

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. 86-152

WASTE DISCHARGE REQUIREMENTS
FOR
CITY OF FARMERSVILLE
WASTEWATER TREATMENT AND DISPOSAL FACILITIES
TULARE COUNTY

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

1. The City of Farmersville (hereafter Discharger) submitted a Report of Waste Discharge, dated 3 January 1986, and a site evaluation report, dated 3 January 1986. The property is owned by the Discharger.
2. The Board, on 13 December 1968, adopted Resolution No. 69-84 which prescribed requirements for the City of Farmersville wastewater treatment and disposal facilities in Sections 12 and 13, T19S, R25E, MDB&M.
3. Present waste discharge requirements established by Resolution No. 69-84 are neither adequate nor consistent with plans and policies of the Board.
4. The Discharger discharges 1.0 million gallons per day from two aeration ponds to eight percolation/evaporation ponds.
5. Approximately 140 acres of prunes and walnuts owned by Jack Hesse are flood irrigated with effluent from the treatment facilities.
6. Irrigation of Mr. Hesse's property is governed under Wastewater Reclamation Requirements Order No. 84-128.
7. The Discharger plans to increase the capacity of the treatment and disposal facilities to accommodate a design flow of 1.25 mgd. This expansion is proposed to be the first of a phased approach to expand the facilities to a final design flow of 1.5 mgd.
8. The plant capacity is proposed to be increased by initially constructing an additional aeration pond and an additional percolation/evaporation pond. The next phase will be the construction of two additional percolation/evaporation ponds along with expanding two existing percolation/evaporation ponds.
9. Surface water drainage is to Deep Creek and Lower Deep Creek, tributaries to the Tule River, a water of the United States.
10. The beneficial uses of the Tule River are municipal, industrial, and agricultural supply; recreation; esthetic enjoyment; ground water recharge; and preservation and enhancement of fish, wildlife and other aquatic resources.

WASTE DISCHARGE REQUIREMENTS
CITY OF FARMERSVILLE
WASTEWATER TREATMENT AND DISPOSAL FACILITIES
TULARE COUNTY

-2-

11. The beneficial uses of the ground water are municipal, industrial, and agricultural supply.
12. Monthly ground water monitoring reports indicate coliform concentrations in shallow ground water underlying the facility.
13. The Discharger has proposed mitigation measures to prevent coliform from entering ground water. These measures include: lining the existing and proposed aeration ponds; installing additional ground water monitoring wells; and monitoring any nearby, existing, downgradient domestic wells.
14. The Board, on 25 July 1975, adopted a Water Quality Control Plan for the Tulare Lake Basin (5D) which contains water quality objectives. These requirements are consistent with that Plan.
15. The City of Farmersville has adopted a negative declaration in accordance with the California Environmental Quality Act, (Public Resources Code Section 21000, et seq.), and the State Guidelines.
16. The Board has reviewed the negative declaration and concurs there are no significant impacts on water quality.
17. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge.
18. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Resolution No. 69-84 be rescinded and the City of Farmersville, 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. The direct discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. The by-pass or overflow of untreated or partially treated waste is prohibited.

B. Discharge Specifications:

1. Neither the treatment nor the discharge shall cause a pollution or nuisance as defined by the California Water Code, Section 13050.

WASTE DISCHARGE REQUIREMENTS
 CITY OF FARMERSVILLE
 WASTEWATER TREATMENT AND DISPOSAL FACILITIES
 TULARE COUNTY

2. The discharge shall remain within the designated disposal area at all times.
3. The 30-day average daily dry weather discharge flow shall not exceed 1.25 million gallons.
4. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer.
5. Reclaimed wastewater shall meet the criteria contained in Title 22, Division 4, California Administrative Code (Section 60301, et seq.).
6. The discharge of an effluent from the final evaporation/percolation pond in excess of the following limits is prohibited:

<u>Constituents</u>	<u>Units</u>	<u>30-Day Average</u>	<u>Instantaneous Maximum</u>
BOD ₅ ^{1/}	mg/l	40	80
Settleable Matter	ml/l	0.2	0.5

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

7. The dissolved oxygen content of holding ponds shall not be less than 1.0 mg/l for 16 hours in any 24-hour period.
8. The maximum electrical conductivity (EC) of the discharge shall not exceed the average EC of the source water plus 500 micromhos/cm.
9. The Discharger shall preclude access to the treatment and disposal areas through such means as fencing, signing, and irrigation management practices.

C. Provisions:

1. The Discharger may be required to submit technical reports as directed by the Executive Officer.
2. The Discharger shall comply with the attached Monitoring and Reporting Program No. 86-152.
3. The Discharger shall comply with the Standard Provisions and Reporting Requirements, dated 1 September 1985, which are a part of this Order.

WASTE DISCHARGE REQUIREMENTS
CITY OF FARMERSVILLE
WASTEWATER TREATMENT AND DISPOSAL FACILITIES
TULARE COUNTY

-4-

4. The Discharger shall comply with Discharge Specification B.1 of this Order according to the following time schedule:

<u>Task</u>	<u>Date</u>	<u>Compliance Report Due</u>
A. Initiate measures to mitigate coliform concentrations in ground water.	15 Aug 1986	30 Aug 1986
B. Complete mitigation measures	31 Dec 1986	15 Jan 1987
C. Full Compliance	1 Feb 1987	15 Feb 1987

The Discharger shall submit to the Board on or before each compliance report date, a report detailing his compliance or noncompliance with the specific schedule date and task.

If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Board by letter when he has returned to compliance with the time schedule.

5. The Discharger shall provide a report 60 days prior to start of construction of the initial phase and each subsequent phase of disposal pond expansion which includes supporting design and soils information which demonstrates the capability of the soils to provide adequate treatment of percolating wastewater. The report shall be prepared by a registered civil engineer competent in the design of wastewater systems and shall be subject to review and approval of the Executive Officer.
6. The Discharger shall provide certified wastewater treatment plant operators in accordance with regulations adopted by the State Resources Control Board.
7. The Discharger shall report promptly to the Board any material change or proposed change in the character, locations, or volume of the discharge.
8. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this office.
9. The Board will review this Order periodically and may revise requirements when necessary.

WASTE DISCHARGE REQUIREMENTS
CITY OF FARMERSVILLE
WASTEWATER TREATMENT AND DISPOSAL FACILITIES
TULARE COUNTY

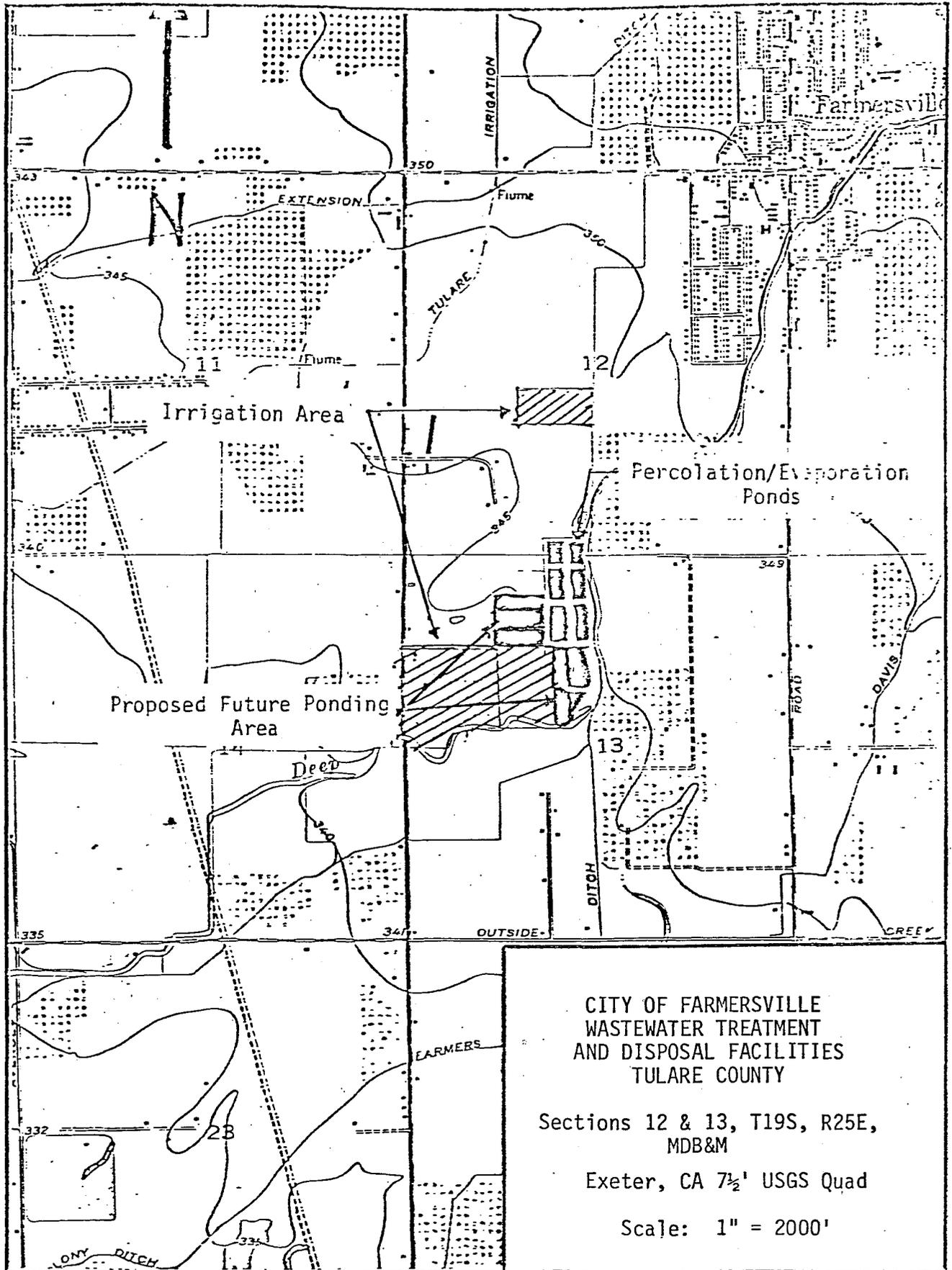
-5-

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 8 August 1986.


WILLIAM H. CROOKS, Executive Officer

JTC:bro:6/2/86

Attachments



CITY OF FARMERSVILLE
 WASTEWATER TREATMENT
 AND DISPOSAL FACILITIES
 TULARE COUNTY

Sections 12 & 13, T19S, R25E,
 MDB&M

Exeter, CA 7½' USGS Quad

Scale: 1" = 2000'

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

REVISED MONITORING AND REPORTING PROGRAM NO. 86-152
FOR
CITY OF FARMERSVILLE
WASTEWATER TREATMENT FACILITY
TULARE 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 by **30 November 2001**, and attached by the Discharger to its copy of this Program.

INFLUENT MONITORING

The Discharger shall collect influent samples at the headworks of the treatment facility prior to any treatment of waste. Time of a grab and composite samples shall be recorded. Influent monitoring shall include at least the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
Average Daily Flow	mgd	Metered	Daily <i>dry weather</i>
Monthly Average Flow	mgd	Computed	Monthly
Conductivity at 25°C (EC)	µmhos/cm	Grab ²	2/month
Settleable Solids	mL/L	Grab	Monthly
BOD ₅ ¹	mg/L	8-hr Composite ³	Monthly
Total Suspended Solids (TSS)		8-hr Composite	Monthly

¹ Five-day, 20°C biochemical oxygen demand

² In nonconsecutive weeks

³ A representative composite sample may be obtained by collecting four samples at uniform intervals over an eight-hour period.

EFFLUENT MONITORING

The Discharger shall collect effluent samples at a point in the system following treatment (prior to discharge to the evaporation/percolation ponds). Effluent samples shall be representative of the volume and nature of the discharge. Time of collection of a grab sample shall be recorded. Effluent monitoring shall include the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
EC	µmhos/cm	Grab	Weekly <i><sw + 500</i>
pH	pH units	Grab	Weekly
Settleable Solids	mL/L	Grab	Monthly <i>0.2 / 0.5</i>

REVISED MONITORING AND REPORTING PROGRAM NO. 86-152
 CITY OF FARMERSVILLE
 FARMERSVILLE WWTF
 TULARE COUNTY

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
BOD ₅	mg/L	8-hr Composite ¹	2/month 40/60
TSS	mg/L	8-hr Composite ¹	2/month
Total Dissolved Solids (TDS) ²	mg/L	Grab	Quarterly ³
Total Kjeldahl Nitrogen	mg/L	Grab	Quarterly ³
Nitrate-Nitrogen	mg/L	Grab	Quarterly ³
Total Nitrogen	mg/L	Calculated	Quarterly ³
Metals ⁴	mg/L	Grab	Yearly
General Minerals ⁵	mg/L	Grab	Yearly ⁶

¹ A representative composite sample may be obtained by collecting four samples at uniform intervals over an eight-hour period

² TDS referenced hereafter in this program shall be determined using EPA Method No. 160.1 for combined organic and inorganic TDS and EPA Method No. 160.4 for inorganic TDS.

³ January, April, July, and October; concurrent with EC sampling

⁴ Metals as referred to in this program shall include arsenic, barium, copper, cadmium, chromium, lead, mercury, molybdenum, selenium, silver, zinc, and nickel.

⁵ General minerals referenced hereafter in this program shall include the constituents in the Analyte List presented below.

⁶ The first General Minerals sample shall be collected in January 2002.

General Minerals Analyte List

Alkalinity (as CaCO ₃)	Carbonate (as CaCO ₃)	Manganese
Aluminum	Chloride	Phosphate
Bicarbonate (as CaCO ₃)	Hardness (as CaCO ₃)	Potassium
Boron	Iron	Sodium
Calcium	Magnesium	Sulfate

General Minerals Sample Collection and Preservation: Any sample placed in an acid-preserved bottle must first be filtered through a 0.45 µm nominal pore size filter. If field filtering is not feasible, samples shall be collected in unpreserved containers and submitted to the laboratory within 24-hours with a request (on the chain-of-custody form) to immediately filter then preserve the samples.

SOURCE WATER MONITORING

The Discharger shall establish a source sample station where a representative sample of the water supply can be obtained. If source water is from more than one source, the results shall be reported as a flow weighted average and include copies of supporting calculations. Source water supply monitoring shall include at least the following:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
EC	µmhos/cm	Grab	Quarterly ¹
TDS	mg/l	Grab	Annually ²

¹ January, April, July and October

² January, concurrent with EC sampling

SLUDGE MONITORING

To ensure that discharges to the WWTF are not interfering with the treatment process, the Discharger shall collect a composite sample of sludge when it is removed from the aeration basins and/or the ten evaporation/percolation ponds. Samples shall be collected in accordance with EPA's *POTW Sludge Sampling And Analysis Guidance Document, August 1989*, and tested for the following metals:

Arsenic	Copper	Nickel
Cadmium	Lead	Selenium
Molybdenum	Mercury	Zinc

POND MONITORING

Permanent markers shall be placed in the ponds with calibration marks indicating the water level at design capacity and available operational freeboard. The freeboard shall be monitored on all evaporation/percolation ponds to the nearest tenth of a foot. Pond monitoring shall include at least the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
Freeboard	feet	Observation	Weekly
<u>Dissolved Oxygen</u>	mg/L	Grab ¹	Weekly ² > 1.0

¹ Samples shall be collected from opposite of the inlet of the evaporation/percolation ponds and analyzed for dissolved oxygen. Samples shall be collected between 0800 and 0900 hours. Time of sampling shall be reported.

² If results indicate a concentration of less than 1.0 mg/L, or if offensive odors are noted, the frequency of monitoring shall be increased as necessary to characterize the period of noncompliance.

In addition, the Discharger shall inspect the condition of the ponds once per week and write visual observations in a bound logbook. Notations shall include observations of whether weeds are developing in the water or along the bank, and their location; whether dead algae, vegetation, scum, or debris are accumulating on the pond surface(s) and their location(s); whether burrowing animals or insects are present; and the color of the ponds (e.g., dark sparkling green, dull green, yellow, gray, tan, brown, etc.). The Discharger shall submit a summary of the entries made in the log during each month along with the monitoring report the following month.

GROUNDWATER MONITORING

Prior to collecting samples, the monitoring well shall be adequately purged to remove water that has been standing within the well screen and casing that may not be chemically representative of formation water. Depending on the hydraulic conductivity of the geologic setting, the volume removed during purging is typically from 3 to 5 volumes of the standing water within the well casing and screen, or additionally the filter pack pore volume.

At least quarterly and concurrently with groundwater quality sampling, the Discharger shall measure the water level in each well. The Discharger shall report groundwater level data as groundwater depth (in feet and hundredths) and as groundwater surface elevation (in feet and hundredths above mean sea level). The horizontal geodetic location for each monitoring well shall be provided where the point of beginning shall be described by the California State Plane Coordinate System, 1983 datum.

In reporting the results of the first quarterly report, the Discharger shall include a detailed description of the procedures and techniques for: (a) sample collection, including purging techniques, sampling equipment, and decontamination of sampling equipment; (b) sample preservation and shipment; (c) analytical procedures; and (d) chain of custody control.

Samples shall be collected quarterly from the approved monitoring wells and analyzed for the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
EC	µmhos/cm	Grab	Quarterly ¹
Total Dissolved Solids	mg/L	Grab	Quarterly ¹
Ammonia (as N)	mg/L	Grab	Quarterly ¹
Nitrate-Nitrogen	mg/L	Grab	Quarterly ¹
Total Kjeldahl Nitrogen (TKN)	mg/L	Grab	Quarterly ¹
Total Organic Carbon (TOC)	mg/L	Grab	Quarterly ¹
Total Nitrogen	mg/L	Calculated	Quarterly ¹
<u>General Minerals</u>	mg/L	Grab	Quarterly ¹

¹ January, April, July, and October

If groundwater monitoring consistently shows no significant variation in magnitude of a constituent concentration after the first 12 months of monitoring, the Discharger may propose to revise the MRP to the reduce frequency. The proposal must include justification for modifications and is subject to the Executive Officer approval.

After one full year of groundwater monitoring, the Discharger shall analyze monitoring data from background well(s) to compute background water quality values for each constituent and to perform an initial assessment of whether there is evidence of an impact from the discharge. To complete this task, the Discharger shall use monitoring data from background, internal and boundary monitoring wells in an

appropriate data analysis method as described in Title 27, section 20415(e)(7-9) (hereafter Data Analysis Method). Reports thereafter shall be submitted quarterly by the **1st day of the second month** after the prescribed sample collection and shall include the same analysis. The Discharger shall perform the Data Analysis Method on the following constituents:

Groundwater Constituents to Evaluate Using Data Analysis Method

Alkalinity (as CaCO ₃)	Phosphate
Ammonia (as N)	Potassium
Boron	Sodium
Calcium	Sulfate
Chloride	TDS
Hardness (as CaCO ₃)	TKN
Iron	Total Nitrogen
Magnesium	TOC
Nitrate (as N)	Manganese

If the Discharger during any quarterly data evaluation finds statistically significant evidence of an increase at boundary wells compared to background levels of TKN or TOC, or evidence of violation of Discharge Specifications No. B.1 (causing nuisance and/or pollution), the Discharger shall conclude that it is in violation of waste discharge requirements unless it can demonstrate an offsite source. The Discharger shall describe the data analysis method used as well as the criteria it used for determining "statistically significant evidence," and submit within two weeks, at confirmation, a written report pursuant to Provision No. C.1.

REPORTING

The Discharger shall report monitoring data and information as required in this Monitoring Reporting Program and as required in the Standard Provisions and Reporting Requirements (September 1985).

Monthly monitoring reports shall be submitted to the Board by the **1st day of the second month** following sample collection, and include, at a minimum, monitoring data collected during the month (e.g., effluent pH and TSS). Samples taken annually shall be submitted with the monthly monitoring report following sample collection.

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents or parameters, and the concentrations or measurements are readily discernible. The data shall be summarized in a manner that clearly illustrates whether the discharge complies with waste discharge requirements. If any pollutant is monitored 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.

By **1 February of each year**, the Discharger shall submit a written report to the Executive Officer containing the following:

- a. The names, titles, certificate grade, and general responsibilities of persons operating and maintaining the wastewater treatment facility.
- b. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.
- c. A certified statement of when monitoring and instrument devices were last calibrated (Standard Provision No. C.5).
- d. The most recent annual Water Quality Report for the City of Farmersville.
- e. A figure depicting the monthly average daily discharge flow for the past five years.
- f. A discharger whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment, collection, and disposal facilities. The projections shall be made in January, based on the last three years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in four years, the discharger shall notify the Board by **31 January**.
- g. A summary of annual sludge monitoring data, including:
 - i. Annual sludge production in dry tons and percent solids.
 - ii. A schematic diagram showing sludge handling facilities and solids flow diagram.
 - iii. A description of disposal methods, including the following information related to the disposal methods used at the WWTF. If more than one method is used, include the percentage of annual sludge production disposed of by each method.
 - (1) For **landfill disposal**, include: the Order numbers of WDRs that regulate the landfill(s) used, the present classifications of the landfill(s) used, and the names and locations of the facilities receiving sludge.
 - (2) For **land application**, include: the locations of the site(s), the Order numbers of any WDRs that regulate the site(s), the application rate in lbs/acre/year (specify wet or dry), and subsequent uses of the land.
 - (3) For **incineration**, include: the names and location of the site(s) where sludge incineration occurs, the Order numbers of WDRs that regulate the site(s), the disposal

method of ash, and the names and locations of facilities receiving ash (if applicable).

- (4) For **composting**, include: the location of the site(s), and the Order numbers of any WDRs that regulate the site(s).

h. A summary of groundwater monitoring, including:

- i. Hydrographs showing the groundwater elevation in each approved well for at least the previous five years (as data become available). The hydrographs should show groundwater elevation with respect to the elevations of the top and bottom of the screened interval and be presented at a scale of values appropriate to show trends or variations in groundwater elevation. The scale for the background plots shall be the same as that used to plot downgradient elevation data;
 - ii. A description and graphical presentation of the gradient and direction of groundwater flow under the area encompassing the disposal ponds and the emergency disposal pond used to dry sludge;
 - iii. Graphs of the laboratory analytical data for all samples taken from each approved well within at least the previous five calendar years (as data become available). Each such graph shall plot the concentration of one or more evaluated constituent over time for a given monitoring well, at a scale appropriate to show trends or variations in water quality. The graphs shall plot each datum, rather than plotting mean values. For any given evaluated constituent, the scale for the background plots shall be the same as that used to plot downgradient data;
 - iv. All monitoring analytical data obtained during the previous four quarterly reporting periods, presented in tabular form, as well as 3.5" computer diskettes (or submitted separately via e-mail), either in MS-DOS / ASCII format or in another file format acceptable to the Executive Officer (e.g., Microsoft Excel); and
 - v. A comprehensive discussion of the compliance record, and the result of any corrective actions taken or planned that may be needed to bring the Discharger into full compliance with the waste discharge requirements.
- i. The report shall discuss the compliance record for the reporting period. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with Waste Discharge Requirements (WDRs) Order No. 86-152.

All reports submitted in response to WDRs Order No. 86-152 shall comply with the following signatory requirements:

- a. All reports shall be signed by persons identified below:
 - a. For a corporation: by a principal executive officer of at least the level of senior vice-president.
 - b. For a Partnership or sale proprietorship: by a general partner or the proprietor.
 - c. For a municipality state, federal or other public agency: by either a principal executive officer or ranking elected or appointed official.
 - d. A duly authorized representative of a person designated in 3a, 3b or 3c of this requirement if;
 - (1) the authorization is made in writing by a person described in 3a, 3b, or 3c of this provision;
 - (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a waste management unit, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named Position); and
 - (3) the written authorization is submitted to the Board.

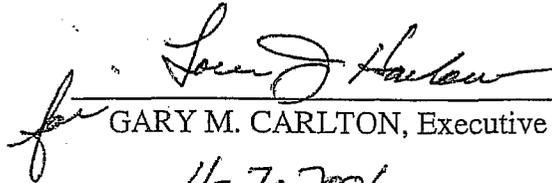
Any person signing a document under this Section shall make the following certification:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted if this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

- b. Technical and monitoring reports specified in WDRs Order No. 86-152 or Revised Monitoring and Reporting Program No. 86-152 are required pursuant to Section 13267 of the Water Code. Failing to furnish the reports by the specified deadlines and falsifying information in the reports are misdemeanors that may result in assessment of civil liabilities against the discharger.
- c. Reports submitted concerning facility performance must also be signed and certified by the chief plant operator. When reports contain laboratory analyses performed by the Discharger and the chief plant operator is not in the direct line of supervision of the laboratory, reports must also be signed and certified by the chief of the laboratory.

REVISED MONITORING AND REPORTING PROGRAM NO. 86-152
CITY OF FARMERSVILLE
FARMERSVILLE WWTF
TULARE COUNTY

The Discharger shall implement the above monitoring and reporting program immediately upon receipt.



for GARY M. CARLTON, Executive Officer
11-7-2001

(Date)