CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORIGINA

ORDER NO. 97-207

WASTE DISCHARGE REQUIREMENTS
FOR
FRESNO COUNTY
ELKHORN CORRECTIONAL FACILITY
WASTEWATER TREATMENT FACILITY
FRESNO COUNTY

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

1. Fresno County, General Services Department, (hereafter Discharger) submitted a Report of Waste Discharge dated 20 May 1997 and a technical report dated April 1997, for a proposed change in the volume of wastes discharged at its Elkhorn Correctional Facility (formerly known as the "Caruthers Branch Jail") wastewater treatment facility (WWTF).

2. Waste Discharge Requirements Order No. 94-274, adopted by the Board on 18 September 1994, prescribes requirements for a discharge of 55,700 gallons per day (gpd) of treated domestic wastewater and includes provision for a proposed change in the method of treatment and disposal of wastes from the correctional Facility.

3. The proposed change in 1994 involved abandoning an on-site Imhoff tank and disposal ponds and building a new WWTF. The proposed change did not materialize because the Discharger closed the jail in 1994. It reopened the Facility in June 1997 as a boot camp for juvenile delinquents, but Elkhorn Correctional Facility is not yet discharging wastes on-site.

4. The Discharger now plans to implement a scaled-down version of its 1994 proposal. It proposes to abandon the existing Imhoff tank and disposal ponds, rehabilitate the pumping station, and build a new WWTF. The proposed WWTF has a design treatment and disposal capacity of 17,050 gpd and includes headworks, two aerated lagoons, one stabilization lagoon, one storage pond, and a 64-acre reclamation site (36 acres are proposed for initial reclamation use and an additional 28 acres for future use). The three treatment lagoons and the storage pond will be lined with soil cement. The reclamation site is adjacent to the jail and owned by the Discharger, but is leased to a Mr. Steve Hildebrand who reclaims WWTF effluent for growing alfalfa and cotton. Disinfection of effluent is not typically required for these uses. The WWTF and reclamation site property are part of a 332- acre parcel (Assessor's Parcel No. 042-043 -01 ST) owned by Fresno County.

5. Order No. 94-274 is not adequate for the current proposal and must be revised.

6. The WWTF is in the southwest quarter of Section 34, T16S, R20E , MDB&M, with surface water drainage to Murphy Slough, a tributary of the Kings River, downstream of Peoples Weir, as shown in Attachment A, which is attached hereto and part of this Order by reference. The site lies within the Consolidated hydrologic area (No. 551.70), as depicted on interagency hydrologic maps prepared by the Department of Water Resources in August 1986.

7. The Facility will not be fully occupied until August 1998, at which time the new WWTF is expected to be fully operational. In the interim, the Discharger proposes to phase in its project operation of the Facility and WWTF and generate wastes as follows:

Time Schedule	Camp Population	Type of Use	Type of Wastewater	Quantity of Wastewater
Jul 97 to Dec 97	45 cadets and 10 staff	Day Use	Graywater	3,000 gpd
Dec 97 to Mar 98	45 cadets and 10 staff	24-hr Use	Graywater	3,800 gpd
Mar 98 to May 98	90 cadets and 10 staff	24-hr Use	Graywater	8,000 gpd
May 98 to Aug 98	125 cadets and 30 staff	24-hr Use	Graywater	10,850 gpd
After Aug 98	125 cadets and 30 staff	24-hr Use	Domestic Sewage	17,050 gpd

During the period of time between occupancy of the camp and completion of the WWTF, domestic sewage will be treated by chemical toilets and disposed of off-site.

8. Until the new WWTF is fully operational, the Discharger proposes to dispose of the graywater by evaporation/percolation through one of the existing ponds or through a temporary 1.0-acre bermed area just north of the existing ponds, either one of which should be capable of adequately handling up to 10,850 gpd. Once the new WWTF is fully operational and the boot camp fully occupied, effluent from the storage pond will be discharged to the reclamation site by flood irrigation of alfalfa and/or cotton during the growing season. The reclamation site will be managed to preclude the generation of irrigation tailwater.

9. The Discharger has provided a water balance for a 100-year annual rainfall season for the effluent storage pond and reclamation site. The effluent storage pond will be sized so it can provide the required storage during periods when effluent is not used for irrigation of crops.

10. Sludge accumulating in the aerated lagoon/stabilization ponds will be removed every 10 years, or more frequently if needed, and either spread on the reclamation site or disposed of at an approved solid waste disposal site.

11. The Board adopted the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition,* (hereafter Basin Plan) which designates beneficial uses, establishes water quality objectives, and describes an implementation program and policies to achieve these objectives for all waters of the Basin. These requirements implement the Basin Plan.

12. Soils at the site are sandy loams with interbeded layers of clayey-silty sands, silty sands, and sandy silts.

13. The beneficial uses of underlying ground water are domestic, industrial, and agricultural supply.

14. The beneficial uses of this reach of the Kings River are agricultural supply; water contact and noncontact water recreation, warm fresh water habitat, wildlife habitat, and ground water recharge.

15. Three irrigation wells, three domestic wells, and one industrial well are within the boundaries of the property. The correctional facility's main domestic well is about 1100 feet south of the proposed reclamation site. The other two domestic wells are standby wells and about 1400 feet south from the proposed reclamation fields. One irrigation well is immediately southeast of the proposed reclamation site, another about 400 feet northwest of the proposed reclamation site, and the third irrigation well is about 1400 feet southwest of the proposed reclamation site. The industrial well is about 400 feet northwest of the proposed reclamation site and 100 feet east of the Imoff tank. Water from this well contains nitrate concentrations at 76 mg/l (as NO_3), which exceeds the Maximum Contaminant Level of 45 mg/l set by state regulations. Data submitted by the Discharger indicate that areal ground water is about 90 feet below ground surface and flows southwesterly. A 156-foot-deep agricultural well 1/8-mile north of the WWTF and reclamation site property, and the 160-foot-deep on-site industrial well, contain groundwater with specific electrical conductivities at 25° (also 'EC') which range from 840 to 1,000 µmhos/cm. Groundwater from the facility's main domestic well is of excellent quality with an EC of approximately 210 µmhos/cm.

16. On 1 November 1992, Fresno County certified a final environmental impact report (EIR) 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.

17. The California Department of Health Services (DHS) has established water reuse criteria in Title 22, California Code of Regulations, Sections 60301 to 60355 (hereafter Title 22) for use of reclaimed water, and has developed guidelines for specific uses. DHS is revising Title 22 and recommends using the proposed revisions as guidelines. Based on a Memorandum of Understanding with DHS, the Board implements both criteria and guidelines in requirements that regulate discharge of reclaimed (also 'recycled') water.

18. The Discharger has not submitted an engineering report with a description of the design of the proposed recycling system and the means for compliance with flexibility of design and reliability requirements for producing adequately treated wastewater for the intended reclamation use as specified in Title 22, Section 60323.

19. The permitted discharge is for a wastewater design flow of 17,050 gpd, reduced from the previously permitted discharge design flow of 55,700 gpd, and is consistent with the antidegradation provisions of State Water Resources Control Board Resolution 68-16. The discharge to the reclamation site will not cause significant impacts on ground water and surface waters, or depletion of limited ground water resources.

20. 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.

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

IT IS HEREBY ORDERED that Order No. 94-274 is rescinded and Fresno County, 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.

3. Discharge of waste classified as 'hazardous' or 'designated', as defined in Section 2521(a) of Title 23, California Code of Regulations, Section 2510, et seq., or 'designated' as defined in Section 13173 of the California Water Code, is prohibited .

4. **Until Provision No. F.3 is satisfied**, discharge of wastes other than graywater at a location or in a manner different from that described in Finding Nos. 7 and 8 is prohibited.

B. Discharge Specifications:

1. **After Provision No. F.3 is satisfied**, the monthly average discharge shall not exceed 17,050 gpd.

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

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

4. The effluent from the WWTF shall not exceed the following limits:

Constituent	Units	Monthly Average	Daily Maximum
BOD_5[1]	mg/l	40	80
Settleable Solids	ml/l	0.2	0.5

[1] 5-day, 20° Celsius biochemical oxygen demand.

5. Ponds shall not have a pH less than 6.5 or greater than 9.5.

6. Ponds shall be managed to prevent breeding of mosquitos. In particular:

   a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.

   b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.

   c. Dead algae, vegetation, and debris shall not accumulate on the water surface.

7. Electrical Conductivity of the discharge to the ponds and reclamation site shall not exceed 50 µmhos/cm plus the EC of the source water, or a maximum of 750 µmhos/cm, whichever is less.

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

9. Ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration during the nonirrigation season. 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).

10. On or about 1 October of each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specification No. B.9.

C. Recycled Water Specifications:

1. The use of recycled water shall be limited to flood irrigation of fodder, fiber and seed crops for nonhuman consumption.

2. There shall be no irrigation with or impoundment of reclaimed water within 150 feet of any domestic water well. Drainage shall be controlled to prevent reclaimed water from coming within 150 feet of a domestic water well.

3. Recycled water used for irrigation shall be managed to minimize erosion.

4. The Discharger shall not irrigate during periods of precipitation or when the reclamation area is saturated.

5. The perimeter of the reclamation area shall be graded to prevent ponding near areas accessible to the general public.

6. Application of recycled water to the reclamation area shall be at reasonable rates considering the crops, soil, climate, and irrigation management system.

7. Grazing of milking animals within the area irrigated with recycled water is prohibited.

8. Areas irrigated with recycled water shall be managed to prevent breeding of mosquitos. More specifically:

   a. All applied irrigation water must infiltrate completely within a 48-hour period.

   b. Ditches not serving as wildlife habitat should be maintained free of emergent, marginal, and floating vegetation.

   c. Low-pressure and unpressurized pipelines and ditches accessible to mosquitos shall not be used to store reclaimed water.

9. By 30 August 1998, recycled water controllers, valves, etc., shall be affixed with recycled water warning signs, and these and quick couplers and sprinkler heads shall be of a type, or secured in a manner, that permits operation by authorized personnel only. The recycled water piping system shall not include any hose bibs.

10. By **30 August 1998,** no physical connection shall exist between recycled water piping and domestic water supply piping.

11. Storm water runoff from the reclamation area shall not be discharged to any surface water drainage course if within 30 days of the most recent recycled water application.

D. 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 2000, 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.

E. Ground Water Limitations:

The discharge, in combination with other sources, shall not cause underlying ground water 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 µmhos/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.")

F. Provisions:

1. The Discharger shall comply with Monitoring and Reporting Program No. 97-207, 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. The Discharger shall comply with the following time schedule to assure compliance with the terms of this Order:

Task	Compliance Date	Report Due
Complete Plans and Specifications for new WWTF	**15 Nov 97**	**30 Nov 97**
Begin Construction of new WWTF	**15 Jan 98**	**30 Jan 98**
Full Compliance	**15 Aug 98**	**30 Aug 98**

Prior to commencement of a discharge of domestic sewage from the boot camp, the Discharger shall provide a letter technical report certifying that new WWTF has treatment and disposal capacity for 17,050 gpd. The technical report shall be prepared under the direction of a California registered civil engineer. If the report meets the satisfaction of the Executive Officer, he shall notify the Discharger in writing that the terms of this provision have been satisfied.

4. By **1 June 1998,** the Discharger shall submit a copy of the operation and maintenance manual for the WWTF. The Operation and Maintenance Manual shall be prepared under the supervision of a California registered civil engineer and include descriptions of complete operational procedures for the WWTF and crop irrigation that assure compliance with Title 22 and this Order. Further, the operation and maintenance manual must address the items in Standard Provision B.2.

5. 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.

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

7. The Discharger shall use the best practicable control technique currently available to comply with this Order.

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. The Discharger shall submit to the Board on or before each report due date the specified document or, if an action is specified, a written report detailing evidence of compliance with the 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 it returns to compliance with the time schedule.

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

11. If reclaimed water is used for construction purposes, 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.

12. 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 19 September 1997

GARY M. CARLTON, Executive Offi

LML:lml/fmc:9/19/97
AMENDED

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 97-207
FOR
FRESNO COUNTY
ELKHORN CORRECTIONAL FACILITY
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 Board and attached to this Program.

EFFLUENT MONITORING

Except for flow, which may be measured whether at the headworks or treatment unit, effluent samples shall be collected just prior to discharge to the disposal facility. Effluent samples should be representative of the volume and nature of the discharge. Samples collected from the outlet structure of ponds will be considered adequately composited. Time of collection of a grab sample shall be recorded. Effluent monitoring shall include at least the following:

Constituents	Units	Type of Sample	Frequency
Total Daily Flow	gpd	Continuous	Daily
Settleable Solids	ml/l	Grab	Daily
Specific Conductivity @ 25°C	µmhos/cm	Grab	Weekly
BOD_5[2]	mg/l	Grab	Weekly

[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 D.O.), 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.

POND MONITORING

The freeboard shall be monitored on the evaporation/percolation ponds in use to the nearest tenth foot. Pond water monitoring shall include the following :

Constituent	Unit	Measurement	Frequency
Freeboard	feet	Observation	Weekly
pH	pH units	Grab	Daily
Dissolved Oxygen[1]	mg/l	Grab	Daily

[1] Samples shall be collected at a depth of one foot from each pond, opposite the inlet, and analyzed for dissolved oxygen. Samples shall be collected between 0800 and 0900 hours.

Permanent markers (e.g., staff gages) shall be placed in the storage pond with calibration indicating the water level at design capacity and available operational freeboard. In addition, the Discharger shall inspect the conditions of all the ponds once per week and write visual observations in a bound log book. Notations shall include observations of whether weeds are developing in the water or along the bank, and their locations; 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 pond (e.g., dark sparking green, dull green, yellow, grey, 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 O & M 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

A sampling station shall be established where a representative sample of water supply can be obtained or the information requested below may be obtained from the supplier. Water supply monitoring shall include at least the following:

Constituent	Unit	Frequency
Standard Minerals[1]	mg/l	Annually

[1] Standards minerals as used in this program shall include all major cations and anions and include a verification that the analysis is complete (i.e., cation/anion balance).

GROUND WATER MONITORING

The Discharger shall comply with the following time schedule for developing and installing a ground water monitoring network which shall consist of one or more background monitoring wells and a

sufficient number of downgradient wells to allow characterization of ground water and determination of ground water gradient and direction of flow at or near the downgradient property boundaries of the WWTF and reclamation site.

Tasks	Compliance Dates	Submit Report of Compliance
Develop workplan for background and downgradient monitoring well program	**15 Jan 1998**	**30 Jan 1998**
Install approved background and downgradient monitoring wells	**15 Aug 1998**	**30 Aug 1998**

All well locations and construction features are subject to the prior approval of the Executive Officer and shall comply with standards for monitoring wells contained in *California Well Standards Bulletin 74-90.* Existing wells proposed for inclusion in the program shall have known construction features (depth, length of perforated interval, surface seal, etc.).

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. The ground water surface elevation (in feet and hundredths, M.S.L.) in all wells shall be measured. 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:

Constituent	Unit	Type of Sample	Frequency
Standard Minerals[1]	mg/l	Grab	Quarterly
Specific Conductivity @ 25°C	μmhos/cm	Grab	Quarterly

Constituent	Unit	Type of Sample	Frequency
pH	pH units	Grab	Quarterly
Total Coliform Organisms	MPN/100 ml	Grab	Quarterly

[1] Standards minerals as used in this program shall include all major cations and anions and include a verification that the analysis is complete (i.e., cation/anion balance).

Following each sampling event (after establishment of water quality protection standards), the Discharger shall determine whether there is 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.

If the Discharger, through a verification monitoring program, or the Board verifies that water quality protection standards have been exceeded at or beyond the POCs, the Discharger shall notify the Board, or acknowledge the Board's findings, and submit a technical report within 90 days. The report must contain a plan and time schedule for implementing a corrective action program designed to achieve compliance with water quality protection standards.

ANNUAL LAND MANAGEMENT REPORTS

The Discharger shall submit a summary report on the land management operation after conclusion of each season. The report shall discuss total water application over the season; the total wastewater applied; the total nutrient loading from wastewater, sludges and chemical fertilizers; and amount of nutrients removed through harvest of the crop. In short, the report shall present a mass balance relative to pollutants of concern and hydraulic loading. The report is due by **31 January** of the following year.

REPORTING

Monthly monitoring containing results of all sampling for the month shall be submitted to the Board by the **20th day** of the following month.

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

Ordered by: _____
GARY M. CARLTON, Executive Officer

19 September 1997
(Date)

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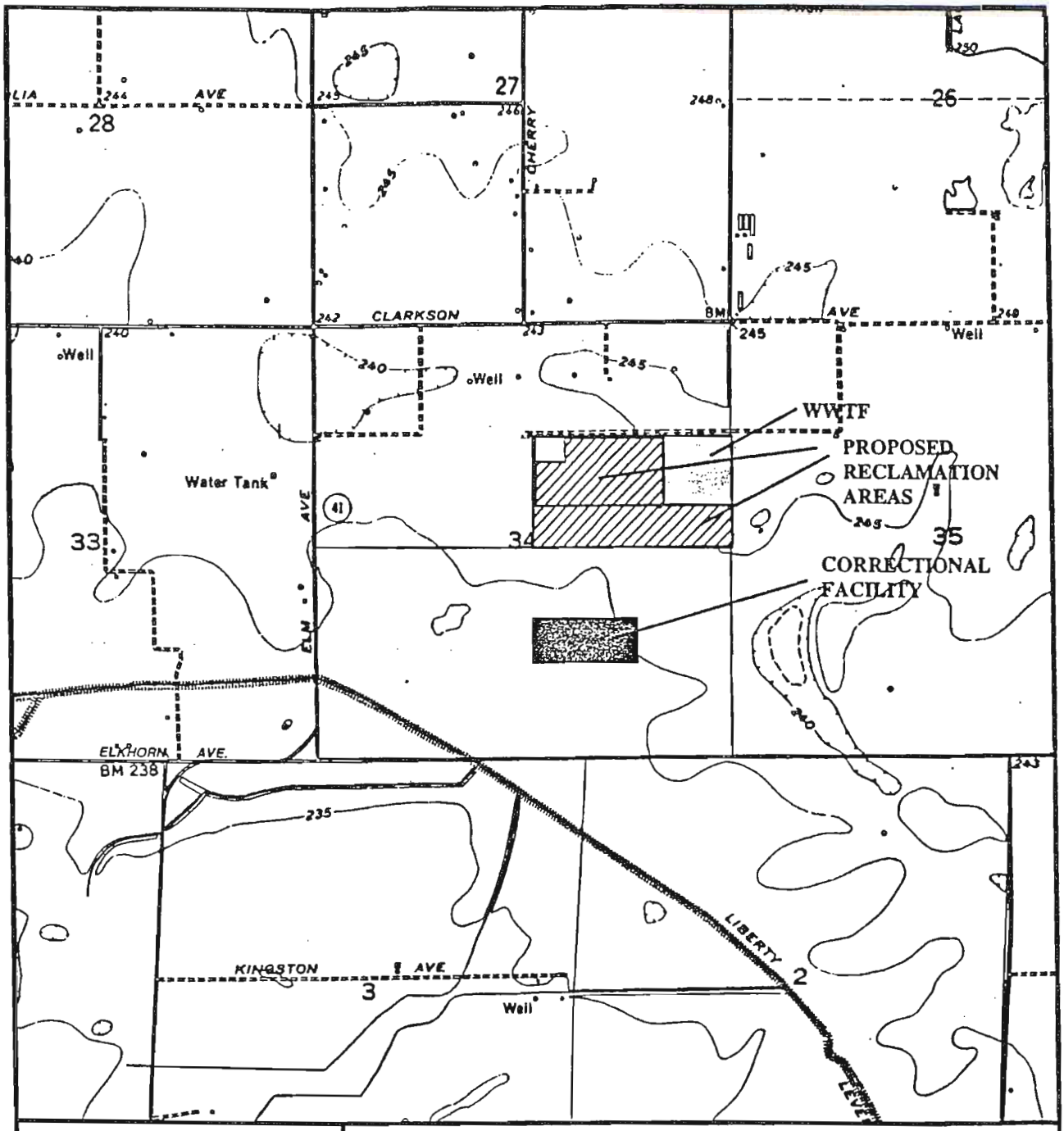
AMENDED



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Scale: 1"=2000'

ATTACHMENT A

VICINITY MAP
FRESNO COUNTY ELKHORN CORRECTIONAL FACILITY
WASTEWATER TREATMENT FACILITY
FRESNO COUNTY

Section 34, T16S, R20E, MDB&M
Caruthers and Riverdale U.S.G.S. Quadrangle Maps

INFORMATION SHEET

FRESNO COUNTY
ELKHORN CORRECTIONAL FACILITY
WASTEWATER TREATMENT FACILITY
FRESNO COUNTY

Fresno County (Discharger) applied for revised waste discharge requirements for a proposed change in the method of treatment and disposal at its Elkhorn Correctional Facility (formerly known as the Caruthers Branch Jail). The correctional facility is 6 miles southwest of the City of Selma and was served by a dilapidated wastewater treatment facility (WWTF) that includes a lift station, an Imhoff tank, and two evaporation/percolation ponds. In September 1994, the Board adopted Waste Discharge Requirements Order No. 94-274 for a proposed change in the method of treatment and disposal of wastes from the jail. The proposed change consisted of abandoning the Imhoff tank and disposal ponds and building a new WWTF. The new WWTF was to include headworks, two aerated lagoons, one stabilization pond, and a 135-acre reclamation site for treatment and disposal of average domestic flows of 55,700 gallons per day. Order No. 94-274 requires that the Discharger develop and implement a groundwater monitoring network to monitor groundwater quality impacts of on-site discharges of wastes. However, the Discharger neither built the proposed WWTF nor developed the groundwater monitoring network because it closed the correctional facility in 1994. It reopened the correctional facility in June 1997 as a boot camp for juvenile delinquents, but is not yet discharging wastes on-site.

The Discharger is now planning to implement a scaled-down version of its 1994 proposal. It proposes to abandon the existing Imhoff tank and disposal ponds, rehabilitate the pumping station, and build a new WWTF. The new WWTF has a design treatment and disposal capacity of 17,050 gpd and includes headworks, two aerated lagoons, one stabilization lagoon, one storage pond, and a 64-acre reclamation site (36 acres are proposed for initial reclamation use and an additional 28 acres for future use) . The three treatment lagoons and the storage pond will be lined with soil-cement. The reclamation area is adjacent to the correctional facility and also owned by the Discharger, but is leased to a farmer. The farmer will use effluent from the storage pond for furrow irrigation of alfalfa and/or cotton on the reclamation site. Disinfection of effluent is not typically required for those uses. Sludge removed from the ponds will be used as a soil amendment in the reclamation area. The new WWTF will be fully operational and the camp fully occupied in August 1998. The WWTF will serve 125 cadets and 30 staff Until the new WWTF is fully operation, the Discharger proposes to discharge up to 10,850 gpd of graywater to either one of the existing ponds or to a temporary 1.0-acre bermed area just north of the existing ponds. Once the new WWTF is fully operational and the boot camp full occupied, treated domestic wastewater from the new WWTF will be discharged to the storage pond and then to the 64-acre reclamation area.

Annual average precipitation in the area is 10 inches, and annual average pan evaporation is 60 inches. Soils at the site are sandy loams with interbeded layers of clayey-silty sands, silty sands, and sandy silts. Three irrigation wells, three domestic wells, and one industrial well are within the boundaries of the property. Data submitted by the Discharger indicate that areal ground water is about 90 feet below

ground surface and flows southwesterly. An on-site well shows nitrate concentrations at 76 mg/l, which exceed the Maximum Contaminant Level of 45 mg/l set by state regulations. This draft Order requires the Discharger to develop a ground water monitoring network to determine the extent of ground water degradation and monitor the proposed reclamation area.

On 1 November 1992, Fresno County date certified a final environmental impact report (EIR) for the project in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.) and the State CEQA Guidelines. The project as approved will not have a significant effect on water quality. Compliance with this Order will prevent any adverse impacts on water quality.

LML:lml/fmc:9/19/97