CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2018-0014

WASTE DISCHARGE REQUIREMENTS

FOR
KERN COUNTY SHERIFF'S OFFICE
KERN COUNTY LERDO CAMPUS
WASTEWATER TREATMENT FACILITY
KERN COUNTY

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

1. On 12 August 2016, the Provost and Pritchard Consulting Group (Provost & Pritchard) submitted, on behalf of Kern County Sheriff's Office (hereafter "County" or "Discharger"), a Report of Waste Discharge (RWD), describing upgrades to the Kern County Lerdo Campus (Lerdo Campus). The upgrades are to include construction of a new Kern County Justice Facility (KCJF) and upgrades to the existing wastewater treatment facility (WWTF) at the Lerdo Campus.

2. The current discharge from the WWTF is regulated by Waste Discharge Requirements (WDRs) Order 84-148, adopted by the Central Valley Water Board on 28 November 1984. Order 84-148 allows an average dry weather flow of up to 0.50 million gallons per day (mgd) with a discharge to land located south of the WWTF for the irrigation of fodder, fiber, and seed crops. The County owns and operates the WWTF and is responsible for compliance with these WDRs.

3. The WWTF is at 17824 Quality Road in Kern County, about 10 miles northwest of the City of Bakersfield, northeast of the intersection of Lerdo Highway and Quality Road as shown on Attachment A, which is attached hereto and made part of this Order by reference. The WWTF is on about 297 acres and the land application areas contains about 94 acres of land (about 90 acres is available for the recycling of effluent) as shown on Attachment B, which is attached hereto and made part of this Order by reference.. The Assessor's Parcel Numbers (APN) for the WWTF and the land application areas are listed in Table 1.

Table 1 Assessor Parcel Numbers

Assessor Parcel Numbers	Area[1]	Acreage
481-030-74	WWTF	65
481-030-24	WWTF	36
481-030-71	WWTF	69
481-030-72	WWTF	65
481-030-27	WWTF	30
481-030-73	WWTF	32
481-09-008	LAA	32
481-09-001	LAA	62

1. WWTF = Wastewater treatment facility, LAA = land application area.

The WWTF is in the eastern half of northwest quarter of Section 7, T28S, R27E, MDB&M, of the United States Geological Service (USGS) North of Oildale 7.5 minute topographic map. The land application area is in the northwest quarter of Section 18, T28S, R27E,

MDB&M, of the United States Geological Service (USGS) Oildale 7.5 minute topographic map.

4. The Lerdo Campus currently includes Pre-Trial, Max-Med, and Juvenile Treatment Facilities that discharge to the WWTF. The WWTF currently serves a population of about 2,500 inmates and about 600 staff. The new KCJF will add another 822 inmates and staff to the population. The Discharger has upgraded the WWTF due to its age and to increase the capacity to accommodate the new KCJF jail facility that will be completed in the near future. Therefore, Order 84-148 will be rescinded and replaced with this Order.

Former WWTF and Discharge

5. Wastewater treatment and disposal has been conducted on the property since at least 1967 (Reclamation Order 67-105), with the former WWTF constructed in 1978 and improved in 1984 and 1989. The former WWTF in 1984 consisted of a headworks (with grinding and screening), a flow meter, two-aerated facultative ponds operated in parallel, a treatment pond, an effluent pump station, two unlined effluent holding ponds, one lined (high density polyethylene) effluent storage pond, and an effluent irrigation pump station.

6. Source water, influent, and effluent results from January through December of 2015 for the former WWTF are summarized in Table 2. The average result is the first number shown, and the range of results are listed in parentheses below.

Table 2 – Old WWTF 2015 Influent/Effluent Data

Influent		Effluent			Source	
EC[1] umhos/cm[4]	BOD[2] mg/L[5]	BOD[2] mg/L[5]	SS[3] mL/L mg/L[6]	EC[1] umhos/cm[4]	EC[1] umhos/cm[4]	EC[1] Limit umhos/cm[4]
853	151	43	0.12	810	600	500 plus source
(740 - 952)	(116 - 175)	(26 - 70)	(0.10 - 0.20)	(658 - 947)	(438 - 763)	(938 - 1,263)

1. EC = Electrical conductivity.
2. BOD = Biochemical oxygen demand.
3. SS = Settleable solids.
4. umhos/cm = micromhos per centimeter.
5. mg/L = milligrams per liter.
6. mL/L = milliliter per liter.

7. Effluent quality was typical for a domestic WWTF, but biochemical oxygen demand (BOD) levels typically exceeded the 40 mg/L 30-day average typical for secondary-treated wastewater. However, the upgraded WWTF lowers the BOD and nitrogen content of the discharge as shown in Table 3.

8. Effluent disposal is to 94 acres of land south of Lerdo Highway and the WWTF that is owned by the County. When access roads and berms are omitted, the area contains a total of about 90 acres of land for the reclamation of wastewater. While WDRs Order 84-148 indicated the discharge was to irrigate fodder, fiber, and seed crops on property owned by the County, the discharge is pumped or gravity flows from the holding ponds at the WWTF through a 10-inch pipeline to a series of four-valved distribution lines that feed a series of small diameter seepage pits. Unfortunately, the RWD notes that the

capacity of the seepage pits is quickly exceeded and the effluent often flows overland. Additional disposal occurs as the effluent percolates into the underlying vadose zone from the unlined effluent storage ponds. The seepage pits have been used for years and allow the effluent to be concentrated in a smaller area. The area around the seepage pits is proposed as part of the land application area. The discharge may have concentrated constituents such as nitrates in the soils underlying the seepage pits. This Order includes Provision H.14 that requires the Discharger to submit a work plan to close the seepage pits and evaluate the soil conditions underlying the seepage pits.

Upgraded WWTF and Discharge

9. The upgraded WWTF provides secondary treatment with nitrification and denitrification of the effluent, and has an annual average daily treatment capacity of 0.68 mgd (maximum monthly average daily flow of 0.86 mgd, maximum daily flow of 1.09 mgd). The upgraded WWTF has a new headworks with a mechanical bar screen that removes debris and solids more than 6 mm in size. A washer compactor dewaters and compresses the screened solids. A Parshall flume measures influent flow. Secondary treatment is an extended aeration activated sludge process using the proprietary Biolac Wave Ox system. A pump station returns biosolids from the clarifier to the aeration basin. Waste activated sludge is discharged as needed to the aerobic digester. Effluent can be pumped and stored in one of seven (six unlined, one lined) effluent storage ponds.

10. The upgraded WWTF has been online since April 2017 and there is limited monitoring data (April through November 2017) available for review.

Table 3 – Upgraded WWTF Influent and Effluent Quality

Constituent	Units[1]	Influent	Effluent
Biochemical Oxygen Demand	mg/L	148	10
Total Suspended Solids	mg/L	131	12
Electrical Conductivity	umhos/cm	na[2]	753
Total Kjeldahl Nitrogen	mg/L	na[2]	2.1
Nitrate as Nitrogen	mg/L	na[2]	18
Total Nitrogen	mg/L	na[2]	20

1. mg/L = milligram per liter; umhos/cm = micromhos per centimeter.
2. na = not analyzed.

11. Biochemical oxygen demand (BOD) and total suspended solids (TSS) in the effluent are below the daily average limit of 40 milligrams per liter (mg/L) and the WWTF removed from 94 to 89 percent of the influent BOD and TSS concentrations. The electrical conductivity (EC) of the effluent complies with the EC effluent limit of the EC of the source water plus 500 micromhos per centimeter (umhos/cm).

12. Total nitrogen at 20 mg/L is higher than the 10 mg/L designed treatment efficiency of the upgraded WWTF. Part of the problem is that now that new WWTF is online, the recorded flows are only about 0.30 mgd, not the 0.49 mgd previously reported or anticipated. The low flows and low BOD influent levels are making it difficult to denitrify the discharge at this time, but total nitrogen in the effluent is anticipated to decrease once the new KCJF facility is housed and operational and the flows increase. Historically, effluent with no

denitrification has been discharged in this location since at least 1967 (Order 67-105) and effluent nitrogen values were likely much higher than the current discharge from the upgraded WWTF. The discharge from the upgraded WWTF improves upon the effluent total nitrogen quality, even though the upgraded WWTF it is not currently operating as designed. This Order includes a performance based effluent limit of 32 mg/L for total nitrogen until the Discharger can comply with the terms of Provisions H.13 and H.14.

13. The RWD indicates the treated effluent will be recycled on about 94 acres of land directly south of the WWTF (Attachment B). The area proposed as a land application area currently contains the seepage pits that are used for disposal of the WWTF effluent.

14. The RWD included a water balance showing the proposed discharge rates (0.68 mgd annual average and 0.86 mgd maximum monthly average) would produce 2.1 acre-feet and 2.6 acre-feet per day, respectively. The water balance included in the RWD evaluates the storage capacity of the WWTF under normal conditions and under the 100-year rainfall design, and concludes that the storage capacity of the WWTF exceeds the volume produced by the WWTF by greater than 33 acre-feet in the 100-year rainfall event scenario, and greater than 55-acre feet under the normal rainfall scenario.

Site-Specific Conditions

15. There are four source water wells for the Lerdo Campus. Currently, wells No.2 and No.3 provide source water to the Lerdo Campus. Two new groundwater wells, Well No. 4 and Well No. 5, were drilled in 2015, but were not operational as of November 2017. The Discharger has indicated that the new wells will go online by the end of 2017, and wells No. 2 and No.3 will remain for use as emergency standby wells. Water quality results from sampling the supply wells was included in the RWD and is summarized in Table 4.

Table 4– Supply Well Data

Constituent	Units[1]	Well No.2	Well No. 3	Well No. 4	Well No. 5
Electrical Conductivity	umhos/cm	300	350	280	330
Total Dissolved Solids	mg/L	160	200	180	190
Chloride	mg/L	34	70	42	43
Sulfate	mg/L	4	7	2.3	5.8
Nitrate as Nitrogen	mg/L	nd[2]	nd[2]	nd[2]	nd[2]
Hydrogen Sulfide	mg/L	5 to 30	5 to 30	na[3]	na[3]

1. umhos/cm = micromhos per centimeter; mg/L = milligrams per liter.
2. nd = not detected by the laboratory.
3. na = not analyzed.

16. The Discharger submits monthly monitoring reports that include the latest EC result from the source water wells. The average EC of the source water since April 2017 is 558 umhos/cm. The source water EC reported in the monthly monitoring reports is less than what was reported in the RWD, because the supply water is treated with chlorine and bisulfate to remove hydrogen sulfide that cause the increase in the EC of the source water.

17. The topography in the vicinity of the WWTF is generally flat with a very slight slope to the west/southwest. The elevation at the WWTF is about 560 feet above mean sea level at the northeastern corner of the property, and about 500 feet at the southwestern corner.

18. The nearest natural surface water is Poso Creek which is about 2.5 miles north of the WWTF as shown on Attachment A, which is attached hereto and made part of this Order by reference. The Cawelo Canal is about a half a mile east of the WWTF and the Lerdo Canal is about 1.75 miles west of the WWTF.

19. The current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Number 06029C1325E, revised 26 September 2008, indicates the WWTF, the treatment ponds, and the evaporation/percolation ponds are not within a 100-year return flood area.

20. Soils in the area of the WWTF and the unlined effluent storage ponds consists almost entirely of the Zerker sandy clay loam according to the Web Soil Survey published by the United States Department of Agriculture Natural Resources Conservation Service. The Zerker sandy clay loam is described as well drained and has a land capability classification of 1. Soils with a Class 1 rating have few limitations that restrict their use.

21. Soils in the area of the land application area are comprised predominantly of Delano sandy loam (~65 percent) and the Wasco sandy loam (~30 percent) according to the Web Soil Survey published by the United States Department of Agriculture Natural Resources Conservation Service. The Delano sandy loam and the Wasco sandy loam are both described as well drained and have land capability classifications of 1. Soils with a Class 1 rating have few limitations that restrict their use.

22. The area is characterized by hot dry summers and cooler, humid winters. The rainy season generally extends from November through March. Average annual precipitation is about 6.5 inches and annual evapotranspiration data is 54.6 inches with monthly averages ranging from 1.3 inches in January and December to 8.1 inches in July (California Irrigation Management Information System, Shafter Station # 5). The 100-year, 24-hour maximum precipitation is about 2.9 inches, based on maps obtained from the Kern County Resource Management Agency, Engineering, Survey and Permit Services, Floodplain Management Section.

23. Land uses in the vicinity of the WWTF are primarily agricultural, with some industrial/commercial properties in the vicinity of the WWTF and oil field activity to the east. The RWD indicates the WWTF is within the Poso Creek Oil Field and just west of the Kern Front Oil Field. A review of Munger Map Book,1999, page 67 shows the WWTF is right along the western edge of the Poso Creek Oil Field. The North Kern Golf Course is present directly north of the WWTF and a cattle feed lot (3 Brand Cattle) is present to the southeast of the WWTF. Several industrial facilities, including the food processors Sun Pacific Shippers and Califia Farms, are about two-miles east of the WWTF near the intersection of Zerker Road and Lerdo Highway. The primary crops grown in the area are alfalfa, pasture, onions, garlic, corn, dry beans and tree crops including almonds, figs, peaches, pistachios, and walnuts, according to data published by the Department of Water Resources (DWR).

Groundwater Conditions

24. Groundwater in the area of the Lerdo Campus WWTF is contained in an unconfined aquifer, and the depth to groundwater is reported in the RWD to be about 520 to 540 feet below the ground surface (bgs). The depth to groundwater data is from two supply wells (Nos. 4 and 5) completed in 2015. The RWD also noted that the historic high groundwater depth was recorded to be 325.5 feet bgs in State Well 28S26E12J002M, set at the southwest corner of the Facility. The depth to water is validated in the DWR's, *Lines of Equal Elevation of Water In Wells, Unconfined Aquifer, San Joaquin Valley* Spring 2010 map that indicates the groundwater elevation is about 100 feet above mean sea level (MSL), which corresponds to a depth to groundwater of about 420 feet bgs. The general direction of groundwater flow in the unconfined aquifer is to the north/northwest due to pumping from a Cawelo Water District well cluster north of the WWTF.

25. The RWD indicates inter-bedded coarse and fine grained alluvial deposits are present to a depth of at least 1,500 feet beneath the facility. Deposits below a depth of about 100 feet are primarily blue or green in color, indicative of reduced conditions. Hydrogen sulfide is common in groundwater in reduced deposits and has been known for many decades to occur at high concentrations near oilfields in the San Joaquin Valley. The facility is in the Poso Creek Oil Field and west of the Kern Front Oil Field. Supply wells No. 2 and No.3 have had levels of hydrogen sulfide averaging from 5 mg/L to 14.5 mg/L, with spikes up to 100 mg/L.

26. Regional groundwater quality data can be found on the USGS Water Quality Portal web site. A search revealed 21 wells with data ranging in depth from 500 to 1,420 feet bgs within a three-mile radius of the WWTF. Three of the USGS wells are or were in close proximity to the WWTF. USGS well 353119119062501 is about three quarters of a mile north of the WWTF at the northeast corner of an adjacent golf course. It is downgradient to slightly cross gradient of the WWTF based on groundwater flow to the north. The USGS record contained results for USGS well 353119119062501 dating from 1986 to 2015. Table 3 summarizes the results available for USGS well 353119119062501.

Table 5- USGS Well 353119119062501

Constituent	Units[1]	1986	1995	2002	2015
Electrical Conductivity	umhos/cm	241	231	222	217
Total Dissolved Solids	mg/L	143	150	130	135
Chloride	mg/L	19	22	23	16
Sodium	mg/L	49	47	46	47
Nitrate as Nitrogen	mg/L	nd[2]	nd[2]	nd[2]	nd[2]
Total Kjeldahl Nitrogen	mg/L	na[3]	nd[2]	nd[2]	na[3]
Ammonia	mg/L	na[3]	0.02	nd[2]	0.01

1. umhos/cm = micromhos per centimeter; mg/L = milligrams per liter.
2. nd = not detected by the laboratory.
3. na = not analyzed.

27. The data in Table 5 indicates good water quality that has met water quality objectives from 1986 through 2015. Nitrate and TKN were not detected in the samples and EC and TDS results are generally stable with a slight decreasing trends in concentration for EC.

28. USGS well 353048119072101 is or was immediately northwest of the WWTF in 1955. If the WWTF been present in 1955, the well would have been downgradient of the WWTF when groundwater flow was to the northwest. A sample was collected in 1955 and the results of the one-time sample are presented in Table 6.

Table 6 – USGS Well 353048119072101

Constituent	Units[1]	1955
Electrical Conductivity	umhos/cm	290
Total Dissolved Solids	mg/L	181
Chloride	mg/L	30
Sodium	mg/L	62
Nitrate as Nitrogen	mg/L	0.2

1. umhos/cm = micromhos per centimeter; mg/L = milligrams per liter.

29. The results in Table 6 indicate good water quality in 1955 that is similar to although slightly higher in concentration to the results reported for upgradient USGS well 353119119062501 presented above in Table 5.

30. A third USGS well 353044119065301 is on the east side of the Lerdo Campus property and is cross gradient to upgradient of the WWTF. The USGS sample record indicates the well was sampled three times; once in 1955, again in 1958, and a third time in 1986. The results are presented in Table 7.

Table 7- USGS Well 353044119065301

Constituent	Units[1]	1955	1958	1986
Electrical Conductivity	umhos/cm	262	246	312
Total Dissolved Solids	mg/L	163	168	186
Chloride	mg/L	34	44	50
Sodium	mg/L	56	58	63
Nitrate as Nitrogen	mg/L	na[2]	na[2]	0.02

1. umhos/cm = micromhos per centimeter; mg/L = milligrams per liter.
2. Na = not analyzed.

31. All of the results in Table 7 meet water quality objectives. The results do show a slight increasing trend from 1958 to 1986 for all constituents but nitrate as nitrogen, but the location of the well upgradient of the WWTF would suggest the WWTF is not the cause of the increase. The WWTF is in the western half of Section 7 of T28S, R27E. The entire eastern half of Section 7 of T28S, R27E (~320 acres which is upgradient of the well) is currently cropped with a citrus orchard. Additionally, the Poso Creek oil field is present to the east and upgradient of the well and the WWTF.

32. The results from the USGS Water Quality Data Portal show that groundwater in the area is of good quality. Only 2 of the 21 wells identified on the USGS Water Quality Portal web site had nitrate as nitrogen results in excess of 10 mg/L. USGS well 353021119082601 was or is about 1.2 miles west/southwest of the WWTF and had a nitrate as nitrogen result of 17.8 mg/L in September 1955. USGS well 353146119093701 was or is about 2.9 miles northwest of the WWTF and had a nitrate as nitrogen result of 33.8 mg/L in September 1955.

Basin Plan, Beneficial Uses, and Regulatory Considerations

33. The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition, revised July 2016* (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Water Board. Pursuant to California Water Code section 13263(a), waste discharge requirements must implement the Basin Plan. . The Tulare Lake Basin Plan (Second Edition, July 2016) indicates that discharges to areas that may recharge to good quality ground waters shall not exceed and EC of 1,000 umhos/cm.

34. The WWTF and the land application area are in the North Kern Hydrologic Area (No. 558.80), which is part of the South Valley Floor hydrologic unit as depicted on hydrologic maps prepared by State Water Resources Control Board in August 1986. The beneficial uses of Valley Floor Waters, as stated in the Basin Plan for Hydrologic Area No. 558, are agricultural supply; industrial service supply; industrial process supply; groundwater recharge; water contact recreation; non-contact water recreation; warm freshwater habitat; wildlife habitat; and enhancement of rare, threatened, or endangered species. Poso Creek is about 2.5 miles north of the WWTF.

35. The WWTF and the land application area are in Detailed Analysis Unit (DAU) No 256 within the Kern County Basin hydrologic unit. The beneficial uses of underlying groundwater as set forth in the Basin Plan are municipal and domestic supply, agricultural supply, industrial service supply and industrial process supply.

36. Water in the Tulare Lake Basin is in short supply, requiring importation of surface water from other parts of the State. The Basin Plan encourages use of recycled water on irrigated crops wherever feasible and indicates that evaporation of recyclable wastewater is not an acceptable permanent disposal method where the opportunity exists to replace existing uses or proposed use of fresh water with recycled water.

37. The Basin Plan establishes narrative water quality objectives for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets forth a numeric objective for total coliform organisms.

38. The Basin Plan's numeric water quality objective for bacteria requires that the most probable number (MPN) of coliform organisms over any seven-day period shall be less than 2.2 per 100 mL in MUN groundwater.

39. The Basin Plan's narrative water quality objectives for chemical constituents, at a minimum, require waters designated as domestic or municipal supply to meet the MCLs specified in Title 22 of the California Code of Regulations (hereafter Title 22). The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than maximum contaminant levels (MCLs) to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.

40. The narrative toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, animal, plant, or aquatic life associated with designated beneficial uses.

41. Quantifying a narrative water quality objective requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses. The Basin Plan states that when compliance with a narrative objective is required to protect specific beneficial uses, the Central Valley Water Board will, on a case-by-case basis, adopt numerical limitations in order to implement the narrative objective.

42. The Basin Plan identifies the greatest long-term problem facing the entire Tulare Lake Basin as the increase in salinity in groundwater, which has accelerated due to the intensive use of soil and water resources by irrigated agriculture. The Basin Plan recognizes that degradation is unavoidable until a mechanism to carry salts out of the basin is established. To limit the degradation, the Basin Plan establishes several salt management requirements, including:

    a. The incremental increase in salt from use and treatment must be controlled to the extent possible. The Tulare Lake Basin Plan effluent limit for EC limits the increase from a point source discharge to a maximum of 500 umhos/cm. When the source water is from more than one source, the EC shall be a weighted average of all sources.

    b. Discharges to areas that may recharge good quality groundwater shall not exceed an EC of 1,000 umhos/cm, a chloride content of 175 mg/L, or a boron content of 1.0 mg/L.

43. In the absence of specific numerical water quality limits, the Basin Plan methodology is to consider any relevant published criteria. General salt tolerance guidelines, such as *Water Quality for Agriculture* by Ayers and Westcot and similar references indicate that yield reductions in nearly all crops are not evident when irrigation water has an EC less than 700 µmhos/cm. There is, however, an eight- to ten-fold range in salt tolerance for agricultural crops, and the appropriate salinity values to protect agriculture in the Central Valley are considered on a case-by-case basis. It is possible to achieve full yield potential with waters having EC up to 3,000 µmhos/cm if the proper leaching fraction is provided to maintain soil salinity within the tolerance of the crop.

44. The list of crops in Finding 23 is not intended as a definitive inventory of crops that are or could be grown in the area where groundwater quality is potentially affected by the discharge, but it is representative of current and historical agricultural practices in the area.

Special Considerations for Salt and Nitrate Discharges

45. Many surface waters and local groundwater supplies have been degraded with salt. In some areas, the high salinity is naturally occurring, but in many areas it is due to the acts of man. In 2006, the Central Valley Water Board, the State Water Board, and stakeholders began a joint effort to address salinity and nitrate problems in the region and adopt long-term solutions that will lead to enhanced water quality and economic sustainability.

46. The Central Valley Water Board is developing amendments to the Basin Plan to incorporate new strategies for addressing ongoing salt and nitrate accumulation in the waters and soils of the Central Valley. Strategies currently under consideration may:

- Alter the way the Board calculates available assimilative capacity for nitrate, which could result in new or modified requirements for nitrate management;
- Require dischargers to implement actions identified under an interim salinity permitting approach; and/or
- Establish alternate compliance approaches that would allow dischargers to participate in efforts to provide drinking water to local communities in consideration for longer compliance time schedules.

Should the Board adopt amendments to the Basin Plan to effectuate such strategies, these waste discharge requirements may be amended or modified to incorporate any newly-applicable requirements.

47. The stakeholder-led Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative has been coordinating efforts to implement new salt and nitrate management strategies. The Board expects dischargers that may be affected by new salt and nitrate management policies to coordinate with the CV-SALTS initiative.

Antidegradation Analysis

48. The *Statement of Policy With Respect to Maintaining High Quality of Waters in California*, SWRCB Order WQ 68-16 (hereinafter "Antidegradation Policy") was adopted by the State Water Board in October 1968. The Antidegradation Policy limits the Board's discretion to authorize the degradation of "high-quality waters." This policy has been incorporated into the Board's Basin Plans. "High-quality waters" are defined as those waters where water quality is more than sufficient to support beneficial uses designated in the Board's Basin Plan. Whether or not a water is a high-quality water is established on a constituent- by-constituent basis, which means that an aquifer can be considered a high-quality water with respect to one constituent, but not for others (SWRCB Order No. WQ 91-10).

49. The Antidegradation Policy applies when an activity discharges to high-quality waters and will result in some degradation. When it applies, the Antidegradation Policy requires that WDRs reflect best practicable treatment or control (BPTC) of wastes and that any degradation of high-quality waters (a) will be consistent with the maximum benefit to the people of the state, and (b) will not result in an exceedance of water quality objectives. If

the activity will not result in the degradation of high-quality waters, the Antidegradation Policy does not apply, and the Discharger need only demonstrate that it will use "best efforts" to control the discharge.

50. The RWD included an Antidegradation Analysis and evaluated the discharge for selected constituents of concern. Constituents of concern that have the potential to degrade groundwater include salts (primarily EC), nitrogen, chloride, arsenic, boron, and coliform organisms as discussed below.

    a. Salinity (EC). The average EC concentration in the effluent since the startup of the upgraded WWTF in April 2017 is 773 umhos/cm. The average is less than the lower recommended Secondary MCL of 900 umhos/cm and would meet the EC limit proposed in Effluent Limitation C.3 which is the EC of the source water (~300 umhos/cm) plus 500 umhos/cm.. The Tulare Lake Basin Plan also indicates that discharges to areas that may recharge to good quality ground waters shall not exceed an EC of 1,000 µmhos/cm, a chloride content of 175 mg/l, or a boron content of 1.0 mg/l. The discharge could degrade the underlying groundwater, but the anticipated concentration would be less than the lower recommended MCL of 900 umhos/cm and meets Effluent Limitation C.3.

    b. Nitrate. For nutrients such as nitrate, the potential for degradation depends not only on the quality of the treated effluent, but the ability of the vadose zone below the effluent disposal ponds to provide an environment conducive to nitrification and denitrification to convert the effluent nitrogen to nitrate and the nitrate to nitrogen gas before it reaches the water table. The depth to water was reported to be from 520 to 540 feet bgs in 2015, with a reported high water level of 325 feet bgs. The data indicates the vadose zone is over 400 feet thick and is described in Finding 24 as consisting of inter-bedded coarse and fine grained alluvial deposits that below a depth of about 100 feet are primarily blue or green in color and indicative of reduced conditions. The RWD indicates the effluent will undergo natural denitrification in anoxic zones below the pond bottoms providing an additional 30 percent nitrogen reduction. Additionally, the treated effluent is to be recycled to about 90-acres of land and a crop will be grown (alfalfa proposed) that can utilize the nitrogen in the discharge.

    The antidegradation analysis contained in the RWD indicates the WWTF was designed to treat total nitrogen in the effluent to less than 10 mg/L. Currently, effluent total nitrogen is averaging about 20 mg/L in the upgraded WWTF, twice that of the design treatment limit. The effluent is temporarily stored in unlined effluent storage ponds and then discharged to a series of unlined seepage pits in the land application areas, not the entire land application area.

    The current discharge to the unlined effluent storage ponds and seepage pits concentrates the discharge in small areas and creates a hydraulic head that could push the effluent downward through the vadose zone to the underlying groundwater. To ensure the nitrogen content of the discharge does not threaten the quality of the underlying groundwater, this Order contains Effluent Limitation C.4 that includes a performance based limit of 32 mg/L for total nitrogen in the discharge until the County can complete a Title 22 Report (Provision H.13) and begin recycling the treated effluent to the 90-acre land application area south of the WWTF and destroy the existing seepage pits (Provision H.14). Once discharge to the land application area begins, the performance based limit will no longer be applicable and total nitrogen shall be applied to the land application area in accordance with Recycling Specification F.12.

c. Chloride. For chloride, the average chloride content of the source water from wells No. 4 and No. 5 is about 43 mg/L. Effluent data for chloride is not available, but the RWD estimates the resulting chloride concentration in the effluent range from about 60 to 75 mg/L. Those values are well below the Basin Plan effluent limit of 175 mg/L for discharges over high quality groundwater, are less than the agricultural water quality objective of 106 mg/L, and are well below the recommended Secondary MCL of 250 mg/L. Therefore, the discharge is not likely to degrade groundwater quality due to the chloride content of the discharge.

d. Arsenic. Arsenic currently averages about 3.4 ug/L in supply wells No. 4 and No.5. The effluent has not been analyzed for arsenic, but the RWD indicates the increase should be minimal and estimates the results will be less than 10 ug/l. The RWD concludes that the discharge will not increase the arsenic concentrations in the underlying groundwater and will not degrade the underlying groundwater quality.

e. Boron. The antidegradation review included in the RWD indicated that boron is of particular concern in the area because of the predominance of citrus crops and high level of boron in oil field discharges that occur regionally. The RWD states that "other than source water" there is no known source of boron for the effluent and the RWD does not provide any regional groundwater data for boron. The regional groundwater data obtained from the USGS Water Quality Portal contained boron data. Boron was an analyte in 17 of the 21 wells that had sampling records. The results are from 1951 through 2015, and indicate that boron was not detected above the agricultural limit of 700 ug/L in any of the wells. Therefore, the discharge is not likely to degrade groundwater quality due to the boron content of the discharge.

f. Total coliform organisms. Coliform bacteria will be present in the discharge because no disinfection is proposed. However, percolation through the underlying soils is effective at removing bacteria. The RWD indicates that movement through as little as 5 to 10 feet of fine-grained unsaturated soils is adequate to remove most bacteria. The thickness of the vadose zone is reported to be about 400 to 500 feet, and it is estimated the downward flow to the groundwater table would take years. Therefore, the RWD concludes the discharge is not likely to degrade the underlying groundwater with respect to coliform organisms.

51. The proposed WWTF will provide BPTC of the discharge that incorporates:

    a. A headworks with a mechanical bar screen to remove solids more than 6 millimeters in size;
    b. A Parshall flume to measure the influent flow;
    c. Secondary treatment of wastewater using an extended aeration activated sludge process;
    d. Aeration chains with submerged diffusers that create alternating aerobic and anoxic zones for simultaneous carbonaceous oxidation and biological nitrogen removal;
    e. Clarifiers for biosolids removal;
    f. Return activated sludge/waste activated sludge pump station to returns biosolids from the clarifier to the aeration basin;
    g. Certified operators to ensure proper operation and maintenance;

h. An operation and maintenance manual;

i. Source water, influent, and effluent monitoring; and

j. Recycling of secondary treated effluent to a 90-acre land application area to irrigate fodder, fiber, or seed crops.

Antidegradation Conclusions

52. This Order establishes groundwater limitations that may allow some degradation, but that will not unreasonably threaten present and future anticipated beneficial uses of groundwater or result in groundwater quality that exceeds water quality objectives set forth in the Basin Plan.

53. The treatment and control measures described above in Finding 51, in combination with the requirements of this Order, represent best practicable treatment or control (BPTC). Adoption of this Order will result in the implementation of BPTC. In addition, this Order requires monitoring to evaluate potential groundwater impacts from the discharge and confirm that BPTC is sufficiently protective of groundwater quality.

54. Generally, limited degradation of groundwater by some of the typical waste constituents of concern (e.g., EC and nitrate) released with discharge from a municipal wastewater utility after effective source control and treatment is consistent with maximum benefit to the people of the state. The technology, energy, water recycling, and waste management advantages of municipal utility service far exceed any benefits derived from a community otherwise reliant on numerous concentrated individual wastewater systems, and the impacts on water quality will be substantially less. Economic prosperity of valley communities and associated industry is of maximum benefit to the people of the state, and therefore sufficient reason to accommodate growth and some groundwater degradation provided terms of the Basin Plan are met. The degradation will not unreasonably affect present and anticipated beneficial uses of groundwater, or result in water quality less than water quality objectives.

55. This Order is consistent with the Antidegradation Policy since: (a) the Discharger has or will implement best management practices and BPTC to minimize degradation, (b) the limited degradation allowed by this Order will not unreasonably affect present or anticipated beneficial uses or result in water quality less than water quality objectives or background groundwater quality, and (c) the limited degradation is of maximum benefit to the people of the State.

Water Recycling Regulatory Considerations

56. Undisinfected domestic wastewater contains human pathogens that are typically measured using total or fecal coliform organism as indicator organisms. The State Water Resources Control Board Division of Drinking Water (formerly the California Department of Public Health Drinking Water Program), which has primary statewide responsibility for protecting water quality and the public health, has established statewide criteria in Title 22, section 60301 et seq. for the use of recycled water.

57. On 3 February 2009, the State Water Board adopted Resolution 2009-0011, *Adoption of a Policy for Water Quality Control for Recycled Water* (Recycled Water Policy). The

Recycled Water Policy promotes the use of recycled water to achieve sustainable local water supplies and reduce greenhouse gases.

58. The County is proposing to recycle the treated effluent on the 90-acre land application area that will contain crops that will utilize the nitrogen in the effluent, but a Title 22 engineering report has not been prepared by the Discharger or reviewed and approved by the Division of Drinking Water (DDW). This Order contains Provision H.13 that contains a time schedule for the Discharger to submit a Title 22 engineering report that describes how it will recycle the secondary-treated undisinfected effluent to the land application area and includes a time schedule to prepare the land application area for the recycling of the secondary treated effluent. The Title 22 Engineering Report must be approved by the DDW and the Executive Officer of the Central Valley Water Board prior to the use of the secondary treated effluent for recycling.

Other Regulatory Considerations

59. In compliance with Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.

60. Based on the threat and complexity of the discharge, the facility is determined to be classified as 2B as defined below:

    a. Category 2 threat to water quality: "Those discharges of waste that could impair the designated beneficial uses of the receiving water, cause short-term violations of water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance."

    b. Category B complexity, defined as: "Any discharger not included [as Category A] that has physical, chemical, or biological treatment systems (except for septic systems with subsurface disposal) or any Class 2 or Class 3 waste management units."

61. California Code of Regulations, Title 27 ("Title 27") contains regulatory requirements for the treatment, storage, processing, and disposal of solid waste, which includes designated waste, as defined by Water Code section 13173. However, Title 27 exempts certain activities from its provisions. Discharges regulated by this Order are exempt from Title 27 pursuant to provisions that exempt domestic sewage, wastewater, and reuse. The exemption, found at Title 27, section 20090, states in part:

> The following activities shall be exempt from the SWRCB-promulgated provisions of this subdivision, so long as the activity meets, and continues to meet, all preconditions listed:
>
> (a) Sewage - Discharges of domestic sewage or treated effluent which are regulated by WDRs issued pursuant to Chapter 9, Division 3, Title 23 of this code, or for which WDRs have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal wastewater treatment plants, provided that residual sludges or solid waste from wastewater treatment facilities shall be

> discharged only in accordance with the applicable SWRCB-promulgated provisions of this division.
>
> (b) Wastewater - Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields if the following conditions are met:
>
> (1) the applicable RWQCB has issued WDRs, reclamation requirements, or waived such issuance;
>
> (2) the discharge is in compliance with the applicable water quality control plan; and
>
> (3) the wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.
>
> ***

62. The discharge authorized herein (except for the discharge of residual sludge and solid waste), and the treatment and storage facilities associated with the discharge, are exempt from the requirements of Title 27 as follows:

    a. The wastewater treatment plant is exempt pursuant to Title 27, section 20090(a) because they are treatment and storage facilities associated with a municipal domestic wastewater treatment plant.

    b. The effluent storage ponds are exempt pursuant to Title 27, section 20090(b) because they are wastewater storage ponds and:

        i. The Central Valley Water Board is issuing WDRs.

        ii. The discharge is in compliance with the Basin Plan, and;

        iii. The treated effluent discharged to the ponds does not need to be managed as hazardous waste.

63. The Discharger is not required to obtain coverage under a National Pollutant Discharge Elimination System General Industrial Storm Water Permit for the WWTF because all storm water runoff is retained onsite and does not discharge to a water of the United States.

64. On 2 May 2006, the State Water Board adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems General Order 2006-0003-DWQ (the General Order). The General Order requires all public agencies that own or operate sanitary sewer systems greater than one mile in length to comply with the Order. The Discharger's collection system exceeds one mile in length and the Discharger is enrolled under the General Order.

65. Water Code section 13267(b)(1) states:

> In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region … shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring those

reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

66. The technical reports required by this Order and the attached Monitoring and Reporting Program R5-2018-0014 are necessary to ensure compliance with these waste discharge requirements. The Discharger owns and operates the facility that discharges the waste subject to this Order.

67. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells (hereafter DWR Well Standards), as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 74-81* (December 1981). These standards, and any more stringent standards adopted by the state or county pursuant to Water Code section 13801, apply to all monitoring wells used to monitor the impacts of wastewater storage or disposal governed by this Order.

68. The improvements to the WWTF were covered in an Environmental Impact Report (EIR) circulated by Kern County in July 2013 with State Clearing House number 2013021019. A Final EIR was certified on 13 November 2014. In general the project was found to have minimal environmental concerns due to the area already being developed and used as a WWTF and jail facility.

69. The United States Environmental Protection Agency (EPA) has promulgated biosolids reuse regulations in 40 CFR 503, *Standard for the Use or Disposal of Sewage Sludge,* which establishes management criteria for protection of ground and surface waters, sets application rates for heavy metals, and establishes stabilization and disinfection criteria.

70. The Central Valley Water Board is using the Standards in 40 CFR 503 as guidelines in establishing this Order, but the Central Valley Water Board is not the implementing agency for 40 CFR 503 regulations. The Discharger may have separate and/or additional compliance, reporting, and permitting responsibilities to the EPA.

71. Pursuant to Water Code section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

Public Notice

72. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.

73. The Discharger and interested agencies and persons have been notified of the Central Valley Water Board's intent to prescribe waste discharge requirements for this discharge, and they have been provided an opportunity to submit written comments and an opportunity for a public hearing.

74. All comments pertaining to the discharge were heard and considered in a public hearing.

IT IS HEREBY ORDERED that Waste Discharge Requirements Order 84-148 is rescinded and, the Kern County Sheriff's Office, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the 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. Discharge of waste classified as 'hazardous', as defined in the California Code of Regulations, title 22, section 66261.1et seq., is prohibited.

3. Bypass or overflow of untreated or partially treated wastes is prohibited, except as allowed by Standard Provisions E.2 of the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, dated 1 March 1991.

4. Discharge of waste at a location or in a manner different from that described in the Findings is prohibited.

5. The Discharger shall not allow toxic substances to be discharged into the wastewater treatment system such that biological treatment mechanisms are disrupted.

B. Flow Limitations

1. The average daily inflow at INF-01 shall not exceed 0.68 mgd.

2. The monthly maximum average daily inflow at INF-01shall not exceed 0.86 mgd.

C. Effluent Limitations

1. The effluent discharge to the effluent storage ponds measured at EFF-01[1] shall not exceed the following limitations:

Constituent	Units	Monthly Average	Daily Maximum
BOD	mg/L	40	80
TSS	mg/L	40	80

2. The arithmetic mean of BOD and TSS in effluent samples collected over a monthly period shall not exceed 20 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (80 percent removal).

[1] EFF-01 is defined in the attached Monitoring and Reporting Program

3. The 12-month rolling average EC of the discharge shall not exceed the 12-month flow-weighted rolling average EC of the source water plus 500 µmhos/cm or 1,000 umhos/cm, whichever is less.

4. Prior to compliance with Provisions H.13 and H.14 the 12-month rolling average of total nitrogen in the discharge shall not exceed a performance based limit of 32 mg/L. This limit shall not be applicable upon compliance with the terms of Provisions H.13 and H.14.

D. Discharge Specifications

1. No waste constituent shall be released, discharged, or placed where it will cause a violation of the Groundwater Limitations of this Order.

2. Wastewater treatment, storage, and disposal shall not cause pollution or a nuisance as defined by Water Code section 13050.

3. The discharge shall remain within the permitted waste treatment/containment structures, storage, and land application areas at all times.

4. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.

5. All conveyance, treatment, storage, and disposal systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

6. Public contact with wastewater at the WWTF shall be prevented through such means as fences, signs, or acceptable alternatives.

7. Objectionable odors associated with the WWTF shall not be perceivable beyond the limits of the WWTF property at an intensity that creates or threatens to create nuisance conditions.

8. As a means of discerning compliance with Discharge Specification D.7, the dissolved oxygen (DO) content in the upper one foot of any wastewater treatment or storage pond shall not be less than 1.0 mg/L for three consecutive sampling events. If the DO in any single pond is below 1.0 mg/L for three consecutive sampling events, the Discharger shall report the findings to the Central Valley Water Board in writing within 10 days and shall include a specific plan to resolve the low DO results within 30 days.

9. The Discharger shall operate and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. Unless a California-registered civil engineer certifies (based on design, construction, and conditions of operation and maintenance) that less freeboard is adequate, the operating freeboard in any pond shall never be less than two feet (measured vertically from the lowest possible point of overflow).

10. Wastewater treatment, storage, and disposal ponds or structures shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter while ensuring compliance with all requirements of this Order. 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.

11. On or about **1 October** of each year, available capacity shall at least equal the volume necessary to comply with Discharge Specifications D.9 and D.10.

12. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes. Specifically:

    a. An erosion control program shall be implemented to ensure 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.

    d. The Discharger shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.

13. Newly constructed or rehabilitated berms or levees (excluding internal berms that separate ponds or control the flow of water within a pond) shall be designed and constructed under the supervision of a California Registered Civil Engineer.

14. The Discharger shall monitor sludge accumulation in the wastewater treatment/storage ponds at least every five years beginning in 2018, and shall periodically remove sludge as necessary to maintain adequate storage capacity. Specifically, if the estimated volume of sludge in the reservoir exceeds five percent of the permitted reservoir capacity, the Discharger shall complete sludge cleanout within 12 months after the date of the estimate.

E. Groundwater Limitations

Release of waste constituents from any portion of the WWTF shall not cause or contribute to groundwater:

a. Containing constituent concentrations in excess of the concentrations specified below or natural background quality, whichever is greater:

    (i) Nitrate as Nitrogen of 10 mg/L.

    (ii) Total Coliform Organisms of 2.2 MPN/100 mL.

    (iii) For constituents identified in Title 22, the primary and secondary MCLs quantified therein.

b. Containing taste or odor-producing constituents, toxic substances, or any other constituent in concentrations that cause nuisance or adversely affect beneficial uses.

F. Recycling Specifications

The following specifications apply to land application areas under the ownership or control of the Discharger.

1. For the purposes of this Order, "land application areas" refers to the discharge areas Recycled water shall be managed in conformance with the regulations contained in Title 22, Division 4, Chapter 3, CCR.

2. Use of Undisinfected Secondary Recycled Water shall be limited to flood irrigation of fodder, fiber, seed crops not eaten by humans or for grazing of non-milking cattle and shall comply with the provisions of Title 22.

3. All reclamation equipment, pumps, piping, valves, and outlets shall be appropriately marked to differentiate them from potable facilities. All reclamation distribution system piping shall be purple or adequately wrapped with purple tape.

4. Recycled water controllers, valves, and similar appurtenances shall be affixed with recycled water warning signs, and shall be equipped with removable handles, locking mechanisms, or some other means to prevent public access or tampering. The contents of the signs shall conform to Title 22, CCR, Section 60310. Quick couplers and sprinkler heads, if used, shall be of a type, or secured in a manner, that permits operation only by authorized personnel. Hose bibs that the public could use shall be eliminated.

5. Public contact with recycled water shall be controlled using signs and/or other appropriate means. All areas where recycled water is used that are accessible to the public shall be posted with signs that are visible to the public, in a size no less than 4 inches high by 8 inches wide, that include the following wording: "RECYCLED WATER – DO NOT DRINK, AGUA DE DESPERDICIO RECLAMADA – NO TOME" Each sign shall display an international symbol similar to that shown in Attachment C which is attached hereto and made part of this Order by reference.

6. Recycled water shall not be allowed to escape from the authorized land application areas by airborne spray or by surface flow except in minor amounts such as that associated with good irrigation practices.

7. Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities.

8. Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff.

9. Workers shall be educated regarding proper hygienic procedures to ensure personal and public safety.

10. Potable water mains shall be separated by a clear horizontal distance of at least four feet from, and a clear vertical distance of at least one foot above, any parallel pipeline conveying disinfected tertiary recycled water, and shall be separated by a clear vertical distance of at least one foot above any crossing pipeline conveying disinfected tertiary recycled water, except as may be otherwise allowed or approved under DPH regulatory requirements or DPH design guidance documents. All separation distances shall be measured from the nearest outside edge of each pipe. Vertical separation distances shall apply wherever the horizontal separation distance is eleven feet or less.

11. Potable water supply piping and recycled water piping shall not have any cross-connections. Supplementing recycled water with potable water shall not be allowed except through an air-gap separation or, if approved by the DPH, a reduced pressure principle backflow device.

12. Application of recycled water to recycled water land application areas shall not exceed the nitrogen or hydraulic loading reasonably necessary to satisfy the nitrogen or water uptake needs of the land application area considering the plant, soil, climate, and irrigation management system (i.e., generally accepted agronomic rates).

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

    a. All applied irrigation water must infiltrate completely within 48 hours.

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

    c. Low-pressure and un-pressurized pipelines and ditches, which are accessible to mosquitoes, shall not be used to store recycled water.

14. Excessive irrigation with recycled water that results in excessive runoff of recycled water, or continued irrigation of recycled water during periods of rain is prohibited. Overspray or runoff associated with normal sprinkler use shall be minimized.

15. The Discharger shall maintain the following setback distances from areas where Secondary Recycled Water is impounded or irrigated with:

Setback Distance (feet)	To
15	Property Line
20	Public Roads
50	Drainage courses
100	Irrigation wells
150	Domestic wells

16. Any irrigation runoff shall be confined to the recycled water land application area, and shall not enter any surface water drainage course or storm water

drainage system unless the runoff does not pose a public health threat and is authorized by the regulatory agency.

G. Solids Disposal Specifications

Sludge, as used in this document, means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screenings generated during preliminary treatment. Residual sludge means sludge that will not be subject to further treatment at the WWTF. Biosolids refers to sludge that has been treated and tested and shown to be capable of being beneficially used as a soil amendment for agriculture, silviculture, horticulture, and land reclamation activities pursuant to federal and state regulations.

1. Sludge and solid waste shall be removed from screens, sumps, ponds, and clarifiers as needed to ensure optimal plant operation.

2. Any handling and storage of residual sludge, solid waste, and biosolids at the WWTF shall be temporary (i.e., no longer than six months) and controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate the groundwater limitations of this Order.

3. Residual sludge, biosolids, and solid waste shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27, division 2. Removal for further treatment, disposal, or reuse at disposal sites (i.e., landfills, WWTFs, composting sites, soil amendment sites) operated in accordance with valid waste discharge requirements issued by a Regional Water Board will satisfy this specification.

4. Use of biosolids as a soil amendment shall comply with valid waste discharge requirements issued by a regional water board or the State Water Board except in cases where a local (e.g., county) program has been authorized by a regional water board. In most cases, this will mean the General Biosolids Order (State Water Resources Control Board Water Quality Order 2004-0012-DWQ, "General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities"). For a biosolids use project to be covered by Order 2004-0012-DWQ, the Discharger must file a complete Notice of Intent and receive a Notice of Applicability for each project.

5. Use and disposal of biosolids shall comply with the self-implementing federal regulations of 40 Code of Federal Regulations part 503, which are subject to enforcement by the U.S. EPA, not the Central Valley Water Board. If during the life of this Order, the State accepts primacy for implementation of part 503, the Central Valley Water Board may also initiate enforcement where appropriate.

6. Any proposed change in sludge use or disposal practice shall be reported in writing to the Executive Officer at least 90 days in advance of the change.

H. Provisions

1. The Discharger shall comply with MRP R5-2018-0014, which is part of this Order, and any revisions thereto as adopted by the Central Valley Water Board or approved by the Executive Officer.

2. The Discharger shall comply with the Standard Provisions and Reporting Requirements for Waste Discharge Requirements, dated 1 March 1991 (Standard Provisions), which are attached hereto and made part of this Order.

3. A copy of this Order, including its MRP, Information Sheet, Attachments, and Standard Provisions, shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.

4. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This Provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Discharger when the operation is necessary to achieve compliance with the conditions of this Order.

5. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports and work plans required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of a person registered to practice in California pursuant to California Business and Professions Code Sections 6735, 7835, and 7835.1. As required by these laws, completed technical reports and work plans must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work. All reports required herein are required pursuant to Water Code section 13267.

6. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports. On or before each report due date, the Discharger shall submit the specified document to the Central Valley Water Board or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, then the Discharger shall state the reasons for such noncompliance and provide an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board in writing when it returns to compliance with the time schedule. Violations may result in enforcement action, including Central Valley Water Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.

7. In the event of any change in control or ownership of the WWTF, the Discharger must notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board.

8. To assume operation as Discharger 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 Central Valley Water 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 Water Code. If approved by the Executive Officer, the transfer request will be submitted to the Central Valley Water Board for its consideration of transferring the ownership of this Order at one of its regularly scheduled meetings.

9. The Discharger shall submit the technical reports and work plans required by this Order for consideration by the Executive Officer, and incorporate comments the Executive Officer may have in a timely manner, as appropriate. Unless expressly stated otherwise in this Order, the Discharger shall proceed with all work required by the foregoing provisions by the due dates specified.

10. The Discharger shall use the best practicable cost-effective control technique(s) including proper operation and maintenance, to comply with this Order.

11. As described in the Standard Provisions, the Discharger shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge.

12. The Discharger shall provide certified wastewater treatment plant operators in accordance with CCR, Title 23, division 3, chapter 26.

13. The Discharger shall submit a Title 22 Engineering Report for the discharge of effluent to the land application area in accordance with the following compliance schedule:

Task	**Task Description**	**Due date**
a.	Submit a Title 22 Engineering Report and implementation schedule to the Central Valley Water Board and the Division of Drinking Water pursuant to Title 22 for water recycling to about a 90-acre land application area to grow fodder, fiber, and seed crops not intended for human consumption. The Report and implementation schedule shall be subject to the approval of the Executive Officer.	**By 5 April 2019.**
b.	Begin recycling treated effluent in accordance with Executive Officer and DDW approved Title 22 Engineering Report.	**By 6 April 2020**

14. The Discharger shall destroy the existing seepage pits in accordance with the following compliance schedule:

Task	Task Description	Due date
a.	Submit a work plan and implementation schedule to close/destroy the existing seepage pits and evaluate the soil conditions beneath the seepage pits. The plan and implementation schedule shall be subject to the approval of the Executive Officer.	**By 5 April 2019.**
b.	Implement the approved work plan and time schedule required by Task a.	**By 6 April 2020.**

15. At least **180 days** prior to any sludge removal and disposal, the Discharger shall submit a *Sludge Cleanout Plan*. The plan shall include a detailed plan for sludge removal, drying, and disposal. The plan shall specifically describe the phasing of the project, measures to be used to control runoff or percolate from the sludge as it is drying, and a schedule that shows how all dried biosolids will be removed from the site prior to the onset of the rainy season **(1 October)**. If the Discharger proposes to land apply biosolids at the effluent recycling site, the report shall include a Report of Waste Discharge and filing fee to apply for separate waste discharge requirements.

16. The Discharger shall report to the Central Valley Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act of 1986."

17. The Discharger shall continue to maintain coverage under, and comply with *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*, Water Quality Order 2006-0003-DWQ and the Revised General WDRs Monitoring and Reporting Program Order 2013-0058-EXEC, and any subsequent revisions thereto as adopted by the State Water Board. Water Quality Order 2006-0003 and Order 2013-0058-EXEC requires the Discharger to notify the Central Valley Water Board and take remedial action upon the reduction, loss, or failure of the sanitary sewer system resulting in a sanitary sewer overflow.

18. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to $10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California

Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify that the foregoing is a full true, and correct copy of an Order adopted by the California Regional Water Quality Control Board on 5 April 2018.

Original signed by

PAMELA C. CREEDON, Executive Officer

Order Attachments:

Monitoring and Reporting Program
A. Site Vicinity Map
B. Site Map
C. Recycled Water Signage
Information Sheet
Standard Provisions (1 March 1991)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2018-0014
FOR
KERN COUNTY SHERIFF'S OFFICE
KERN COUNTY LERDO CAMPUS
WASTEWATER TREATMENT FACILITY
KERN COUNTY

This Monitoring and Reporting Program (MRP) is required pursuant to California Water Code (CWC) section 13267.

The Kern County Sheriff's Office (hereafter Discharger) shall not implement any changes to this MRP unless and until the Central Valley Regional Water Quality Control Board (hereafter Central Valley Water Board) adopts, or the Executive Officer issues, a revised MRP. Changes to sample location shall be established with concurrence of Central Valley Water Board staff, and a description of the revised stations shall be submitted for approval by the Executive Officer.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. All analyses shall be performed in accordance with ***Standard Provisions and Reporting Requirements for Waste Discharge Requirements***, dated 1 March 1991 (Standard Provisions).

Field test instruments (such as pH, electrical conductivity, and dissolved oxygen) may be used provided that the operator is trained in the proper use of the instrument and each instrument is serviced and/or calibrated at the recommended frequency by the manufacturer or in accordance with manufacturer instructions.

Analytical procedures shall comply with the methods and holding times specified in the following: *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA); *Test Methods for Evaluating Solid Waste* (EPA); *Methods for Chemical Analysis of Water and Wastes* (EPA); *Methods for Determination of Inorganic Substances in Environmental Samples* (EPA); *Standard Methods for the Examination of Water and Wastewater* (APHA/AWWA/WEF); and *Soil, Plant and Water Reference Methods for the Western Region* (WREP 125). Approved editions shall be those that are approved for use by the United States Environmental Protection Agency or the State Water Resources Control Board (State Water Board), Division of Drinking Water, Environmental Laboratory Accreditation Program. The Discharger may propose alternative methods for approval by the Executive Officer.

If monitoring consistently shows no significant variation in magnitude of a constituent concentration or parameter after at least 12 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency.

A glossary of terms used within this MRP is included on page 9.

The Discharger shall monitor the following locations to demonstrate compliance with the requirements of this Order:

Monitoring Point	Monitoring Location Description
INF-01	Location where a representative sample of the wastewater treatment facility (WWTF) influent can be obtained prior to any additives, treatment processes, and WWTF return flow.
EFF-01	Location where a representative sample of the WWTF effluent can be obtained prior to discharge into the effluent storage ponds.
PND-01 - PND-07	Storage Ponds (all effluent storage ponds that store effluent at the WWTF).
SWS-01	Source water supply for the WWTF.
SLD-01	Location where a representative sample of the WWTF sludge/biosolids can be obtained.
LAA	~ 94-acre Land Application Area south of WWTF

INFLUENT MONITORING

The Discharger shall monitor the influent to the WWTF at INF-001 as follows:

Frequency	Constituent/Parameter	Units[1]	Sample Type
Continuous	Flow	mgd	Meter
Weekly	pH	pH units	Grab
Weekly	Electrical Conductivity	umhos/cm	Grab
Monthly	Total Suspended Solids	mg/L	Grab
Monthly	Biochemical Oxygen Demand	mg/L	Grab

1. mgd = million gallons per day; umhos/cm = micromhos per centimeter; mg/L = milligrams per liter.

EFFLUENT MONITORING

The Discharger shall monitor the treated effluent at EFF-01. Effluent Monitoring shall include at least the following:

Frequency	Constituent/Parameter	Units[1]	Sample Type
Weekly	pH	pH Units	Grab
Weekly	Electrical Conductivity	umhos/cm	Grab
Monthly	Biochemical Oxygen Demand	mg/L	Grab
Monthly	Total Suspended Solids	mg/L	Grab
Monthly	Total Dissolved Solids	mg/L	Grab
Monthly	Nitrate as Nitrogen	mg/L	Grab
Monthly	Ammonia as Nitrogen	mg/L	Grab
Monthly	Total Kjeldahl Nitrogen	mg/L	Grab

Frequency	Constituent/Parameter	Units[1]	Sample Type
Monthly	Total Nitrogen	mg/L	Calculated
Annually	General Minerals	varies	Grab

[1] mgd = millions of gallons per day; umhos/cm = micromhos per centimeter; mg/L = milligrams per liter; Varies = mg/L or micrograms per liter (ug/L), whichever is appropriate.

POND MONITORING

A permanent marker shall be placed in all WWTF ponds. The marker shall have calibrations indicating water level at the design capacity and available operational freeboard. Effluent storage pond monitoring at PND-01 through PND-07 shall include at least the following:

Frequency	Constituent/Parameter	Units	Sample Type
Weekly	Dissolved Oxygen (DO)[1]	Milligrams per liter	Grab[2]
Weekly	Freeboard	Feet[3]	Observation

1. Should the DO be below 1.0 mg/L during a weekly sampling event, the Discharger shall take all reasonable steps to correct the problem and commence daily DO monitoring in the affected ponds until the problem has been resolved.
2. DO shall be measured between 8:00 am and 10:00 am and shall be taken opposite the pond inlet at a depth of approximately one foot.
3. To the nearest tenth of a foot.

The Discharger shall inspect the condition of each storage pond weekly and record visual observations in a bound logbook. Notations shall include observations of whether weeds are developing in the water or along the bank, and their location; whether grease, dead algae, vegetation, scum, or debris are accumulating on the storage pond surface and their location; whether burrowing animals or insects are present; and the color of the reservoirs (e.g., dark green, dull green, yellow, gray, tan, brown, etc.). A summary of the entries made in the log shall be included in the subsequent monitoring report.

SOURCE WATER MONITORING

The Discharger shall collect source water samples from its source water well or wells at SWS-01 and analyze them for the constituents specified in the following table. If the source water is from more than one source (surface and/or groundwater), the results shall also be presented as a flow-weighted average of all the sources used.

Frequency	Constituent/Parameter	Units	Sample Type
Quarterly	EC (flow weighted if from more than one source)	umhos/cm	Grab/Computed Average
Annually	General Minerals	varies	Grab

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LAND APPLICATION AREA MONITORING

The Discharger shall perform the following routine monitoring and loading calculations for the Land Application Area. In addition the Discharger shall keep a log of routine monitoring observations (e.g., areas of ponding, broken irrigation pipes, odors and/or flies within the Land Application Area, etc.). Data shall be collected and presented in tabular format and shall include the following:

Frequency	Constituent/Parameter	Units	Sample Type
Daily	Application Location	n/a	n/a
Daily	Application Area	acres	n/a
Daily	Wastewater Flow	gallons	Metered
Daily	Wastewater Loading	inches/day[1]	Calculated
Daily	Supplemental Irrigation	inches/day[1]	Calculated
Daily	Precipitation[2]	inches/day[1]	Rain gage
BOD Loading Rates:			
Daily	On Day of Application[3]	lbs/acre	Calculated
Daily	Cycle Average[4]	lbs/acre	Calculated
Nitrogen Loading Rates:			
Monthly	From Wastewater[5]	lbs/acre	Calculated
Monthly	From Fertilizer[6]	lbs/acre	Calculated
Salt Loading Rates:			
Monthly	From Wastewater[5]	lbs/acre	Calculated
Annually	Cumulative Salt Loading	lbs/acre-year	Calculated

1. To the nearest tenth of a foot.
2. National Weather Service data from the nearest weather station is acceptable.
3. Loading rates to be calculated using applied acreage, and average of the three most recent BOD concentrations.
4. The cycle average BOD loading rate shall be calculated using applied volume of wastewater, applied acreage, and average of the three most recent BOD concentrations divided by the number of days since the last application.
5. Nitrogen and salt loading rates shall be calculated using the applied volume of wastewater, applied acreage, and average of the three most recent concentrations for total nitrogen and fixed dissolved solids.
6. Additional nitrogen loading to the land application area from other sources (i.e. organic matter and manure).

SLUDGE/BIOSOLIDS MONITORING

If used for land application, the Discharger shall sample sludge/biosolids at SLD-01 for the following prior to the disposal of the sludge/biosolids:

Arsenic	Copper	Nickel
Cadmium	Lead	Selenium
Molybdenum	Mercury	Zinc

Monitoring shall be conducted using the methods in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (SW-846) and updates thereto, as required in Title 40 of the Code of Federal Regulations (40 CFR), Part 503.8(b)(4).

The Discharger shall demonstrate that treated sludge (i.e., biosolids) meets Class A or Class B pathogens reduction levels by one of the methods listed in 40 CFR, Part 503.32. The Discharger shall track and keep records of the operational parameters used to achieve Vector Attraction

Reduction requirements in 40 CFR, Part 503.33(b). The Discharger also needs to demonstrate that the facility where sludge is hauled to complies with 40 CFR, Part 503.

REPORTING

All monitoring results shall be reported in **Quarterly Monitoring Reports** which are due by the first day of the second month after the calendar quarter. Therefore, monitoring reports are due as follows:

First Quarter Monitoring Report:	**1 May**
Second Quarter Monitoring Report:	**1 August**
Third Quarter Monitoring Report:	**1 November**
Fourth Quarter Monitoring Report:	**1 February**

A transmittal letter shall accompany each monitoring report. The transmittal letter shall discuss any violations that occurred during the reporting period and all actions taken or planned for correcting violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions or a time schedule for implementing the corrective actions, reference to the previous correspondence is satisfactory.

The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, submissions, materials, data, monitoring reports, and correspondence shall be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be mailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disc and mailed to the appropriate regional water board office, in this case 1685 E Street, Fresno, CA, 93706.

To ensure that your submittals are routed to the appropriate staff, the following information should be included.

Program: Non-15, WDID: 5D150106001, Facility Name: Kern County Sheriff's Office, Lerdo Campus, WWTF, Order: R5-2018-0014.

In reporting 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.

In addition to the details specified in Standard Provision C.3, monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated.

Laboratory analysis reports do not need to be included in the monitoring reports; however, the laboratory reports must be retained for a minimum of three years in accordance with Standard Provision C.3.

All monitoring reports shall comply with the signatory requirements in Standard Provision B.3. All monitoring reports that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1.

A. All Quarterly Monitoring Reports shall include the following:

Wastewater Reporting:

1. The results of Influent and Effluent Monitoring specified on pages 2 and 3.

2. For each month of the quarter, calculation of the maximum daily flow and the monthly average flows from the wastewater stream.

3. For each month of the quarters, calculation of a 12-month rolling average EC of the discharge using the EC value for that month averaged with EC values for the previous 11 months.

4. For each month of the quarter, calculation of the monthly average effluent BOD and TSS concentrations, and calculation of the percent removal of BOD and TSS compared to the influent.

5. A summary of the notations made in the pond monitoring log during each quarter. Copies of log pages covering the quarterly reporting period shall not be submitted unless requested by Central Valley Water Board staff.

Pond Monitoring Reporting

1. The results of monitoring specified on page 3.

Source Water Reporting

1. The results of Source Water Monitoring (EC results) specified on page 3.

2. For each month of the quarter, calculation of the flow-weighted 12-month rolling average EC of the source water using monthly flow data and the source water EC values for the most recent four quarters.

Land Application Area Reporting

1. The results of the routine monitoring and loading calculations specified on pages 3 and 4.
2. Provide a Site Map of the Land Application Area showing predominant features, and include field numbers (if applicable) and acreage where wastewater was applied.
3. For each month that wastewater is applied to the Land Application Area, calculation of the monthly hydraulic load for wastewater and supplemental irrigation water (in million gallons) to each discreet irrigation area.

4. A summary of the notations made in the Land Application Area monitoring log. The entire contents of the log do not need to be submitted.

B. Fourth Quarter Monitoring Reports, in addition to the above, shall include the following:

Wastewater Treatment Facility Information:

1. The names, certificate grades, and general responsibilities of all persons in charge of wastewater treatment, handling, and disposal.

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

3. A statement certifying when the flow meters and other monitoring instruments and devices were last calibrated, including identification of who performed the calibrations (Standard Provision C.4).

4. A statement whether the current operation and maintenance manual, sampling plan, salinity management plan, and contingency plan, reflect the WWTF as currently constructed and operated, and the dates when these documents were last reviewed for adequacy.

5. A summary of any changes in processing that might affect waste characterization and/or discharge flow rates.

6. The results of an annual evaluation conducted pursuant to Standard Provision E.4 and a figure depicting monthly average discharge flow for the previous five calendar years.

7. A summary and discussion of the compliance record for the reporting period. If violations have occurred, the report shall discuss the corrective actions taken and the plan to bring the discharge back into compliance with Order R5-2018-0014.

Source Water Reporting

1. For each annual period, the results of the source water monitoring specified on page 3. Results must include supporting calculations.

Solids Reporting

1. Annual production of totals solids (excluding trash and recyclables) in dry tons or cubic yards.

2. A description of disposal methods, including the following information related to the disposal methods used. If more than one method is used, include the percentage disposed of by each method.

    a. For landfill disposal, include: the name and location of the landfill, and the Order number of WDRs that regulate it.

    b. For land application, include: the location of the site, and the Order number of any WDRs that regulate it.

c. For composting, include: the location of the site, and the Order number of any WDRs that regulate it.

d. For incineration, include: the name and location of the site where incineration occurs, the Order number of WDRs that regulate the site, the disposal method of ash, and the name and location of the facility receiving ash (if applicable).

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

Ordered by: Original signed by

PAMELA C. CREEDON, Executive Officer

4/5/2018

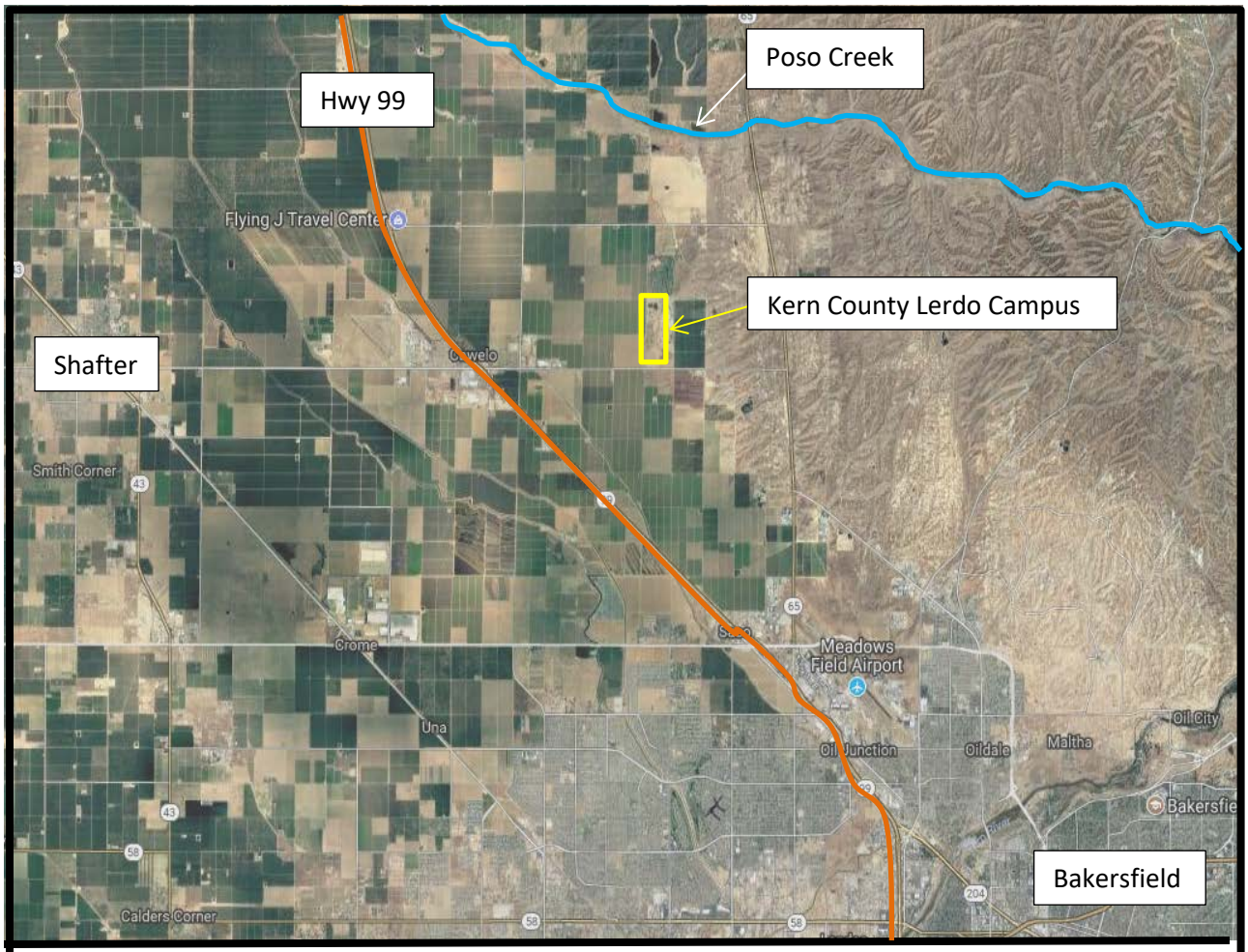
(Date)

GLOSSARY

BOD_5	Five-day biochemical oxygen demand
CBOD	Carbonaceous BOD
DO	Dissolved oxygen
EC	Electrical conductivity at 25° C
FDS	Fixed dissolved solids
NTU	Nephelometric turbidity unit
TKN	Total Kjeldahl nitrogen
TDS	Total dissolved solids
TSS	Total suspended solids
Continuous	The specified parameter shall be measured by a meter continuously.
24-Hour Composite	Unless otherwise specified or approved, samples shall be a flow-proportioned composite consisting of at least eight aliquots.
Daily	Samples shall be collected every day.
Twice Weekly	Samples shall be collected at least twice per week on non-consecutive days.
Weekly	Samples shall be collected at least once per week.
Twice Monthly	Samples shall be collected at least twice per month during non-consecutive weeks.
Monthly	Samples shall be collected at least once per month.
Bimonthly	Samples shall be collected at least once every two months (i.e., six times per year) during non-consecutive months
Quarterly	Samples shall be collected at least once per calendar quarter. Unless otherwise specified or approved, samples shall be collected in January, April, July, and October.
Semiannually	Samples shall be collected at least once every six months (i.e., two times per year). Unless otherwise specified or approved, samples shall be collected in April and October.
Annually	Samples shall be collected at least once per year. Unless otherwise specified or approved, samples shall be collected in October.
mg/L	Milligrams per liter
mL/L	Milliliters [of solids] per liter
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
mgd	Million gallons per day
MPN/100 mL	Most probable number [of organisms] per 100 milliliters
General Minerals	Analysis for General Minerals shall include at least the following:

Alkalinity	Chloride	Sodium
Bicarbonate	Hardness	Sulfate
Calcium	Magnesium	TDS
Carbonate	Potassium	

General Minerals analyses shall be accompanied by documentation of cation/anion balance.



SITE VICINITY MAP

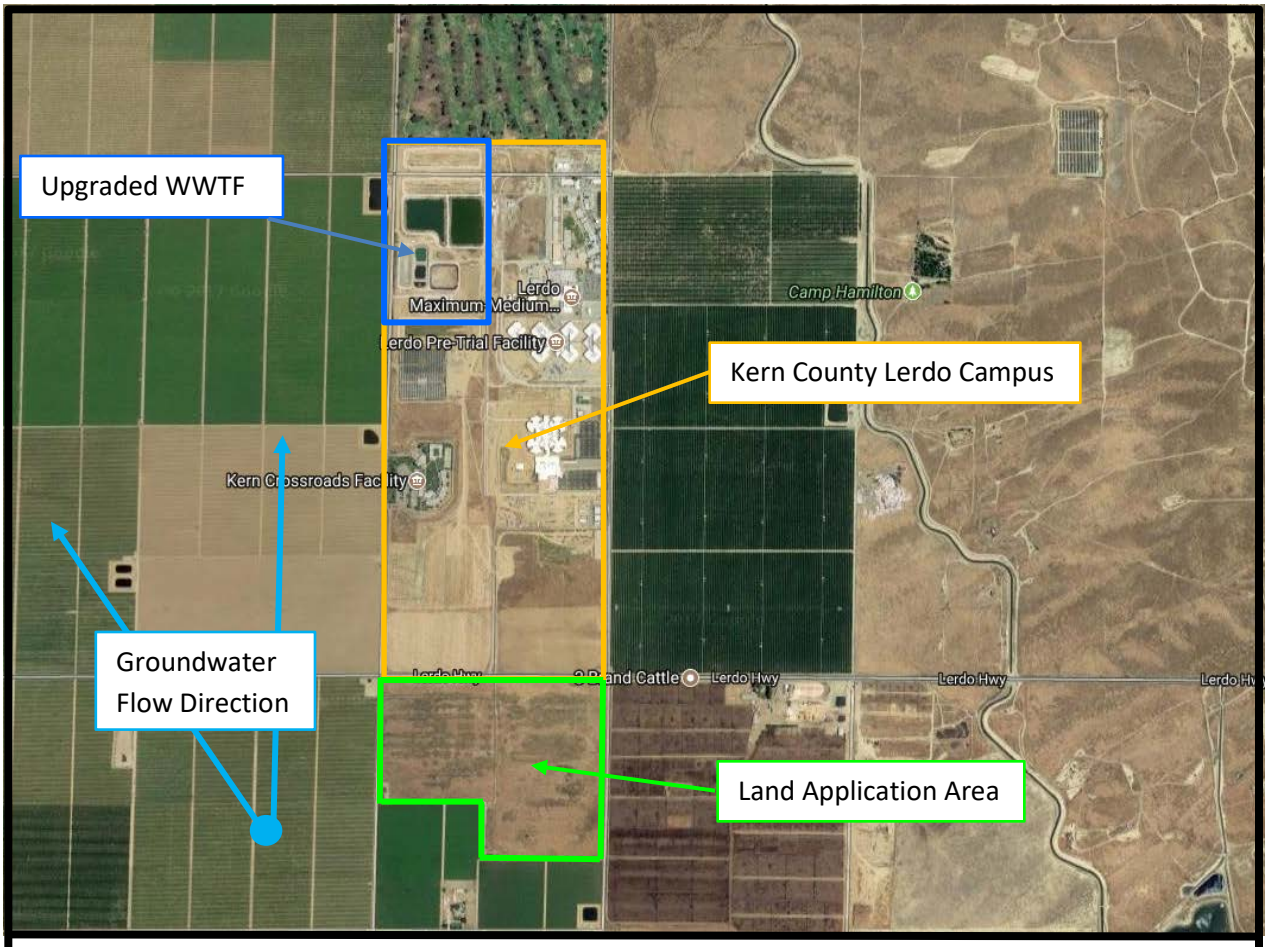
ORDER R5-2018-0014
WASTE DISCHARGE REQUIREMENTS
FOR
KERN COUNTY SHERIFF'S OFFICE
KERN COUNTY LERDO CAMPUS
WASTEWATER TREATMENT FACILITY
KERN COUNTY

Approximate Scale in Miles

0.0 1.0 2.0 3.0 4.0 5.0

N
W E
S

ATTACHMENT A



SITE PLAN

ORDER R5-2018-0014
WASTE DISCHARGE REQUIREMENTS
FOR
KERN COUNTY SHERIFF'S OFFICE
KERN COUNTY LERDO CAMPUS
WASTEWATER TREATMENT FACILITY
KERN COUNTY

Approximate Scale in Miles

0 0.25 0.5 0.75 1.0 1.25

N
W E
S

ATTACHMENT B

ATTACHMENT C

RECYCLED WATER SIGNAGE
WASTE DISCHARGE REQUIREMENTS
ORDER R5-2018-0014
KERN COUNTY SHERIFF'S OFFICE
KERN COUNTY LERDO CAMPUS
WASTEWATER TREATMENT FACILITY
KERN COUNTY

INFORMATION SHEET

INFORMATION SHEET - ORDER NO. R5-2018-0014
KERN COUNTY SHERIFF'S OFFICE
LERDO CAMPUS
WASTEWATER TREATMENT FACILITY
KERN COUNTY

Background

Provost and Pritchard Consulting Group, submitted on behalf of the Kern County Sherriff's Office (County) a Report of Waste Discharge (RWD) dated 12 August 2016 describing the then proposed upgrades to the then existing WWTF at the Kern County Lerdo Campus (Lerdo Campus) at 17824 Quality Road, which is about 10 miles northwest of Bakersfield in Kern County. The upgrades to the WWTF are generally complete, but the new Kern County Justice Facility (KCJF) is under construction. The new WWTF has been online since April 2017 and currently serves a population of approximately 2,500 inmates and a staff of about 600. The new KCJF will house an additional 822 inmates and staff.

Wastewater Generation and Disposal

Waste Discharge Requirements Order 84-148 regulates a discharge of up to 0.5 million gallons per day (mgd) and permits the reclamation of treated effluent from the WWTF to land for irrigation of fodder, fiber, and seed crops. The former WWTF was constructed in 1978 and produced non-disinfected, non-denitrified secondary-treated effluent that was discharged to a series of unlined effluent storage ponds, and then to a land application area south of the WWTF. In the 1990's, the disposal changed to a series of seepage pits on the property just south of the WWTF. Unfortunately, the capacity of the seepage pits is easily exceeded and the effluent often surfaces and flows overland. The discharge of secondary-treated effluent to the seepage pits concentrates the discharge to a small area and may have affected the underlying soils with nitrogen. Irrigation over impacted soil could mobilize nitrogen stored in the soil causing it to travel to and threaten the quality of the underlying groundwater. This Order includes Provision H.14 that requires the Discharger to submit a work plan to close/destroy the seepage pits and evaluate the underlying soil conditions.

The upgraded WWTF provides secondary treatment with nitrification/denitrification of the effluent, using an extended aeration activated sludge treatment process. The average daily treatment capacity is 0.68 mgd with a daily maximum of 1.09 mgd. Biochemical oxygen demand and total suspended solids have averaged right around 10 mg/L (well below the daily average of 40 mg/L) since the upgraded WWTF went online.

The WWTF was designed to treat total nitrogen in the effluent to less than 10 mg/L. However, the WWTF is currently producing effluent with a total nitrogen concentration of about 20 mg/L. This Order includes a performance based effluent limit of 32 mg/L for total nitrogen until the Discharger can comply with the terms of Provisions H.13 and H.14. Provision H.13 requires the Discharger to submit and obtain approval of a Title 22 Report for the recycling of the treated effluent to an approximately 90-acre land application area. Provision H.14 requires the discharger to cease discharge to and remove the seepage pits.

Groundwater Considerations

The RWD reviews groundwater and indicates that the current static groundwater depth is about 520 to 540 feet bgs. The data is from two supply wells (Nos. 4 and 5) completed in 2015. Both wells are 1,300 feet deep and screened from 630 to ~ 1,250 feet bgs. The depth to water is validated on the DWR's, *Lines of Equal Elevation of Water In Wells, Unconfined Aquifer, San Joaquin Valley* Spring 2010 map that indicates the groundwater elevation is about 100 feet above MSL, which corresponds to

a depth to groundwater of about 420 feet bgs. The general direction of groundwater flow is to the north/northwest.

The water quality results from the supply wells are good with no exceedances of water quality objectives. Nitrate and TKN were not detected and EC (averages about 350 umhos/cm) and TDS (averages about 190 mg/L) results are below the respective MCLs. All constituents have stable concentrations that do not show increasing or decreasing trends. Regional groundwater quality results from 1952 through 2015 indicate good water quality that has met water quality objectives through 2015.

Legal Effect of Rescission of Prior WDRs or Orders on Existing Violations

The Board's rescission of prior waste discharge requirements and/or monitoring and reporting orders does not extinguish any violations that may have occurred during the time those waste discharge requirements or orders were in effect. The Central Valley Water Board reserves the right to take enforcement actions to address violations of prior prohibitions, limitations, specifications, requirements, or provisions of rescinded waste discharge requirements or orders as allowed by law.

Reopener

The conditions of discharge in the proposed Order were developed based on currently available technical information and applicable water quality laws, regulations, policies, and plans, and are intended to assure conformance with them. The proposed Order would set limitations based on the information provided thus far. If applicable laws and regulations change, or once new information is obtained that will change the overall discharge and its potential to impact groundwater, it may be appropriate to reopen the Order.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

STANDARD PROVISIONS AND REPORTING REQUIREMENTS FOR WASTE DISCHARGE REQUIREMENTS

1 March 1991

A. General Provisions:

1. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, or protect the Discharger from liabilities under federal, state, or local laws. This Order does not convey any property rights or exclusive privileges.

2. The provisions of this Order are severable. If any provision of this Order is held invalid, the remainder of this Order shall not be affected.

3. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

   a. Violation of any term or condition contained in this Order;

   b. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;

   c. A change in any condition that results in either a temporary or permanent need to reduce or eliminate the authorized discharge;

   d. A material change in the character, location, or volume of discharge.

4. Before making a material change in the character, location, or volume of discharge, the discharger shall file a new Report of Waste Discharge with the Regional Board. A material change includes, but is not limited to, the following:

   a. An increase in area or depth to be used for solid waste disposal beyond that specified in waste discharge requirements.

   b. A significant change in disposal method, location or volume, e.g., change from land disposal to land treatment.

   c. The addition of a major industrial, municipal or domestic waste discharge facility.

   d. The addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.

5. Except for material determined to be confidential in accordance with California law and regulations, all reports prepared in accordance with terms of this Order shall be available for public inspection at the offices of the Board. Data on waste discharges, water quality, geology, and hydrogeology shall not be considered confidential.

6. The discharger shall take all reasonable steps to minimize any adverse impact to the waters of the state resulting from noncompliance with this Order. Such steps shall include accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliance.

7. The discharger shall maintain in good working order and operate as efficiently as possible any facility, control system, or monitoring device installed to achieve compliance with the waste discharge requirements.

8. The discharger shall permit representatives of the Regional Board (hereafter Board) and the State Water Resources Control Board, upon presentations of credentials, to:

   a. Enter premises where wastes are treated, stored, or disposed of and facilities in which any records are kept,

   b. Copy any records required to be kept under terms and conditions of this Order,

   c. Inspect at reasonable hours, monitoring equipment required by this Order, and

   d. Sample, photograph and video tape any discharge, waste, waste management unit, or monitoring device.

9. For any electrically operated equipment at the site, the failure of which would cause loss of control or containment of waste materials, or violation of this Order, the discharger shall employ safeguards to prevent loss of control over wastes. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means.

10. The fact that it would have been necessary to halt or reduce the permitted activity in Order to maintain compliance with this Order shall not be a defense for the discharger's violations of the Order.

11. Neither the treatment nor the discharge shall create a condition of nuisance or pollution as defined by the California Water Code, Section 13050.

12. The discharge shall remain within the designated disposal area at all times.

B. General Reporting Requirements:

1. In the event the discharger does not comply or will be unable to comply with any prohibition or limitation of this Order for any reason, the discharger shall notify the Board by telephone at **(916) 464-3291** *[Note: Current phone numbers for all three Regional Board offices may be found on the internet at http://www.swrcb.ca.gov/rwqcb5/contact_us.]* as soon as it or its agents

have knowledge of such noncompliance or potential for noncompliance, and shall confirm this notification in writing within **two weeks**. The written notification shall state the nature, time and cause of noncompliance, and shall include a timetable for corrective actions.

2. The discharger shall have a plan for preventing and controlling accidental discharges, and for minimizing the effect of such events.

   This plan shall:

   a. Identify the possible sources of accidental loss or leakage of wastes from each waste management, treatment, or disposal facility.

   b. Evaluate the effectiveness of present waste management/treatment units and operational procedures, and identify needed changes of contingency plans.

   c. Predict the effectiveness of the proposed changes in waste management/treatment facilities and procedures and provide an implementation schedule containing interim and final dates when changes will be implemented.

   The Board, after review of the plan, may establish conditions that it deems necessary to control leakages and minimize their effects.

3. All reports shall be signed by persons identified below:

   a. <u>For a corporation</u>: by a principal executive officer of at least the level of senior vice-president.

   b. <u>For a partnership or sole proprietorship</u>: by a general partner or the proprietor.

   c. <u>For a municipality, state, federal or other public agency</u>: by either a principal executive officer or ranking elected or appointed official.

   d. A duly authorized representative of a person designated in 3a, 3b or 3c of this requirement if;

      (1) the authorization is made in writing by a person described in 3a, 3b or 3c of this provision;

      (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a waste management unit, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

      (3) the written authorization is submitted to the Board

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

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

4. Technical and monitoring reports specified in this Order are requested pursuant to Section 13267 of the Water Code. Failing to furnish the reports by the specified deadlines and falsifying information in the reports, are misdemeanors that may result in assessment of civil liabilities against the discharger.

5. The discharger shall mail a copy of each monitoring report and any other reports required by this Order to:

California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114
Note: Current addresses for all three Regional Board offices may be found on the internet at http://www.swrcb.ca.gov/rwqcb5/contact_us.
or the current address if the office relocates.

C. Provisions for Monitoring:

1. All analyses shall be made in accordance with the latest edition of: (1) *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA 600 Series) and (2) *Test Methods for Evaluating Solid Waste* (SW 846-latest edition). The test method may be modified subject to application and approval of alternate test procedures under the Code of Federal Regulations (40 CFR 136).

2. Chemical, bacteriological, and bioassay analysis shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. In the event a certified laboratory is not available to the discharger, analyses performed by a noncertified laboratory will be accepted provided a Quality Assurance-Quality Control Program is instituted by the laboratory. A manual containing the steps followed in this program must be kept in the laboratory and shall be available for inspection by Board staff. The Quality Assurance-Quality Control Program must conform to EPA guidelines or to procedures approved by the Board.

   Unless otherwise specified, all metals shall be reported as Total Metals.

3. The discharger shall retain records of all monitoring information, including all calibration and maintenance records, all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to

complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

Record of monitoring information shall include:

a. the date, exact place, and time of sampling or measurements,
b. the individual(s) who performed the sampling of the measurements,
c. the date(s) analyses were performed,
d. the individual(s) who performed the analyses,
e. the laboratory which performed the analysis,
f. the analytical techniques or methods used, and
g. the results of such analyses.

4. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated at least yearly to ensure their continued accuracy.

5. The discharger shall maintain a written sampling program sufficient to assure compliance with the terms of this Order. Anyone performing sampling on behalf of the discharger shall be familiar with the sampling plan.

6. The discharger shall construct all monitoring wells to meet or exceed the standards stated in the State Department of Water Resources *Bulletin 74-81* and subsequent revisions, and shall comply with the reporting provisions for wells required by Water Code Sections 13750 through 13755.22

D. Standard Conditions for Facilities Subject to California Code of Regulations, Title 23, Division3, Chapter 15 (Chapter 15)

1. All classified waste management units shall be designed under the direct supervision of a California registered civil engineer or a California certified engineering geologist. Designs shall include a Construction Quality Assurance Plan, the purpose of which is to:

   a. demonstrate that the waste management unit has been constructed according to the specifications and plans as approved by the Board.

   b. provide quality control on the materials and construction practices used to construct the waste management unit and prevent the use of inferior products and/or materials which do not meet the approved design plans or specifications.

2. Prior to the discharge of waste to any classified waste management unit, a California registered civil engineer or a California certified engineering geologist must certify that the waste management unit meets the construction or prescriptive standards and performance goals in Chapter 15, unless an engineered alternative has been approved by the Board. In the case of an engineered alternative, the registered civil engineer or a certified engineering geologist must

certify that the waste management unit has been constructed in accordance with Board-approved plans and specifications.

3. Materials used to construct liners shall have appropriate physical and chemical properties to ensure containment of discharged wastes over the operating life, closure, and post-closure maintenance period of the waste management units.

4. Closure of each waste management unit shall be performed under the direct supervision of a California registered civil engineer or a California certified engineering geologist.

E. Conditions Applicable to Discharge Facilities Exempted from Chapter 15 Under Section 2511

1. If the discharger's wastewater treatment plant is publicly owned or regulated by the Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade according to California Code of Regulations, Title 23, Division 4, Chapter 14.

2. By-pass (the intentional diversion of waste streams from any portion of a treatment facility, except diversions designed to meet variable effluent limits) is prohibited. The Board may take enforcement action against the discharger for by-pass unless:

   a. (1) By-pass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a by-pass. Severe property damage does not mean economic loss caused by delays in production); and

      (2) There were no feasible alternatives to by-pass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a by-pass that would otherwise occur during normal periods of equipment downtime or preventive maintenance; or

   b. (1) by-pass is required for essential maintenance to assure efficient operation; and

      (2) neither effluent nor receiving water limitations are exceeded; and

      (3) the discharger notifies the Board ten days in advance.

   The permittee shall submit notice of an unanticipated by-pass as required in paragraph B.1. above.

3. A discharger that wishes to establish the affirmative defense of an upset (see definition in E.6 below) in an action brought for noncompliance shall demonstrate, through properly signed, contemporaneous operating logs, or other evidence, that:

a. an upset occurred and the cause(s) can be identified;

b. the permitted facility was being properly operated at the time of the upset;

c. the discharger submitted notice of the upset as required in paragraph B.1. above; and

d. the discharger complied with any remedial measures required by waste discharge requirements.

In any enforcement proceeding, the discharger seeking to establish the occurrence of an upset has the burden of proof.

4. A discharger whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment, collection, and disposal facilities. The projections shall be made in January, based on the last three years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in four years, the discharger shall notify the Board by **31 January**.

5. Effluent samples shall be taken downstream of the last addition of wastes to the treatment or discharge works where a representative sample may be obtained prior to disposal. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.

6. Definitions

   a. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper action.

   b. The monthly average discharge is the total discharge by volume during a calendar month divided by the number of days in the month that the facility was discharging. This number is to be reported in gallons per day or million gallons per day.

      Where less than daily sampling is required by this Order, the monthly average shall be determined by the summation of all the measured discharges by the number of days during the month when the measurements were made.

   c. The monthly average concentration is the arithmetic mean of measurements made during the month.

   d. The "daily maximum" **discharge** is the total discharge by volume during any day.

e. The "daily maximum" **concentration** is the highest measurement made on any single discrete sample or composite sample.

f. A "grab" sample is any sample collected in less than 15 minutes.

g. Unless otherwise specified, a composite sample is a combination of individual samples collected over the specified sampling period;

(1) at equal time intervals, with a maximum interval of one hour

(2) at varying time intervals (average interval one hour or less) so that each sample represents an equal portion of the cumulative flow.

The duration of the sampling period shall be specified in the Monitoring and Reporting Program. The method of compositing shall be reported with the results.

7. Annual Pretreatment Report Requirements:

Applies to dischargers required to have a Pretreatment Program as stated in waste discharge requirements.)

The annual report shall be submitted **by 28 February** and include, but not be limited to, the following items:

a. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the influent and effluent for those pollutants EPA has identified under Section 307(a) of the Clean Water Act which are known or suspected to be discharged by industrial users.

The discharger is not required to sample and analyze for asbestos until EPA promulgates an applicable analytical technique under 40 CFR (Code of Federal Regulations) Part 136. Sludge shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent sampling analysis. The sludge analyzed shall be a composite sample of a minimum of 12 discrete samples taken at equal time intervals over the 24-hour period. Wastewater and sludge sampling and analysis shall be performed at least annually. The discharger shall also provide any influent, effluent or sludge monitoring data for nonpriority pollutants which may be causing or contributing to Interference, Pass Through or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto.

b. A discussion of Upset, Interference, or Pass Through incidents, if any, at the treatment plant which the discharger knows or suspects were caused by industrial users of the system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the industrial user(s) responsible. The discussion shall also include a review of the applicable pollutant limitations to determine whether any

additional limitations, or changes to existing requirements, may be necessary to prevent Pass Through, Interference, or noncompliance with sludge disposal requirements.

c. The cumulative number of industrial users that the discharger has notified regarding Baseline Monitoring Reports and the cumulative number of industrial user responses.

d. An updated list of the discharger's industrial users including their names and addresses, or a list of deletions and additions keyed to a previously submitted list. The discharger shall provide a brief explanation for each deletion. The list shall identify the inddustrial users subject to federal categorical standards by specifying which set(s) of standards are applicable. The list shall indicate which categorical industries, or specific pollutants from each industry, are subject to local limitations that are more stringent that the federal categorical standards. The discharger shall also list the noncategorical industrial users that are subject only to local discharge limitations. The discharger shall characterize the compliance status through the year of record of each industrial user by employing the following descriptions:

(1) Complied with baseline monitoring report requirements (where applicable);

(2) Consistently achieved compliance;

(3) Inconsistently achieved compliance;

(4) Significantly violated applicable pretreatment requirements as defined by 40 CFR 403.8(f)(2)(vii);

(5) Complied with schedule to achieve compliance (include the date final compliance is required);

(6) Did not achieve compliance and not on a compliance schedule;

(7) Compliance status unknown.

A report describing the compliance status of any industrial user characterized by the descriptions in items (d)(3) through (d)(7) above shall be **submitted quarterly from the annual report date** to EPA and the Board. The report shall identify the specific compliance status of each such industrial user. This quarterly reporting requirement shall commence upon issuance of this Order.

e. A summary of the inspection and sampling activities conducted by the discharger during the past year to gather information and data regarding the industrial users. The summary shall include but not be limited to, a tabulation of categories of dischargers that were inspected and sampled; how many and how often; and incidents of noncompliance detected.

f. A summary of the compliance and enforcement activities during the past year. The summary shall include the names and addresses of the industrial users affected by the following actions:

(1) Warning letters or notices of violation regarding the industrial user's apparent noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the apparent violation concerned the federal categorical standards or local discharge limitations;

(2) Administrative Orders regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations;

(3) Civil actions regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations;

(4) Criminal actions regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations.

(5) Assessment of monetary penalties. For each industrial user identify the amount of the penalties;

(6) Restriction of flow to the treatment plant; or

(7) Disconnection from discharge to the treatment plant.

g. A description of any significant changes in operating the pretreatment program which differ from the discharger's approved Pretreatment Program, including, but not limited to, changes concerning: the program's administrative structure; local industrial discharge limitations; monitoring program or monitoring frequencies; legal authority of enforcement policy; funding mechanisms; resource requirements; and staffing levels.

h. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.

i. A summary of public participation activities to involve and inform the public.

j. A description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report.

Duplicate signed copies of these reports shall be submitted to the Board and:

Regional Administrator
U.S. Environmental Protection Agency W-5
75 Hawthorne Street
San Francisco, CA 94105

and

State Water Resource Control Board
Division of Water Quality
P.O. Box 100
Sacramento, CA 95812

Revised January 2004 to update addresses and phone numbers