# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

#### ORDER NO. 98-140

# WASTE DISCHARGE REQUIREMENTS FOR EARLIMART PUBLIC UTILITY DISTRICT WASTEWATER TREATMENT FACILITY TULARE COUNTY

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

- Waste Discharge Requirements (WDRs) Order No. 96-019, adopted by the Board on 26 January 1996, prescribes requirements for discharge of wastewater from the wastewater treatment facility (WWTF) operated by Earlimart Public Utility District (hereafter Discharger).
- 2. The WWTF consists of a bar screen, an aerated grit chamber, two communitors in parallel, a clarigester, and two sets of oxidation ponds, with each set comprised of three ponds in series. The oxidation ponds have an operating depth of four feet. The total oxidation pond bottom area is about 8.3 acres. In January 1995, the Discharger proposed construction of additional oxidation ponds to increase the treatment capacity of the WWTF. Order No. 96-019 required the Discharger to complete construction of the ponds by 15 November 1996. The Discharger did not comply with the time schedule.
- 3. In April 1997, the Discharger provided final design details of the WWTF expansion. The Discharger has started construction of the ponds and expects to complete construction by July 1998. Eight more oxidation ponds with total additional pond bottom area of 11.12 acres will be provided at the WWTF. The expanded WWTF will have a total treatment capacity of 1.24 mgd.
- 4. Effluent from the oxidation ponds is stored in three retention ponds. The surface area of the retention ponds is 20 acres. Order No. 96-019 permitted recycling of the wastewater on 140 acres of Discharger owned land, which is currently fallow. The Discharger has indicated that currently all wastewater evaporates and percolates from the retention ponds. As flow increases, the Discharger plans to recycle the wastewater. The 140 acres of land will be converted into pasture land.
- 5. On 20 October 1997, the Discharger submitted a Report of Waste Discharge for increased flows at the WWTF. Order No. 96-019 permitted discharge of 0.6 mgd prior to additional pond construction and 0.8 mgd after construction of the ponds. Installation of a new

transducer and a recorder in the flowmeter in July 1997 showed that the actual flow of wastewater at the WWTF is higher than the recorded flow. The Discharger requested that the monthly average flow limit be changed from 0.8 mgd to 1.24 mgd in proportion to capacity based on corrected flow measurements.

- 6. Along with the Report of Waste Discharge, the Discharger submitted water and nutrient balance calculations for the WWTF. The percolation rate used in the calculations was an assumed value, which was not verified in the field. Also, the concentration of effluent nitrogen used in the nutrient balance calculations was from a different WWTF. The Discharger has not characterized Earlimart PUD's effluent for nitrogen.
- 7. The Discharger's self monitoring reports for 1995, 1996, and 1997 show that the winter flows are not higher than the summer flows, indicating there is no significant inflow and infiltration during winter months at the collection system.
- 8. Since 1993, the Discharger has been exceeding BOD limits. The Discharger attributed some of the high effluent BOD readings in 1994 and 1995 as due to laboratory errors. Review of the 1996 and 1997 self monitoring reports shows that the monthly average effluent BOD varied between 40 and 69 mg/l, except in April, May, June, and July 1997 when the monthly averages of effluent BOD were within the 40 mg/l limit. The maximum effluent BOD limit of 80 mg/l was exceeded in April and June 1996. The Discharger states that the BOD problem will be solved by the additional oxidation ponds.
- 9. Since January 1996, the Discharger has violated the dissolved oxygen limit of 1 mg/l specified in the Waste Discharge Requirements. The Discharger's engineer states that accumulation of organic matter in the wastewater recirculation pipes connecting to the ponds may be the cause of low dissolved oxygen in the ponds.
- 10. The WWTF is in Section 32, T23S, R25E, MDB&M, as shown in Attachment A, which is attached hereto and part of this Order by reference. Surface water drainage is to Deer Creek, a valley floor water. The site lies within the Tule Delta Hydrologic Area (No. 558.20) in the South Valley Floor Hydrologic Unit, as depicted on interagency hydrologic maps prepared by the Department of Water Resources in August 1986.
- 11. The Water Quality Control Plan for the Tulare Lake Basin, Second Edition, (hereafter Basin Plan), designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for all waters of the Basin. These requirements implement the Basin Plan.

- 12. The beneficial uses of Deer Creek, a valley floor water, as identified in the Basin Plan, include industrial and agricultural supply; water contact and non-contact water recreation; warm fresh water habitat; preservation of rare and endangered species; and groundwater recharge.
- 13. Based on the information obtained from the "Lines of Equal Elevation of Water in Wells in Unconfined Aquifer," published by Department of Water Resources in Spring 1996, the depth of groundwater in the region is 100 feet below ground surface.
- 14. The beneficial uses of underlying groundwater are domestic, industrial, and agricultural supply.
- 15. Soils in the area are Fresno clay loam and Traver fine sandy loam. Fresno clay loam is calcareous and has a hardpan. Traver fine sandy loam is a saline soil with poor drainage characteristics.
- 16. The Regional Board has considered antidegradation pursuant to State Board Resolution No. 68-16 and finds that the permitted discharge is consistent with those provisions, and is unlikely to cause an increase in groundwater constituents above that of background levels.
- 17. Based on the information obtained from the Department of Water Resources, the annual precipitation in the area is around 8 inches and the annual pan evaporation is around 79 inches.
- 18. The California Department of Health Services has established statewide criteria in Title 22, California Code of Regulations (CCR), Section 60301 et seq., for the use of recycled water and has developed guidelines for specific uses.
- 19. The Board consulted with the Department of Health Services, the Tulare County Health Department, and the appropriate Mosquito Abatement District, and considered their recommendations regarding public health aspects for use of recycled water.
- 20. The Earlimart Public Utility District certified a negative declaration on 14 November 1995, for the expansion of the treatment plant, pursuant to the provisions of the California Environmental Quality Act (CEQA) in accordance with Title 14, CCR, Section 15301. The Board reviewed the Negative Declaration and concurs there is no substantial evidence the project will have a significant impact on water quality.

21. 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.

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

**IT IS HEREBY ORDERED** that Order No. 96-019 is rescinded and Earlimart Public Utility District, 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. Bypass or overflow of untreated or partially treated waste is prohibited except as allowed in Provision E.2 of Standard Provisions and Reporting Requirements.
- 3. Discharge of waste classified as 'hazardous', as defined in Section 2521(a) of Title 23, CCR, Section 2510, et seq., or 'designated', as defined in Section 13173 of the California Water Code, is prohibited.
- 4. The use of untreated or partially treated waste for irrigation is prohibited.
- 5. Grazing of milking animals within the area irrigated with effluent is prohibited unless such irrigation has ceased for at least thirty days.

## **B.** Discharge Specifications

- 1. The monthly average discharge shall not exceed 0.8 mgd. When a California registered civil engineer has certified that the WWTF can reliably treat 1.24 mgd, the monthly average discharge shall not exceed 1.24 mgd.
- 2. The discharge shall remain within the designated treatment and disposal area at all times.
- 3. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal area.

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- 4. As a means of discerning compliance with Discharge Specification No. B.3, the dissolved oxygen content in the upper zone (1 foot) of wastewater in the oxidation ponds and retention ponds shall not be less than 1.0 mg/l.
- 5. The treatment facilities and disposal areas shall be operated and maintained to prevent inundation or washout due to rainfall with a 100-year return frequency.
- 6. The effluent from the last oxidation pond, prior to discharge to the retention pond, shall not exceed the following limits:

| Constituent                   | <u>Units</u> | Monthly<br><u>Average</u> | Daily<br><u>Maximum</u> |
|-------------------------------|--------------|---------------------------|-------------------------|
| BOD <sub>5</sub> <sup>1</sup> | mg/l         | 40                        | 80                      |
| Settleable Solids             | ml/l         | 0.2                       | 0.5                     |

Five-day, 20° Celsius biochemical oxygen demand

- The maximum conductivity of the discharge shall not exceed source water EC plus
  400 μmhos/cm.
- 8. Ponds shall not have a pH less than 6.5 or greater than 8.5.

9. Ponds shall be managed to prevent breeding of mosquitoes. In particular:

- a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.
- a. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
- b. Dead algae, vegetation, and debris shall not accumulate on the water surface.
- 10. The ponds, in conjunction with disposal on land, shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration. Design seasonal precipitation shall be based on

total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns. Freeboard shall never be less than two feet (measured vertically to the lowest point of overflow).

11. On or about 15 October of each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specification B.10.

#### 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 and USEPA 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 assume primacy to implement regulations contained in 40 CFR 503, this Order may be reopened to incorporate appropriate time schedules and technical standards. The Discharger is responsible for compliance with the standards and time schedules contained in 40 CFR 503 whether or not they have been incorporated into this Order.

# **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 conductivity. Regarding conductivity, the discharge shall not cause groundwater to exceed an incremental increase in conductivity greater than 30 µmhos/cm over the most recent five-year period.

### E. Recycled Water Specifications

- 1. The recycling of wastewater shall be limited to furrow or flood irrigation of pasture, fodder, fiber or seed crops for non-human consumption. Wastewater may also be used for irrigation of orchards or vineyards provided the fruits do not come in contact with the wastewater at anytime and the wastewater is not applied within 30 days of the harvesting of the crops.
- 2. Recycled water shall remain within the designated application area at all times.
- 3. Recycled water used for irrigation shall be managed to minimize erosion.
- 4. The Discharger shall maintain the following setback distances from areas irrigated with recycled water:

| Setback Distance (feet) | <u>To</u>        |
|-------------------------|------------------|
| 25                      | Property line    |
| 30                      | Public roads     |
| 50                      | Drainage courses |
| 100                     | Irrigation wells |
| 150                     | Domestic wells   |

- 5. The perimeter of the application area shall be graded to prevent ponding along public roads or other public areas.
- 6. Application of recycled water to the application area shall be at reasonable rates considering the crop, soil, climate, and irrigation management system.
- 7. Areas irrigated with recycled water shall be managed to prevent breeding of mosquitoes. More specifically:
  - a. All applied irrigation water must infiltrate completely within a 48-hour period.
  - b. Ditches must be maintained free of emergent, marginal, and floating vegetation.
  - c. Low-pressure and unpressurized pipelines and ditches accessible to mosquitoes shall not be used to store water.

8. All areas where recycled water is used shall be posted with conspicuous signs that present the following wording in size that can be clearly read by the public:

"NO TRESPASSING - RECLAIMED WATER - DO NOT DRINK" or "NO TRESPASSING - RECYCLED WATER - DO NOT DRINK"

The signs will have the universal "Do not drink" cross-out underneath the wording (See Attachment B).

9. No physical connection shall exist between recycled water piping and any domestic water supply well, or between recycled water piping and any irrigation well that does not have an air gap or reduced pressure principle device.

## F. Provisions

- 1. The Discharger shall comply with Monitoring and Reporting Program No. 98-140, 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. By **1** November 1998, the Discharger shall submit a report on water and nutrient balance calculations at the WWTF. The report shall verify the assumptions made by the Discharger in water and nutrient balance calculations submitted in October 1997. Percolation rates used in the calculations shall represent actual site conditions. The nutrient balance calculations shall include nitrogen data of the effluent from the WWTF.

The report shall be prepared by a California registered civil engineer experienced in the design of wastewater treatment and disposal facilities.

- 4. The Discharger shall implement, as more completely set forth in 40 CFR 403.5, the necessary legal authorities, programs, and controls to ensure that the following incompatible wastes are not introduced to the treatment system, where incompatible wastes are:
  - a. Wastes which create a fire or explosion hazard in the treatment works;

- b. Wastes which will cause corrosive structural damage to treatment works, but in no case wastes with a pH lower than 5.0, unless the works is specially designed to accommodate such wastes;
- c. Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation or treatment works;
- d. Any waste, including oxygen demanding pollutants (BOD, etc.), released in such volume or strength as to cause inhibition or disruption in the treatment works, and subsequent treatment process upset and loss of treatment efficiency;
- e. Heat in amounts that inhibit or disrupt biological activity in the treatment works, or that raise influent temperatures above 40°C (104°F), unless the treatment works is designed to accommodate such heat;
- f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
- g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the treatment works in a quantity that may cause acute worker health and safety problems;
- h. Any trucked or hauled pollutants, except at points predesignated by the Discharger.
- 5. The Discharger shall implement, as more completely set forth in 40 CFR 403.5, the legal authorities, programs, and controls necessary to ensure that indirect discharges do not introduce pollutants into the sewerage system that, either alone or in conjunction with a discharge or discharges from other sources:
  - a. Flow through the system and cause a violation of discharge specifications of this Order.
  - b. Inhibit or disrupt treatment processes, treatment system operations, or sludge processes, use, or disposal and either cause a violation of this Order or prevent sludge use or disposal in accordance with this Order.
- 6. In addition to requirements set forth in Standard Provision A.4, before accepting waste from an industry subject to Categorical Pretreatment Standards under 40 CFR 403.6 or 40 CFR, Chapter I, Subchapter N, or waste from any industry which will change the character of the discharge, the Discharger shall file a new RWD. The

RWD shall include: (a) its industrial sewer ordinance and any proposed modifications for Board evaluation and approval of the legal authority necessary for the administration and enforcement of general pretreatment requirements of Provision Nos. F.4 and F.5 and any specific requirements of 40 CFR 403.6 or 40 CFR, Chapter I, Subchapter N; and (b) technical justification for its local limits, in particular effluent limits for conventional pollutants.

7. 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.

To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the State of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Board, and a statement. The statement shall comply with the signatory paragraph of Standard Provision B.3 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved by the Executive Officer.

- 8. 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.
- 9. A copy of this Order shall be kept at the WWTF for reference by wastewater treatment plant operating personnel. Key operating personnel shall be familiar with its contents.
- 10. If reclaimed water is used for construction purpose, it shall comply with the most current edition of *Guidelines for Use of Reclaimed Water for Construction Purposes*. Other uses of reclaimed water not specifically authorized herein shall be subject to the approval of the Executive Officer and shall comply with 22 CCR, Division 4.
- 11. 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.

RLTON, Executive Officer

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# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

# MONITORING AND REPORTING PROGRAM NO. 98-140 FOR EARLIMART PUBLIC UTILITY DISTRICT WASTEWATER TREATMENT FACILITY TULARE COUNTY

# INFLUENT MONITORING

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

| Constituent      | <u>Units</u> | Type of Sample | <b>Frequency</b> |
|------------------|--------------|----------------|------------------|
| Flow             | mgd          | Metered        | Continuously     |
| BOD <sub>5</sub> | mg/l         | Grab           | Monthly          |

# **EFFLUENT MONITORING**

Effluent samples shall be collected at the outlet of the last oxidation pond, just prior to discharge to retention ponds. Effluent samples shall be representative of the volume and nature of the discharge. Time of collection of the sample shall be recorded. Effluent monitoring shall include at least the following:

| Constituent            | <u>Units</u> | Type of Sample | Frequency |
|------------------------|--------------|----------------|-----------|
| рН                     | pH Units     | Grab           | Weekly    |
| Settleable Solids      | ml/l         | Grab           | Weekly    |
| BOD₅                   | mg/l         | Grab           | Weekly    |
| EC                     | µmhos/cm     | Grab           | Weekly    |
| Total Nitrogen         | mg/l         | Grab           | Monthly   |
| Total Suspended Solids | mg/l         | Grab           | Annually  |

| <u>Constituent</u>     | <u>Units</u> | Type of Sample | Frequency |
|------------------------|--------------|----------------|-----------|
| Total Dissolved Solids | mg/l         | Grab           | Annually  |

## POND MONITORING

The freeboard shall be monitored on all ponds to the nearest tenth of a foot. Pond monitoring shall include at least the following:

| Constituent                   | <u>Units</u> | Type of Sample | Frequency |
|-------------------------------|--------------|----------------|-----------|
| Dissolved Oxygen <sup>1</sup> | mg/l         | Grab           | Weekly    |
| Freeboard                     | feet         | Observation    | Weekly    |

<sup>1</sup> Samples shall be collected from each pond near the outlet and analyzed for dissolved oxygen. Samples shall be collected between 0800 and 0900 hours.

Permanent markers shall be placed in the ponds with calibration indicating the water level at design capacity and available operational freeboard.

In addition, the Discharger shall inspect the condition of the ponds once per week and write visual observation in a bound log book. 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 and their location; 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.). A copy of the entries made in the log during each month shall be submitted along with the monitoring report the following month. Where the operation and maintenance manual indicates remedial action is necessary, the Discharger shall briefly explain in the transmittal what action has been taken or is scheduled to be taken.

## WATER SUPPLY MONITORING

The Discharger shall conduct annual monitoring of the supply water for EC. If the source water is from more than one source, the EC shall be reported as a weighted average and copies of the supporting calculations shall be included.

### **RECYCLED WATER MONITORING**

Recycling of wastewater shall be monitored according to the following:

| <u>Constituent</u> | <u>Units</u> | Type of Sample | Frequency |
|--------------------|--------------|----------------|-----------|
| Flow               | mgd          | Estimate       | Daily     |
| Area irrigated     | acres        | Estimate       | Monthly   |

### **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:

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

Sampling records shall be maintained for a minimum of five years. A log shall be kept of sludge quantities generated and handling and disposal activities.

The Discharger shall submit annual reports containing the following:

- a. Annual sludge production in dry tons and percent solids.
- b. A schematic diagram showing sludge handling facilities and solids flow diagram.
- c. Depth of application and drying time for sludge drying beds.
- d. A description of disposal methods, including the following information related to the disposal methods used at the facility. If more than one method is used, include the percentage of annual sludge production disposed by each method.
  - (1) For landfill disposal, include: (a) the Order numbers of WDRs that regulate the landfill(s) used, (b) the present classifications of the landfill(s) used, and (c) the names and locations of the facilities receiving sludge.

- (2) For land application, include: (a) the locations of the site(s), (b) the Order numbers of any WDRs that regulate the site(s), (c) the application rate in pounds/acre/year (specify wet or dry), and (d) subsequent uses of the land.
- (3) For incineration, include: (a) the names and locations of the site(s) where sludge incineration occurs, (b) the Order numbers of WDRs that regulate the site(s), (c) the disposal method of ash, and (d) the names and locations of facilities receiving ash (if applicable).
- (4) For composting, include: (a) the location of the sites(s), and (b) the Order numbers of any WDRs that regulate the site(s).

Prior to any disposal or land application of sewage sludge, or removal of sewage sludge from the wastewater treatment plant site, the monitoring and record keeping requirements of 40 CFR 503 shall be met.

#### REPORTING

Daily, weekly, and monthly monitoring data shall be reported in monthly monitoring reports. Monthly monitoring reports shall be submitted to the Board by the 20th day of the following month. Annual monitoring reports shall be submitted by 31 January of each year.

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 that illustrates clearly whether the Discharger 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 discharge monitoring report.

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, certificate grades, and general responsibilities of persons in charge of wastewater treatment and disposal.

- b. The names and telephone numbers of persons to contact regarding the facility for emergency and routine situations.
- A statement certifying when the flow meter and other monitoring instruments and devices c. were last calibrated, including identification of who performed the calibration (Standard Provision C.4)
- d. A statement identifying 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.
- The total quantity of sludge disposed of during the previous year and ultimate disposal e. site(s).

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

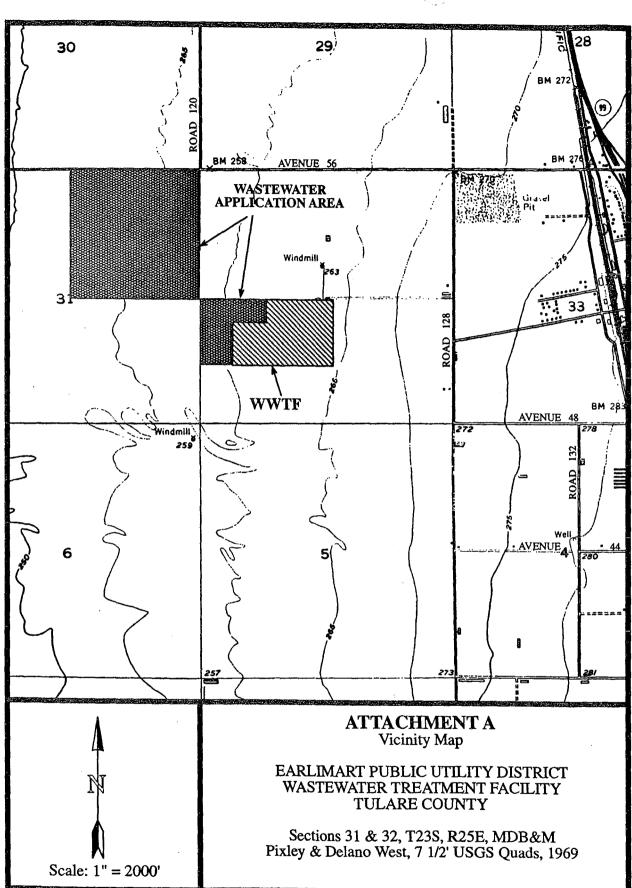
The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

Ordered by:

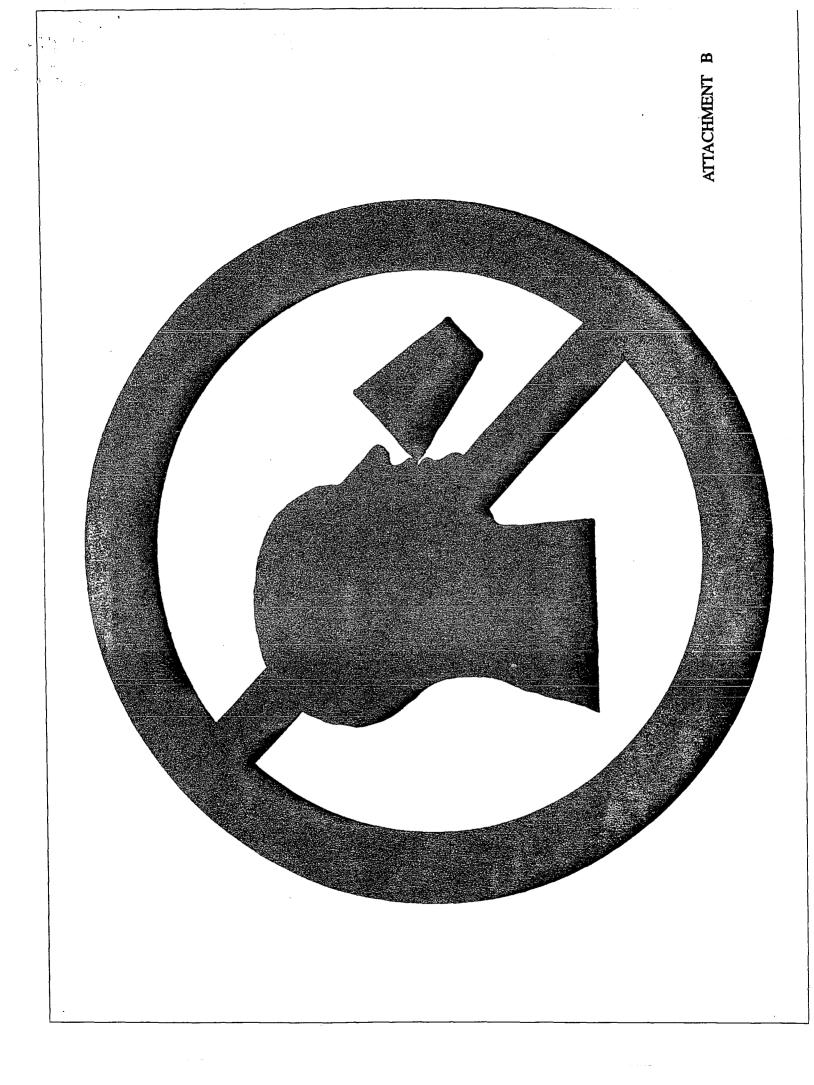
ARLTON, Executive Officer

5 June 1998 (Date)

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## **INFORMATION SHEET**

# EARLIMART PUBLIC UTILITY DISTRICT WASTEWATER TREATMENT FACILITY TULARE COUNTY

Earlimart Public Utility District operates a wastewater treatment facility (WWTF) consisting of a Parshall flume, a back-cleaned bar screen, an aerated grit chamber, two communitors, a lift station, a clarigester, and six oxidation ponds covering a total pond bottom area of 8.3 acres.

In 1995, the Discharger proposed construction of additional oxidation ponds to increase treatment capacity of the WWTF. The Discharger requested increased flow limit after expansion of the WWTF. The additional oxidation ponds were also proposed to address high BOD problems faced at the WWTF. Waste Discharge Requirements Order No. 96-019 was adopted by the Board to reflect increase in flow limit from 0.6 to 0.8 mgd after WWTF expansion. Order No. 96-019 required the Discharger to submit plans by May 1996, start construction by August 1996, and complete construction by November 1996.

The Discharger failed to comply with the time schedule on WWTF expansion. As a consequence, the Discharger continued to violate the BOD limits, even though it complied with the flow limit. In April 1997, the Discharger submitted final plans and specifications on providing additional oxidation ponds. The Discharger has started construction of the ponds and expects to complete construction by July 1998. The WWTF has eight additional oxidation ponds covering a pond bottom area of 11.12 acres.

Order No. 96-019 required the Discharger to conduct at least annual calibration of all monitoring instruments including flowmeter and submit a report on flowmeter calibration by 31 January each year. In February 1997 Board staff sent a Notice of Violation (NOV) on failure by the Discharger to report flowmeter calibration. Following the NOV the Discharger looked into its flow measurement and found discrepancies based on supply water flow and wastewater flow. In July 1997 the Discharger installed a new transducer and a recorder. It also conducted spot checking of its flowmeter. The Discharger concluded that the actual flows are much higher than the recorded flow.

On 20 October 1997, the Discharger submitted a Report of Waste Discharge for increased flows at the WWTF. The Discharger requested change in the monthly average flow limit from 0.8 mgd to 1.25 mgd to reflect discrepancies in flow measurement.

Effluent from the oxidation ponds is discharged to three retention ponds occupying a total area of 20 acres. The WWTF has 140 acres of land for disposal of wastewater. The Discharger has indicated that all effluent is currently disposed at the retention ponds, and that the 140 acres of land has not been used for wastewater disposal. When flows start increasing, the Discharger will use the 140 acres of land for wastewater recycling. The fallow land will be converted into a pasture land. The California Department of Health Services (DHS) has established statewide criteria in Title 22, for the use of recycled water and has developed guidelines for specific uses. This Order includes criteria and guidelines developed by DHS.

## **INFORMATION SHEET - Continued**

# EARLIMART PUD WWTF TULARE COUNTY

Along with the Report of Waste Discharge, the Discharger submitted water and nutrient balance calculations for the WWTF. The calculations used assumed values for percolation of the ponds and nitrogen data from a different WWTF. This Order requires the Discharger to submit a revised report on water and nutrient balance calculations, using site specific data.

Surface water drainage is to Deer Creek, a valley floor water. The beneficial uses of Deer Creek include industrial and agricultural supply, water contact and non-contact water recreation, warm fresh water habitat, preservation of rare and endangered species, and groundwater replenishment.

Based on the information obtained from the "Lines of Equal Elevation of Water in Wells in Unconfined Aquifer," published by Department of Water Resources in Spring 1996, the depth of groundwater in the region is 100 feet below ground surface. The beneficial uses of the groundwater include domestic and agricultural supply.

Soils in the area are Fresno clay loam and Traver fine sandy loam. Fresno clay loam is calcareous and has a hardpan. Traver fine sandy loam is a saline soil with poor drainage characteristics.

The annual precipitation in the area is around 8 inches and the annual pan evaporation is around 79 inches.

The Water Quality Control Plan for the Tulare Lake Basin, Second Edition (hereafter Basin Plan), prescribes a maximum conductivity (EC) for domestic wastewater discharges to land of the EC of the source water plus 500 µmhos/cm. But the Basin Plan also states that the incremental increase in salts from use and treatment must be controlled to the extent possible. The treatment facility receives little, if any, industrial flow. Therefore, the Order limits the incremental increase in EC to source water plus 400 µmhos/cm.

Earlimart Public Utility District certified a negative declaration on 14 November 1995 for the proposed expansion of the treatment plant, as per the provisions of the California Environmental Quality Act (CEQA) in accordance with Title 14, California Code of Regulations (CCR), Section 15301.

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