

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. 5-00-088

WASTE DISCHARGE REQUIREMENTS
FOR
CALIFORNIA DEPARTMENT OF CORRECTIONS
PRESTON YOUTH CORRECTIONAL FACILITY
CALIFORNIA DEPARTMENT OF FORESTRY FIRE ACADEMY
MULE CREEK STATE PRISON
AMADOR COUNTY

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

1. The California Department of Corrections, Mule Creek State Prison (CDC) submitted Report of Waste Discharge (RWD) dated 10 January 2000 to update Waste Discharge Requirements for the Mule Creek State Prison Wastewater Treatment Plant (WWTP). The WWTP also serves wastewater flows from the Preston Youth Correctional Facility (PYCF) and the California Department of Forestry Fire Academy (CDFFA).
2. The California Department of Corrections, Mule Creek State Prison, Preston Youth Correctional Facility, and California Department of Forestry Fire Academy shall be jointly and severally responsible for compliance with these Waste Discharge Requirements as it applies to each entity's own property and as ordered below.
3. The WWTP is located approximately one mile north of the town of Ione on Highway 104, in Section 13, T6N, R9E, MDB&M. Mule Creek bisects the property from north to south, as shown in Attachment A, which is attached hereto and made part of this Order by reference.
4. Waste Discharge Requirements Order No. 87-166, adopted by the Board on 25 September 1987, prescribes requirements for discharge of treated wastewater to land. Order No. 87-166 is neither adequate nor consistent with current plans and policies of the Board.
5. The WWTP is designed for an average daily flow of 0.74 million gallons per day (mgd) and peak wet weather flow of 2.2 mgd. According to monitoring reports submitted by CDC, the current average dry weather flow is approximately 0.649 mgd with peak wet weather flows at approximately 0.950 mgd.
6. Influent to the WWTP is from three sources: wastewater generated at the Mule Creek State Prison, wastewater from the Preston Youth Correctional Facility, and wastewater from the California Department of Forestry Fire Academy. The average wastewater flow volume from the Preston Youth Correctional Facility is 0.153 mgd with peak flows up to 0.239 mgd. Wastewater is transported from the Preston Youth Correctional Facility property via two pumping stations and an underground transmission line. Current winter wastewater flows from the Department of Forestry Fire Academy average 2,000 gallons

per day (gpd) with a peak flow of 5,000 gpd. During the summer months, when training classes are in session, the flows increase to approximately 10,000 to 20,000 gpd. Ongoing construction is expected to increase wastewater flows to approximately 30,000 gpd by the summer of 2000. Wastewater is transported from the California Department of Forestry Fire Academy to the WWTP via a gravity flow line.

7. The California Department of Corrections, Mule Creek State Prison is responsible for the operation and maintenance of the WWTP, the 525-acre foot storage reservoir, sprayfields, and all conveyance lines on its property. CDC is also responsible for maintaining the sewer line between PYCF Pump Station #1 and the wastewater treatment plant.
8. The Preston Youth Correctional Facility is responsible for the operation and maintenance of the two lift stations, the bar screen, and the sewer line between the PYCF Pump Station #1 and PYCF Pump Station #2.
9. The California Department of Forestry Fire Academy is responsible for the maintenance of all conveyance lines and appurtenances associated with the transport of wastewater from the Academy's property up to Mule Creek State Prison's property line, including the pipe crossing above Mule Creek.
10. The WWTP design consists of an oxidation ditch, two clarifiers, chlorination facilities, a filter belt press operation for dewatering sludge, a 4,000-gallon hypochlorination storage tank, a 525 acre-foot storage reservoir, and 296 acres of irrigated pasture land. The WWTP is connected to the institution emergency (critical) power circuit which is supplied by a 1500 kilowatt Cat generator. Should this power source fail, the WWTP has a separate back-up energy supply consisting of a 60 kilowatt generator with 100 gallons diesel supply and manual switchgear. The influent pump station has a back-up energy supply consisting of a 100-kilowatt generator with 500 gallons diesel supply tank and automatic switchgear.
11. The WWTP is designed to discharge treated wastewater to three different end uses: the 296 acres of spray irrigation fields; the 525 acre-foot storage reservoir; and/or the Amador Regional Sanitation Authority (ARSA) pipeline. Mule Creek State Prison is under contract to provide a minimum annual flow of 80 acre-feet to ARSA.
12. The Board adopted a Water Quality Control Plan, Fourth Edition, for the Sacramento River and San Joaquin River Basins (hereafter Basin Plan), which contains water quality objectives for waters of the Basins. These requirements implement the Basin Plan.
13. Surface water drainage is to Mule Creek, which is a tributary to Dry Creek and the Sacramento-San Joaquin Delta. The beneficial uses of Mule Creek and downstream waters are municipal, industrial, and agricultural supply; recreation; esthetic enjoyment; navigation; groundwater recharge; fresh water replenishment; hydroelectric power

generation; and preservation and enhancement of fish, wildlife, and other aquatic resources.

14. The beneficial uses of underlying groundwaters are municipal, industrial, and agricultural supply.
15. Based upon the geological setting and a review of wells within one-half mile of Mule Creek State Prison, the depth to groundwater is in excess of 200 feet. Within the boundaries of Mule Creek State Prison there is no evidence of any wells.
16. The Department of Corrections has adopted a final Environmental Impact Report in accordance with the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) and State Guidelines.
17. The Board has reviewed the EIR and concurs there are no significant impacts of water quality.
18. The Board has considered antidegradation pursuant to State Board Resolution No. 68-16 and finds that the discharge is consistent with those provisions, and will not cause an increase in groundwater constituents above that of background levels.
19. This discharge is exempt from the requirements of *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 2005, et seq., (hereafter Title 27). The exemption pursuant to Section 20090(b), is based on the following:
 - a. The Board is issuing waste discharge requirements,
 - b. The discharge complies with the Basin Plan, and
 - c. The wastewater does not need to be managed according to Title 22 CCR, Division 4.5, and Chapter 11, as a hazardous waste.
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. 87-166 is rescinded and the California Department of Corrections, Mule Creek State Prison (CDC), their 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 or treated wastewater or runoff from spray irrigation disposal areas into wetlands or surface waters is prohibited.
4. Neither the treatment nor the discharge shall cause a nuisance or condition of pollution as defined by the California Water Code, Section 13050.
5. The discharge shall not cause the degradation of any water supply.
6. Discharge of waste classified as hazardous, as defined in Sections 2521(a) of Title 23, CCR, Section 2510, et seq., (hereafter Chapter 15, or 'designated', as defined in Section 13173 of the California Water Code, is prohibited.
7. Excessive irrigation with reclaimed water that results in runoff of reclaimed water, or irrigation of reclaimed water during periods of precipitation, and within 24 hours of cessation of precipitation, is prohibited.

B. Discharge Specifications:

1. The average dry weather discharge flow rate shall not exceed 0.74 mgd.
2. The peak wet weather discharge flow rate shall not exceed 2.2 mgd.
3. The discharge shall not cause degradation of any water supply.
4. The waste discharge shall at all times remain in the designated disposal area.
5. A 100-foot wide buffer area shall be maintained around the spray field and between any watercourse and the wetted area produced during spray disposal.
6. Measures shall be taken to restrict public access to the spray field areas.
7. Disposal of treated wastewater by spray irrigation shall comply with applicable regulation criteria set forth in Title 22, Division 4, Section 60301 et seq., CCR.
8. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment, storage, and disposal areas.

9. As a means of discerning compliance with Discharge Specification No. 8, the dissolved oxygen content in the upper zone (1 foot) of the storage reservoir shall not be less than 1.0 mg/l.
10. The WWTP, storage reservoir, and spray irrigation disposal areas shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
11. The WWTP storage reservoir shall have sufficient capacity to contain all reclaimed wastewater flow, design seasonal precipitation, seasonal ancillary inflow, and infiltration during the wet season. Design seasonal precipitation shall be based on total annual precipitation using a return of 100 years, distributed monthly in accordance with historical rainfall patterns.
12. The freeboard in the storage reservoir shall never be less than two feet as measured vertically from the water surface to the upper surface of the lowest adjacent dike or levee.
13. On or about **15 October** each year, the available storage reservoir capacity shall at least equal the volume necessary to comply with Discharge Specification Nos. 11 and 12.

C. Effluent Limitations:

1. Effluent discharged to the storage reservoir in excess of the following limits is prohibited:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Monthly Median</u>	<u>Daily Max</u>
Total Coliform Organisms	MPN/100 ml	-	23	230
Total Suspended Solids	mg/l	40	-	80
Total Settleable Solids	ml/l	-	-	0.2
BOD ¹	mg/l	40	-	80
Total Dissolved Solids	mg/l	450	-	-

¹ 5-Day, 20° Celsius Biochemical Oxygen Demand

D. Reclamation Requirements:

1. Reclaimed wastewater shall meet the criteria contained in Title 22, Division 4, CCR (Section 60301, et seq.).
2. Reclaimed wastewater conveyance lines shall be clearly marked as such.

3. Reclaimed water controllers, valves, etc., shall be affixed with reclaimed 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.
4. Areas irrigated with reclaimed 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 not serving as wildlife habitat should be maintained free of emergent, marginal, and floating vegetation.
 - c. Low-pressure and un-pressurized pipelines and ditches accessible to mosquitoes shall not be used to store reclaimed water.
5. Treated wastewater used for irrigation shall be managed to minimize erosion, runoff, and movement of aerosols from the disposal area.
6. Wastewater is to be applied at agronomic rates such that there shall be no standing water in the irrigation disposal area 48 hours after spray irrigation.
7. Direct or windblown spray shall be confined to the designated reclamation area and prevented from contacting drinking water facilities.
8. Grazing of milking animals within the area irrigated with reclaimed water is prohibited.
9. CDC may not irrigate with effluent during periods of precipitation and for at least 24 hours after cessation of precipitation, or spray irrigate when wind velocities exceed 30 mph.
10. Signs with proper wording of sufficient size shall be placed at areas of access and around the perimeter of all areas used for effluent disposal to alert the public of the use of reclaimed water.
11. Storm water runoff from the irrigation field shall not be discharged to any surface water drainage course within 24 hours of the last application of reclaimed water.

E. Solids Disposal Requirements:

1. Collected screenings, sludge, 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 from a previously approved practice shall be reported to the Executive Officer and U.S. Environmental Protection Agency (EPA) Regional Administrator at least 90 days in advance of the change.
3. Use and disposal of sewage sludge shall comply with existing Federal, State, and local laws and regulations, including permitting requirements and technical standards included in 40 CFR 503.
4. CDC is encouraged to comply with the State Guidance Manual issued by the Department of Health Services titled *Manual of Good Practice for Landspreading of Sewage Sludge*.
5. If the State Water Resources Control Board and the Regional Water Resources Control Board are given the authority to implement regulations contained in 40 CFR 503, this Order may be reopened to incorporate appropriate time schedules and technical standards. CDC shall comply with the standards and time schedules contained in 40 CFR 503 whether or not they have been incorporated into this Order.

F. 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 coliform. For coliform, increases shall not cause the most probable number of total coliform organisms to exceed 2.2/100 ml over any 7-day period.

G. Surface Water Limitations:

The discharge of wastewater to land shall not cause Mule Creek downstream of the spray irrigation system to contain waste constituents in concentrations statistically greater than background (upstream) surface water quality.

H. Provisions:

1. By **1 June 2000**, CDC shall submit a Wastewater Disposal Operations Plan that describes in detail how, when, and where wastewater will be applied to the spray irrigation fields. The Operations Plan shall include a description of measures taken to control surface runoff and controls implemented to prevent any and all potential runoff from entering surface water (ie. Mule Creek).
2. By **1 June 2000**, CDC shall submit written verification of compliance with Provision H. 9, including a copy of each operator's certification.

3. By **1 October 2000**, CDC shall submit a Solids Management Plan for the permanent disposal of biosolids, the long-term management of biosolids, and for all other non-effluent wastes generated by the treatment process. The Solids Management Plan shall provide a detailed program and schedule for permanent disposal of all solid wastes that will be generated in the future. Information provided shall include methods and locations of temporary on-site storage (if used), Best Management Practices for on-site handling and storage of solid waste, means of disposal, frequency of disposal, and disposal site (as applicable).
4. At least 90 days prior to termination or expiration of any lease, contract, or agreement involving the disposal or reclamation areas, used to justify the capacity authorized herein and assure compliance with this Order, CDC shall notify the Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.
5. CDC shall comply with Monitoring and Reporting Program No. 5-00-088, which is part of this Order, and any revisions thereto, as ordered by the Executive Officer.
6. CDC shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which is attached hereto and made part of this Order by reference. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)".
7. CDC shall submit to the Board on or before each compliance report due date the specified document, or if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is reported, then CDC shall state the reasons for noncompliance and shall provide a schedule to come into compliance.
8. CDC shall use the best practicable cost-effective control technique(s) currently available to comply with discharge limits specified in this order.
9. CDC shall provide certified wastewater treatment plant operators in accordance with Title 23 of the California Code of Regulations, Division 3, Chapter 26.
10. CDC shall report promptly to the Board any material change or proposed change in the character, location, or volume of the discharge.
11. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by California Department of Corrections, Mule Creek State Prison, then the party 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.

12. CDC shall 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.
13. A copy of this Order shall be kept at the discharge facility for operating personnel. Key operating personnel shall be familiar with its contents.
14. The Board will review this Order periodically and may revise requirements when necessary.

IT IS HEREBY ORDERED that the Preston Youth Correctional Facility (PYCF), their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, shall comply with the following:

I. 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. Neither the treatment nor the discharge shall cause a nuisance or condition of pollution as defined by the California Water Code, Section 13050.
4. The discharge shall not cause the degradation of any water supply.
5. Discharge of waste classified as hazardous, as defined in Sections 2521(a) of Title 23, CCR, Section 2510, et seq., (hereafter Chapter 15, or 'designated', as defined in Section 13173 of the California Water Code, is prohibited.

J. Solids Disposal Requirements:

Collected screenings, sludge, and other solids removed from pump stations 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.

K. Provisions:

1. By **1 June 2000** PYCF shall submit an Operations Plan for operation, maintenance, and repair of the lift stations and all associated appurtenances and conveyance lines.

2. At least 90 days prior to termination or expiration of any lease, contract, or agreement involving the disposal or reclamation areas, used to justify the capacity authorized herein and assure compliance with this Order, the PYCF 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.
3. PYCF shall comply with Monitoring and Reporting Program No. 5-00-088, which is part of this Order, and any revisions thereto, as ordered by the Executive Officer.
4. PYCF shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which is attached hereto and made part of this Order by reference. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)".
5. PYCF shall submit to the Board on or before each compliance report due date the specified document, or if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is reported, then PYCF shall state the reasons for noncompliance and shall provide a schedule to come into compliance.
6. PYCF shall use the best practicable cost-effective control technique(s) currently available to comply with discharge limits specified in this order.
7. PYCF shall report promptly to the Board any material change or proposed change in the character, location, 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 Preston Youth Correctional Facility, then the party 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. PYCF shall 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.
10. A copy of this Order shall be kept at the discharge facility for operating personnel. Key operating personnel shall be familiar with its contents.
11. The Board will review this Order periodically and may revise requirements when necessary.

IT IS HEREBY ORDERED that the California Department of Forestry Fire Academy (CDFFA), their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, shall comply with the following:

L. 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. Neither the treatment nor the discharge shall cause a nuisance or condition of pollution as defined by the California Water Code, Section 13050.
4. The discharge shall not cause the degradation of any water supply.
5. Discharge of waste classified as hazardous, as defined in Sections 2521(a) of Title 23, CCR, Section 2510, et seq., (hereafter Chapter 15, or 'designated', as defined in Section 13173 of the California Water Code, is prohibited.

M. Solids Disposal Requirements:

Collected screenings, sludge, and other solids removed from pump stations 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.

N. Provisions:


1. By **1 October 2000**, CDFFA shall submit a report describing (a) domestic waste spill prevention, and (b) emergency response, containment, and spill cleanup for the wastewater transmission line. In particular, the plan shall focus on the location where the wastewater transmission line crosses Mule Creek.
2. At least 90 days prior to termination or expiration of any lease, contract, or agreement involving the disposal or reclamation areas, used to justify the capacity authorized herein and assure compliance with this Order, the CDFFA 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.
3. CDFFA shall comply with Monitoring and Reporting Program No. 5-00-088, which is part of this Order, and any revisions thereto, as ordered by the Executive Officer.

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-088
CALIFORNIA DEPARTMENT OF CORRECTIONS
PRESTON YOUTH CORRECTIONAL FACILITY
CALIFORNIA DEPARTMENT OF FORESTRY FIRE ACADEMY
MULE CREEK STATE PRISON

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4. CDFFA shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which is attached hereto and made part of this Order by reference. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)".
5. CDFFA shall submit to the Board on or before each compliance report due date the specified document, or if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is reported, then the CDFFA shall state the reasons for noncompliance and shall provide a schedule to come into compliance.
6. CDFFA shall use the best practicable cost-effective control technique(s) currently available to comply with discharge limits specified in this order.
7. CDFFA shall report promptly to the Board any material change or proposed change in the character, location, 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 CDFFA, then the party 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. CDFFA shall 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.
10. A copy of this Order shall be kept at the discharge facility for operating personnel. Key operating personnel shall be familiar with its contents.
11. The Board will review this Order periodically and may 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 28 April 2000.


GARY M. CARLTON, Executive Officer

Attachments
DLM: 28 April 00

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 5-00-088

FOR
CALIFORNIA DEPARTMENT OF CORRECTIONS
PRESTON YOUTH CORRECTIONAL FACILITY
CALIFORNIA DEPARTMENT OF FORESTRY FIRE ACADEMY
MULE CREEK STATE PRISON
AMADOR COUNTY

This monitoring and reporting program (MRP) incorporates requirements for monitoring of the treatment and disposal processes of the Mule Creek State Prison, for monitoring, operation, and maintenance of wastewater conveyance facilities for the Preston Youth Correctional Facility, and for monitoring, operation, and maintenance of wastewater conveyance facilities for the California Department of Forestry, and is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer. Regional Board staff prior to implementation of sampling activities shall approve specific sample station locations. Sample collection stations shall be established such that the samples collected are representative of the nature and volume of the material(s) sampled.

INFLUENT MONITORING

CDC shall collect samples of influent wastewater at approximately the same time as effluent samples and should be representative of the influent at the plant headworks prior to treatment. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. At a minimum, influent monitoring shall consist of the following:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
BOD ₅ at 20° C	mg/l	Grab	Weekly	Monthly
Suspended Solids	mg/l	Grab	Weekly	Monthly
Flow	mg/l	Grab	Weekly	Monthly

EFFLUENT MONITORING

CDC shall collect effluent samples just prior to discharge. Effluent samples should be representative of the volume and nature of the discharge. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. At a minimum, effluent monitoring shall consist of the following:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Total Coliform Organisms	MPN/100 ml	Grab	Bi-weekly	Monthly
Flow	mgd	Cumulative	Daily	Monthly
BOD ₅ at 20° C	mg/l	Grab	Weekly	Monthly
Suspended Solids	mg/l	Grab	Weekly	Monthly
Settleable Solids	ml/l	Grab	Weekly	Monthly
pH	pH units	Grab	Weekly	Monthly
Turbidity	NTU	Grab	Weekly	Monthly
Total Dissolved Solids	mg/l	Grab	Weekly	Monthly
Minerals*	mg/l	Grab	Annually	Annually

* - Alkalinity, Calcium, Chloride, Copper, Iron, Methylene Blue Active Substances, Manganese, pH, Sodium, Sulfate, Total Hardness, Conductivity, Zinc (Title 22)

BIOSOLIDS MONITORING

At a minimum, one composite sample of biosolids shall be collected annually in accordance with the U.S. EPA's POTW Sludge Sampling and Analysis Guidance Document, August 1989, and tested for the following constituents:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sampling and Reporting Frequency</u>
Cadmium	mg/Kg	Annually
Lead	mg/Kg	Annually
Chromium	mg/Kg	Annually
Nickel	mg/Kg	Annually
Copper	mg/Kg	Annually
Zinc	mg/Kg	Annually

A log shall be kept to document biosolids quantities generated; sampling dates; analytical reports; and actual handling, storage and disposal practices. Sampling records shall be retained for a minimum of five years.

SURFACE WATER MONITORING

CDC shall establish two sampling stations along the banks of Mule Creek: one approximately 100 feet upstream of the spray irrigation fields and one approximately 100 feet downstream of the spray irrigation fields. Collected samples shall be analyzed for the following:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling and Reporting Frequency</u>
Total Dissolved Solids	mg/l	Grab	Monthly
Nitrate as Nitrogen	mg/l	Grab	Monthly

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling and Reporting Frequency</u>
Chlorine	mg/l	Grab	Monthly
Total Coliform Organisms	MPN/100ml	Grab	Monthly

STORAGE RESERVOIR MONITORING

CDC shall monitor the storage reservoir as follows:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Freeboard	feet	Observation	Weekly	Monthly
Dissolved Oxygen	mg/l	Grab	Weekly	Monthly
Flow to Storage Reservoir	mgd	Cumulative	Continuous	Monthly

COLLECTION SYSTEM & PUMP STATION MONITORING

The Preston Youth Correctional Facility (PYCF) shall monitor the collection system and pump stations on its property on a monthly basis for pipe anomalies, cracks, overflows, or leaks. A copy of all monitoring inspections shall be submitted monthly to the Board.

WASTEWATER TRANSMISSION LINE

The California Department of Forestry shall monitor the collection system and wastewater pipeline on its property on a monthly basis for pipe anomalies, cracks, overflows, or leaks. A copy of all monitoring inspections shall be submitted bi-annually to the Board.

REPORTING

In reporting monitoring data, CDC shall arrange the data in tabular form so that the date, sample type (e.g., influent, effluent, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Regional Board.

A. Monthly Monitoring Reports

Monthly reports shall be submitted to the Regional Board by the **1st day** of the second month after the month of sampling (i.e., the January Report is due by 1 March).

B. Annual Monitoring Reports

The December Monthly Monitoring Report (due by **1 February** of each year) shall also serve as an Annual Monitoring Report. At a minimum, the Annual Monitoring Report shall include the following:

1. The contents of a regular Monthly Report.
2. If requested by staff, tabular and graphical summaries of all monitoring data obtained during the previous year.
3. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.
4. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting system.

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

Ordered by:

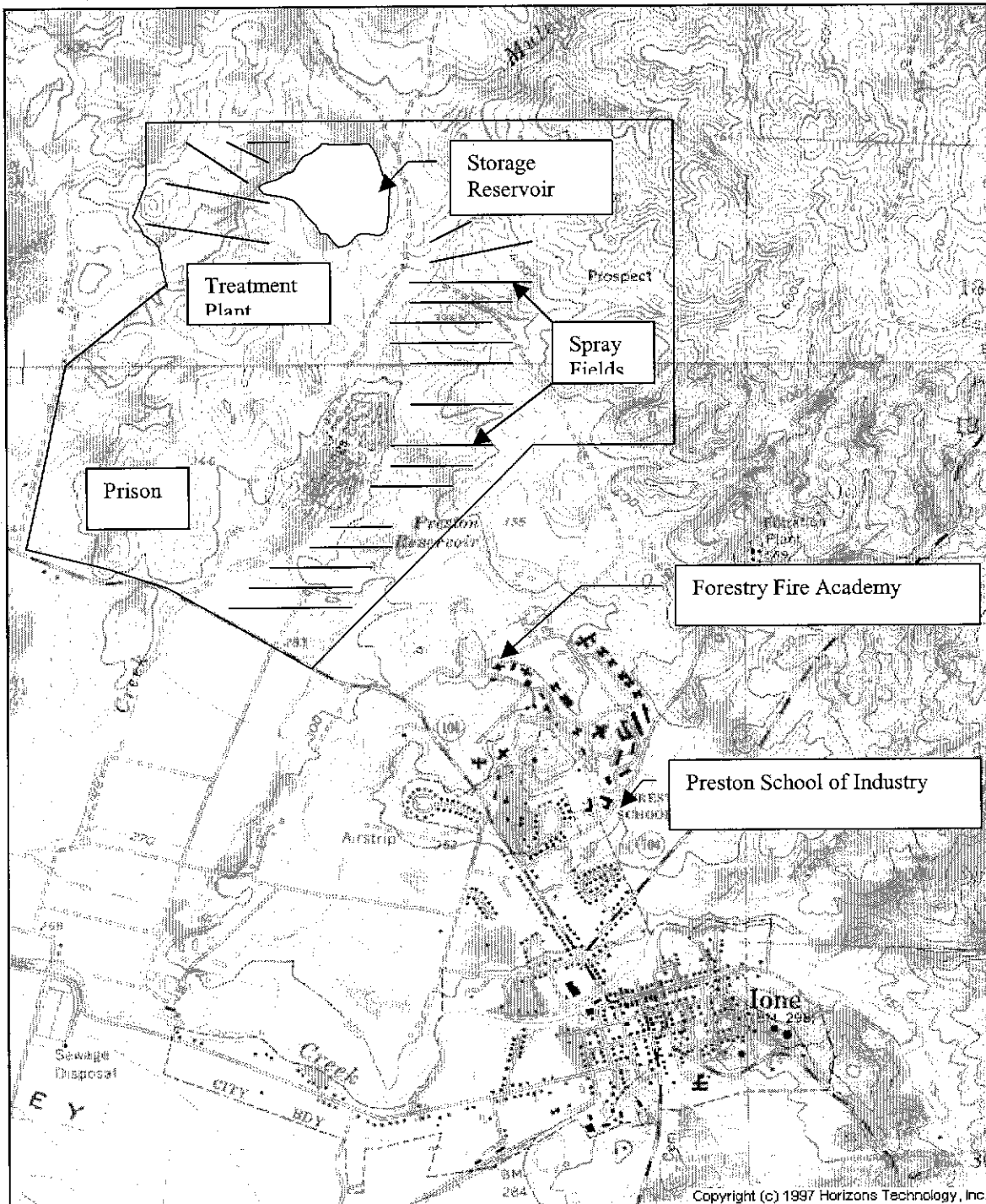

GARY M. CARLTON, Executive Officer

28 April 2000

(Date)

DLM: 28 April 2000

VICINITY MAP



California Department of Corrections
Preston Youth Correctional Facility
California Department of Forestry Fire Academy
Mule Creek State Prison Wastewater Treatment Plant

USGS, Ione, CA
1:24,000

INFORMATION SHEET

ORDER NO. 5-00-088
CALIFORNIA DEPARTMENT OF CORRECTIONS
PRESTON YOUTH CORRECTIONAL FACILITY
CALIFORNIA DEPARTMENT OF FORESTRY FIRE ACADEMY
MULE CREEK STATE PRISON
AMADOR COUNTY

The California Department of Corrections, Mule Creek State Prison, owns and operates the Mule Creek State Prison wastewater treatment plant. The wastewater treatment plant is located approximately one mile north of the town of Ione.

Influent to the wastewater treatment plant is from three sources: wastewater generated at the Mule Creek State Prison, wastewater from the Preston Youth Correctional Facility, and wastewater from the California Department of Forestry Fire Academy. The average wastewater flow volume from the Preston Youth Correctional Facility is 0.153 mgd with peak flows up to 0.239 mgd. Wastewater is transported from the Preston Youth Correctional Facility property via two pumping stations and an underground transmission line. Current winter wastewater flows from the Department of Forestry Fire Academy average 2,000 gallons per day (gpd) with a peak flow of 5,000 gpd. During the summer months, when training classes are in session, the flows increase to approximately 10,000 to 20,000 gpd. On-going construction is expected to increase wastewater flows to approximately 30,000 gpd by the summer of 2000. Wastewater is transported from the California Department of Forestry Fire Academy to the WWTP via a gravity flow line.

The wastewater treatment plant is designed for an average daily flow of 0.74 million gallons per day (mgd) and peak wet weather flow of 2.2 mgd. According to monitoring reports submitted by CDC, the current average dry weather flow is approximately 0.649 mgd with peak wet weather flows at approximately 0.950 mgd.

The wastewater treatment plant design consists of an oxidation ditch, two clarifiers, chlorination facilities, a filter belt press operation for dewatering sludge, a 4,000-gallon hypochlorination storage tank, a 525 acre-foot storage reservoir, and 296 acres of irrigated pasture land.

Surface water drainage is to Mule Creek, which is a tributary to Dry Creek and the Sacramento-San Joaquin Delta. The beneficial uses of Mule Creek and downstream waters are municipal, industrial, and agricultural supply; recreation; esthetic enjoyment; navigation; groundwater recharge; fresh water replenishment; hydroelectric power generation; and preservation and enhancement of fish, wildlife, and other aquatic resources.