>
<tr>
<td>Total Nitrogen</td>
<td>35 mg/l</td>
</tr>
<tr>
<td>EC</td>
<td>&lt;720 μmhos/cm</td>
</tr>
</tbody>
</table>

7. Effluent will be disposed of in three rapid infiltration basins, each about 8 acres in area. Pond size is based on a discharge of 3.0 mgd; percolation of 0.6 ft. per day; 100-year, 10-day precipitation of 6.0 inches; and zero evaporation. To maximize nitrogen removal, ponds will be filled and dried on a 30-day cycle.

8. The WWTF is in Sections 25 and 26, T14S, R22E, MDB&M, and Sections 11 and 12, T15S, R22E, MDB&M with surface water drainage to the Kings River, as shown in Attachment A and Attachment B, respectively, which are part of this Order by reference. The WWTF properties are within the Consolidated Hydrologic Area (No. 551.70), as depicted on interagency hydrologic maps prepared by the Department of Water Resources.

9. The Discharger has submitted a Notice of Intent for coverage under the General Permit for Discharges of Storm Water Associated with Industrial Activities, which includes WWTFs.

10. Groundwater in the vicinity of the WWTF disposal area is approximately 30 feet below ground surface. Department of Water Resources groundwater map entitled *Lines of Equal Elevation of Water in Wells, Unconfined Aquifer, San Joaquin Valley, Spring 1995*, indicates that the general direction of groundwater flow is to the southeast. Testing of groundwater in the disposal area in 1996 and 1997 indicates groundwater is low in minerals, with an EC of 220 μmhos/cm. The
nitrate level in groundwater is approximately 14 mg/l. Coliform testing of on-site wells in December 1996 and January 1997 indicates the presence of coliform organisms in groundwater in all eight samples obtained, with five of the eight samples detecting coliform organisms at concentrations greater than 23 MPN/100 ml.

11. Soils beneath the disposal area consist of silty sands. Samples from four soil borings obtained at depths from 5 to 25 feet provided soil permeabilities of $3.3 \times 10^{-4}$ to $3.2 \times 10^{-2}$ cm/sec.

12. The beneficial uses of underlying groundwater are domestic, industrial, and agricultural supply.

13. On 24 June 1996, the City of Sanger certified a final environmental impact report (EIR) for the WWTF improvements and new wastewater discharge location in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.) and the State CEQA Guidelines. The Regional Board considered the EIR and incorporated mitigation measures in these waste discharge requirements to address impacts to water quality. The mitigation measures include: 1) the requirement to disinfect effluent to a maximum monthly median coliform concentration of 23 MPN/100 ml, and 2) the requirement to establish a groundwater monitoring network.

14. The permitted discharge is consistent with the antidegradation provisions of State Water Resources Control Board Resolution No. 68-16. The discharge to the rapid infiltration basins will not cause significant impacts on ground water and surface waters, or depletion of limited ground water resources.

15. 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.

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

**IT IS HEREBY ORDERED** that the City of Sanger, 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 at the aforementioned facility.

**A. Discharge Prohibitions**

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.

2. Discharge of untreated or partially treated waste is prohibited.

3. The bypass or overflow of wastes from the WWTF is prohibited, except as allowed by Standard Provision E.2.
4. Discharge of waste classified as ‘hazardous’, as defined in Section 2521(a) of Title 23, California Code of Regulations (CCR), Section 2510, et seq. or ‘designated,’ as defined in Section 13173 of the California Water Code, is prohibited.

B. Discharge Specifications

1. The monthly average daily dry weather discharge shall not exceed 3.0 mgd.

2. Objectionable odors originating at this WWTF shall not be perceivable beyond the limits of the WWTF property.

3. The dissolved oxygen content in the upper zone (1 foot) of wastewater in the rapid infiltration basins shall not be less than 1.0 mg/l.

4. The discharge shall not exceed the following limits:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Units</th>
<th>Monthly Average</th>
<th>Daily Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD₅</td>
<td>mg/l</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/l</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>Settleable Solids</td>
<td>ml/l</td>
<td>0.2</td>
<td>0.5</td>
</tr>
</tbody>
</table>

¹ Five-day, 20° Celsius biochemical oxygen demand.

5. Effective 1 January 1999, effluent from the treatment facility shall not exceed the following limits.

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Units</th>
<th>Monthly Median</th>
<th>Daily Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coliform Organisms</td>
<td>MPN¹/100 ml</td>
<td>23</td>
<td>240</td>
</tr>
</tbody>
</table>

¹ Most Probable Number.

6. The discharge shall not have a pH less than 6.0 or greater than 9.0.

7. The EC of the discharge shall not exceed the average EC of the source water plus 500 µmhos/cm.

8. Public contact with treated and untreated wastewater at the WWTF shall be precluded through such means as fences and signs, or acceptable alternatives.
9. The WWTF shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

C. Sludge Disposal Specifications

1. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer and consistent with Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq.

2. Any proposed change in sludge use or disposal practice shall be reported to the Executive Officer 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 accept primacy to implement regulations contained in 40 CFR 503, this Order may be reopened to incorporate appropriate time schedules and technical standards.

D. Groundwater Limitations

The discharge, in combination with other sources, shall not cause underlying groundwater to contain waste constituents in concentrations statistically greater than background water quality, except for EC. For EC, the incremental increase over any five-year period shall not exceed 20 \( \mu \text{mhos/cm.} \) (For purposes of comparison, background water quality shall be determined when background monitoring provides sufficient data. Quality determined in this manner establishes "water quality protection standards.")

E. Provisions

1. The Discharger shall comply with Monitoring and Reporting Program No. 98-141, 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 part of this Order. This attachment and its individual paragraphs are commonly referenced as “Standard Provision (s).”

3. The Discharger shall use the best practicable cost-effective control technique currently available to comply with this Order.
4. 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.

5. A copy of an updated Operation and Maintenance (O&M) Manual for the WWTF shall be submitted by 15 January 1999. The O&M Manual shall be prepared under the supervision of a California registered civil engineer and include descriptions of complete operational procedures for the WWTF, including the treatment and storage ponds, and disposal site, that assure compliance with this Order. The O&M Manual shall include a plan for preventing and controlling accidental discharges, and minimizing the effect of such events pursuant to Standard Provision B.2.

6. By 1 February 1999 the Discharger shall implement a pretreatment program that includes a source control program for industrial dischargers that assures compliance with limits specified in this Order. A copy of the pretreatment program documents shall be submitted by 15 February 1999.

7. A technical report certifying completion of WWTF modifications for a treatment and disposal capacity of 3.0 mgd shall be submitted by 1 January 1999. The report shall be prepared under the direction of a California registered civil engineer experienced in wastewater treatment plant design. Until the certification is received and acknowledged by the Executive Officer, the discharge shall be limited pursuant to Order No. 91-037.

8. A copy of this Order shall be kept at the WWTF for reference by operating personnel. Key operating personnel shall be familiar with its contents.

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

I, GARY M. CARLTON, 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 5 June 1998.

[Signature]
GARY M. CARLTON, Executive Officer

LML:lm/fmc:6/5/98
MONITORING AND REPORTING PROGRAM NO. 98-141
FOR
CITY OF SANGER
WASTEWATER TREATMENT FACILITY
FRESNO COUNTY

Specific sample station locations shall be established with concurrence of the Board’s staff, and a description of the stations shall be submitted to the Board and attached to this Program.

INFLUENT MONITORING

Influent samples shall be collected at the inlet of the headworks (and at approximately the same time as effluent samples.) Influent monitoring shall include at least the following:

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD$_5$</td>
<td>mg/l</td>
<td>Composite$^2$</td>
<td>Weekly</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/l</td>
<td>Composite$^2$</td>
<td>Weekly</td>
</tr>
<tr>
<td>Settleable Solids</td>
<td>ml/l</td>
<td>Composite$^2$</td>
<td>Weekly</td>
</tr>
</tbody>
</table>

$^1$ Five-day, 20°Celsius biochemical oxygen demand.
$^2$ A representative sample of the influent shall be obtained by compositing twelve samples obtained over a 24-hour period, proportioned according to flow.

EFFLUENT MONITORING

Except for flow, which may be measured either at the headworks or the outlet from the treatment system, effluent samples shall be collected just prior to discharge for rapid infiltration disposal. Effluent samples should be representative of the volume and nature of the discharge. Time of collection of a grab sample shall be recorded.

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling Frequency$^1$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Daily Flow</td>
<td>mgd</td>
<td>Metered</td>
<td>Continuous</td>
</tr>
<tr>
<td>BOD$_5$</td>
<td>mg/l</td>
<td>Composite$^3$</td>
<td>Weekly</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/l</td>
<td>Composite$^3$</td>
<td>Weekly</td>
</tr>
</tbody>
</table>
MONITORING AND REPORTING PROGRAM  
CITY OF SANGER WWTF  
FRESNO COUNTY

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC⁴</td>
<td>µhmhos/cm</td>
<td>Composite³</td>
<td>Weekly</td>
</tr>
<tr>
<td>pH</td>
<td>pH Units</td>
<td>Composite³</td>
<td>Weekly</td>
</tr>
<tr>
<td>Total Coliform</td>
<td>MPN⁵/100 ml</td>
<td>Grab</td>
<td>Weekly</td>
</tr>
<tr>
<td>Organisms</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 If results of monitoring a pollutant appear to violate effluent limitations, but monitoring frequency is not sufficient to validate violation (e.g., the monthly average for BOD), or indicate a violation and potential upset of the treatment process (e.g., less than minimum DO), the frequency of sampling shall be increased to confirm the magnitude and duration of violation, if any, and aid in identification and resolution of the problem.

2 Five-day, 20° Celsius biochemical oxygen demand.

3 A representative sample of the effluent shall be obtained by compositing twelve samples obtained over a 24-hour period, proportioned according to flow.

4 Conductance @ 25°C.

5 Most Probable Number.

DISPOSAL SITE (INFILTRATION BASIN) MONITORING

Disposal site monitoring shall include the following:

a. The infiltration basins shall be monitored as follows:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeboard</td>
<td>feet</td>
<td>Measured</td>
<td>Weekly</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>mg/l</td>
<td>Grab¹</td>
<td>Weekly</td>
</tr>
</tbody>
</table>

¹ Grab samples shall be obtained between the hours of 0800 and 0900 at a depth of 1-foot below the infiltration basin water surface.

b. The area of land (infiltration basin) utilized for discharge of the wastewater shall be reported monthly.

c. Three representative locations shall be established for soil profile sampling of the disposal site. Two of these shall be within the disposal site, and one shall be outside to represent background conditions.
Disposal site soil samples shall be analyzed as follows:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrate-Nitrogen</td>
<td>mg/kg</td>
<td>6 feet(^1)</td>
<td>Yearly(^2)</td>
</tr>
<tr>
<td>Kjeldahl-Nitrogen</td>
<td>mg/kg</td>
<td>6 feet(^1)</td>
<td>Yearly(^2)</td>
</tr>
<tr>
<td>Total Nitrogen</td>
<td>mg/kg</td>
<td>6 feet(^1)</td>
<td>Yearly(^2)</td>
</tr>
<tr>
<td>pH</td>
<td>pH units</td>
<td>6 feet(^1)</td>
<td>Yearly(^2)</td>
</tr>
</tbody>
</table>

\(^1\) Samples shall be taken at 2-foot depth increments.

\(^2\) Each location shall be sampled when the infiltration basins are empty, in the months of June, July, or August.

**SLUDGE MONITORING**

A composite sample of sludge shall be collected annually in accordance with EPA's *POTW Sludge Sampling and Analysis Guidance Document*, August 1989, and tested for the following metals:

- Cadmium
- Chromium
- Copper
- Lead
- Nickel
- Zinc
- Selenium
- Arsenic
- Molybdenum
- Molybdenum
- Mercury

Sampling records shall be retained for a minimum of five years. A log shall be kept of sludge quantities generated and of handling and disposal activities. The frequency of entries is discretionary; however, the log should be complete enough to serve as a basis for part of the annual report.

**WATER SUPPLY MONITORING**

A sampling station shall be established where a representative sample of the water supply can be obtained. Water supply monitoring shall include at least the following:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Unit</th>
<th>Sample Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC(^1)</td>
<td>(\mu)mhos/cm</td>
<td>Quarterly</td>
</tr>
</tbody>
</table>

\(^1\) Conductance @ 25°C.
GROUNDWATER MONITORING

By **15 December 1998**, the Discharger shall submit a work plan for a groundwater monitoring network with a schedule for implementation, in or near all areas where wastes are disposed of by the Discharger. The monitoring network shall consist of one or more background monitoring wells and sufficient downgradient wells to determine flow direction and gradient, and to monitor disposal areas. All well locations and construction features are subject to the prior approval of the Executive Officer and must be sufficient to monitor potential impacts of the disposal operation on the uppermost groundwater aquifer. Existing wells proposed for inclusion in the program shall have known construction features (depth, length of perforated interval, surface seal, etc.). Wells shall be perforated in only the upper portion of the aquifer and shall comply with standards for construction and installation of monitoring wells in accordance with *California Well Standards, Bulletins 74-81 and 74-90*, prepared by the California Department of Water Resources. **Within 30 days following approval** of the work plan by the Executive Officer, the Discharger shall implement the proposed groundwater monitoring well network.

Samples shall be taken monthly from approved background monitoring well(s) for one year and analyzed for the parameters specified below. Data from these analyses shall be reported to the Board within **30 days after said year ends**, for use in determining water quality protection standards.

If subsequent sampling of the background monitoring well(s) indicates significant water quality changes due to either seasonal fluctuations or other reasons unrelated to waste disposal activities, the Discharger may request modification of the water quality protection standards.

The downgradient wells shall constitute “points of compliance” (POCs). In conjunction with background monitoring, monitoring of POCs will enable one to determine compliance with water quality protection standards. This information shall be displayed on a water flow net diagram for the site. Water samples shall be collected from wells in the approved monitoring network and analyzed as follows:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth</td>
<td>feet$^1$</td>
<td>measurement</td>
<td>Monthly</td>
</tr>
<tr>
<td>Minerals$^2$</td>
<td>mg/l</td>
<td>Grab</td>
<td>Annually</td>
</tr>
<tr>
<td>EC$^3$</td>
<td>$\mu$hos/cm</td>
<td>Grab</td>
<td>Annually</td>
</tr>
<tr>
<td>pH</td>
<td>pH units</td>
<td>Grab</td>
<td>Annually</td>
</tr>
<tr>
<td>Nitrate-Nitrogen</td>
<td>mg/l</td>
<td>Grab</td>
<td>Annually</td>
</tr>
</tbody>
</table>
MONITORING AND REPORTING PROGRAM
CITY OF SANGER WWTF
FRESNO COUNTY

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kjeldahl-Nitrogen</td>
<td>mg/l</td>
<td>Grab</td>
<td>Annually</td>
</tr>
<tr>
<td>Total Nitrogen</td>
<td>mg/l</td>
<td>Grab</td>
<td>Annually</td>
</tr>
</tbody>
</table>

1 The Discharger shall report ground water levels as elevations with respect to mean sea level as well as depth below ground surface.
2 Mineral analyses shall include calcium, carbonate, chloride, fluoride, iron, magnesium, nitrate, potassium, sodium, sulfate, total dissolved solids, and total phosphorous.
3 Conductance @ 25°C.

Following each sampling event (after establishment of water quality protection standards), the Discharger shall determine whether there is a statistically significant increase over water quality protection standards for each parameter and constituent analyzed. If the Discharger or the Board finds there is a statistically significant increase in indicator parameters or waste constituents over the water quality protection standards at the POCs, the Discharger shall notify the Board, or acknowledge the Board's findings, and submit, within 90 days, either a technical report with a plan and time schedule for implementing a verification monitoring program or a report demonstrating water quality protection standards have been exceeded and assess the horizontal and vertical extent of the impact.

REPORTING

Monthly monitoring reports containing results of all sampling conducted during the month shall be submitted to the Board by the 20th day of the month following sample collection. Quarterly and annual monitoring results shall be submitted by the 20th day of the month following each calendar quarter and year, respectively.

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 whether the discharge complies with waste discharge requirements.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring report form.

The Discharger may also be requested to submit an annual report to the Board with tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.
By 31 January of each year, the Discharger shall submit a written report to the Executive Officer containing the following:

a. The names, titles, certificate grade (if any) and general responsibilities of persons operating and maintaining the wastewater treatment plant.

b. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.

c. A certified statement of when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who did the calibration (Standard Provision C.4).

d. A statement whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as currently constructed and operated, and the dates when these documents were last reviewed for adequacy.

e. The total quantity of sludge disposed of during the previous year and ultimate disposal site(s)

All reports submitted in response to this Order shall comply with the signatory requirements in Standard Provision B.3.

The Discharger shall implement the above monitoring program on the first day of the month following the completion of the WWTF improvements.

Ordered by: GARY M. CARLTON, Executive Officer

5 June 1998
(Date)

ATTACHMENT B
VICINITY MAP
CITY OF SANGER
WASTEWATER TREATMENT FACILITY
FRESNO COUNTY

Section 11 AND 12, T15S, R22E, MDB&M
Sanger U.S.G.S. Quadrangle Map
CITY OF SANGER
WASTEWATER TREATMENT FACILITY
FRESNO COUNTY

The existing City of Sanger (hereafter Discharger) wastewater treatment facility (WWTF) provides for collection, treatment, and disposal of both domestic and industrial wastewater. Because of organic and hydraulic overloading of both industrial and domestic units, the Discharger is under a Cease and Desist Order (Order No. 96-002) that includes a time schedule to complete modifications necessary to comply with requirements. The Discharger submitted a Report of Waste Discharge in April 1997 that describes the necessary WWTF modifications, which include the expansion of WWTF capacity to 3.0 mgd, and the discharge of treated domestic wastewater to new property on Lincoln Avenue. The industrial wastewater will continue to be treated and discharged at the existing WWTF property. The industrial wastewater discharge will be regulated by separate waste discharge requirements.

The WWTF will consist of headworks, primary clarifiers, activated sludge unit, secondary clarifiers, disinfection unit, sludge thickener, anaerobic sludge digester, sludge drying beds, and rapid infiltration disposal basins. Dried sludge will be hauled off-site for land application at a permitted facility.

Effluent will be disposed of in three rapid infiltration basins, each about 8 acres in area. Basin size is based on a discharge of 3.0 mgd; percolation of 0.6 ft. per day; a 100-year, 10-day precipitation of 6.0 inches; and zero evaporation. To maximize nitrogen removal, basins will be filled and dried on a 30-day cycle time.

These waste discharge requirements require that the Discharger submit a technical report prepared by a California registered engineer certifying completion of WWTF modifications for a treatment and disposal capacity of 3.0 mgd. Until the certification is received and acknowledged by the Executive Officer, the discharge shall be limited pursuant to existing Waste Discharge Requirements Order No. 91-037.

Groundwater in the vicinity of the WWTF disposal area is approximately 30 feet below ground surface. Department of Water Resources groundwater map (1995) indicates that the general direction of groundwater flow is to the southeast. Testing of groundwater in the disposal area in 1996 and 1997 indicates groundwater is low in minerals with a specific electrical conductivity (EC) of 220 μmhos/cm. The nitrate level in groundwater is approximately 14 mg/l. Coliform tests indicate that coliform bacteria are present in groundwater.

Soils beneath the disposal area consist of silty sands. Samples from four soil borings obtained at depths from 5 to 25 feet provided soil permeabilities of $3.3 \times 10^{-4}$ to $3.2 \times 10^{-2}$ cm/sec.

Annual average precipitation in the area is 10 inches, and annual average pan evaporation is 60 inches.

The WWTF properties drain to the Kings River.
On 24 June 1996, the City of Sanger certified a final environmental impact report (EIR) for the WWTF improvements in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.) and the State CEQA Guidelines. The Regional Board considered the EIR and incorporated mitigation measures in these waste discharge requirements to address impacts to water quality.