# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER R5-2019-0061

# WASTE DISCHARGE REQUIREMENTS FOR WESTWOOD COMMUNITY SERVICES DISTRICT WASTEWATER TREATMENT/DISPOSAL PONDS LASSEN COUNTY

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

- On 26 December 2018, Westwood Community Services District (Westwood CSD) submitted a Report of Waste Discharge (RWD) to apply for a renewal of Waste Discharge Requirements (WDRs) for an existing publicly owned Wastewater Treatment Plant (WWTP), which serves the City of Westwood. RWD was deemed complete on 3 January 2018.
- Westwood CSD (Discharger) owns and operates the Westwood Wastewater Treatment/Disposal Ponds (Facility) and is responsible for compliance with these WDRs.
- 3. The facility is located off Fir Street Ext. southwest of the city of Westwood (Section 7, T28N, R9E, MDB&M) with surface water drainage to Mountain Meadows Reservoir, which is a tributary to Lake Almanor via the Hamilton Branch. The facility occupies Assessor's Parcel Numbers (APN) 123-090-75, and 123-110-10 as indicated on Attachment A, which is attached hereto and made part of this Order by reference.
- 4. WDRs Order 5-01-253, adopted by the Central Valley Water Board on 18 October 2001, prescribes requirements for the facility. Order 5-01-253 allows an average dry weather flow of approximately 300,000 gallons per day (gpd) of domestic wastewater and approximately 2,200 gallons per day of supernatant from dewatered septage. The Discharger is not proposing any changes to the treatment system or an increase in capacity. However, Order 5-01-253 has passed its renewal date and is due for revision. Therefore, Order 5-01-253 will be rescinded and replaced with this Order.

## **Background Information**

5. The Facility receives, on average, 308,000 gallons per day (gpd) of raw domestic sewage from approximately 800 connections in the City of Westwood (population ~1,600) and a small amount (~2%) of that flow comes from a septage hauler.

Wastewater is discharged to one of four percolation/evaporation ponds. Peak flows of two times (2x) the average gpd can occur during seasonal storm events.

# **Existing Facility and Discharge**

- 6. Wastewater receives essentially no treatment before entering the Facility's pond system. Treatment in the ponds consists of natural aeration and decomposition. The system consists of inlet structures (Comminutor and Parshall flume), and four ponds. Inlet flow can be diverted to Pond 2 to allow drying and cleanout of Pond 1. Pond 4 is partially segmented by an earthen berm dividing the pond into east and west cells.
- 7. In addition to the regular domestic sewage from the town, the District also receives septic tank effluent from a local septage hauler. The septage is discharged into a hydrator to remove the liquid. The liquid passes through a series of screens to remove grit, sand and any other settleable solids not removed in the hydrator. The septage is separated ahead of the ponds so only the clarified liquid is discharged into a 10,000-gallon holding tank for later release into the Westwood outfall sewer line that discharges to the ponds.
- 8. The solids accumulated from the hydrator are coagulated with the use of a polymer and when thoroughly coagulated are discharged to a drying bed near the headworks of the system, about 500 feet east of Pond 1. The dried sludge is transported to an appropriate disposal site in Nevada.

# **Site-Specific Conditions**

- 9. The Facility's wastewater treatment ponds are at an elevation of approximately 5,052 feet mean sea level (MSL). The overall topography at the Facility is generally flat with a gentle slope to the south, towards Mountain Meadows Reservoir.
- 10. The Facility ponds themselves are within Zone A (no base flood elevation established) and the remainder of the property is located within Zone X (areas of 0.2 percent annual chance flooding).
- 11. The Facility is located within the south end of the Cascade Mountains Geologic Province of California. Directly beneath the site, the basement rock is either granite or meta-volcanic rock of Mesozoic age or older at an indeterminate (16 ft) depth. The treatment ponds are constructed over flat-lying, vesicular basalt of Pleistocene age. Interbedded within the basalt are cinders and residual clays, and other pyroclastic rocks. Boring logs for the site indicate that the depth to basalt bedrock ranges from 5 to over 25 feet. Clayey silt or gravel is commonly found in fractures between blocks of basalt.

- 12. The soil types encountered at the Facility generally consist of gravelly to sandy silt, clayey sand, and volcanic gravel and cobbles with the predominant soil type in the project vicinity identified as Redriver-Weste complex, with 2 to 9 percent slopes. Soils at bottom-of-pond are classified as a clayey sand (SC). The permeability value for the clayey sand is 3.6 x 10<sup>-6</sup> centimeter/second.
- 13. Annual Precipitation in the area is approximately 20 inches with an annual pan evaporation of approximately 55 inches.
- 14. In the immediate vicinity of the Facility, land uses consist of timberland harvest, open space, and rural residential. Mountain Meadows Reservoir also abuts the property to the south/southeast.

#### **Groundwater Conditions**

- 15. The Site is not located within a groundwater basin as delineated by the California Department of Water Resources (DWR). The site lies to the east of the Sacramento Valley basin. Generally, the volcanic units in this area have variable groundwater yields, with production zones at a depth of approximately 200 feet bgs. The Facility lies within Mountain Meadows Reservoir Hydrologic Subarea (HSA) No. 518.45 as depicted on interagency hydrologic maps prepared by the California Department of Water Resources (DWR) in August 1986.
- 16. In response to the Central Valley Water Board's request for a new RWD one new monitoring point (EFF-1) was installed 10 September 2018 to obtain a representative sample of effluent that had percolated through the vadose zone near the groundwater interface. Groundwater gradient was northerly at magnitudes ranging from 0.002 to 0.009 feet/foot, possibly influenced by the Westwood CSD ponds and/or Mountain Meadows Reservoir. Depth to groundwater in onsite monitoring wells ranged from approximately 5 to 15 feet bgs.
- 17. Shallow groundwater beneath the ponds occurs near the contact of the clastic materials that overlie the volcanic bedrock, with first water noted during drilling was at 17.5 feet below ground surface (bgs) with the static water (at EFF-1) eventually rising to about 10 feet bgs. Deeper, regional groundwater occurs at 50 to over 100 feet bgs, and is confined, according to DWR information.
- 18. Based on onsite monitoring wells (MW-1 to MW-3), shallow groundwater quality is good, with none of the measured parameters exceeding their respective MCL in September 2018. Effluent quality generally is poorer than the shallow groundwater, although the concentrations of several general mineral parameters in MW-2 are higher than in the treated effluent.

19. Percolating effluent moves into fractured bedrock underlying the ponds and migrates into underlying strata. The exact quality of the effluent that moves through fractured bedrock is unknown, but it is reasonable to assume that it is of similar quality to that observed in the Facility's shallow groundwater monitoring wells, which meets Water Quality Objectives (WQOs) for the constitutions of concern. Thus, the discharge (pond percolation) does not appear to adversely affect groundwater quality, nor should it cause WQOs to be exceeded.

#### **Basin Plan Considerations**

- 20. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fifth Edition, revised May 2018 (Basin Plan) designates beneficial uses, establishes WQOs, 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 section13263(a), waste discharge requirements must implement the Basin Plan.
- 21. Local drainage is to Mountain Meadows Reservoir a tributary Lake Almanor via the Hamilton Branch. The beneficial uses of Lake Almanor, as stated in the Basin Plan, are Municipal and Domestic Supply (MUN), Hydropower Generation (POW), Water Contact Recreation (REC-1) and Non-contact Water Recreation (REC-2); including canoeing and rafting, Wildlife Habitat (WILD) and other aquatic resources.
- 22. The beneficial uses of underlying groundwater as set forth in the Basin Plan are Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Service Supply (IND), Industrial Process Supply (PRO).
- 23. The Basin Plan establishes narrative WQOs for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets forth a numeric objective for total coliform organisms.
- 24. 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.
- 25. The Basin Plan's narrative WQOs for chemical constituents, at a minimum, require MUN-designated waters to meet MCLs specified in California Code of Regulations, title 22 (Title 22). The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.
- 26. 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.

- 27. 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.
- 28. 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.

# **Antidegradation Analysis**

- 29. State Water Resources Control Board Resolution 68-16 (Policy with Respect to Maintaining High Quality Waters of the State) (Antidegradation Policy) prohibits degradation of groundwater unless it has been shown that:
  - a. The degradation is consistent with the maximum benefit to the people of the state.
  - b. The degradation will not unreasonably affect present and anticipated future beneficial uses.
  - c. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives, and
  - d. The discharger employs best practicable treatment or control (BPTC) to minimize degradation.
- 30. Degradation of groundwater by some of the typical waste constituents associated with discharges from a municipal wastewater utility, after effective source control, treatment, and control measures are implemented, is consistent with the 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 reliance on numerous, concentrated individual wastewater systems, and the impact on water quality will be substantially less. The economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State, and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.

- 31. Prior to 1994 the Discharger was not required to monitor groundwater quality at the Facility. Based on the lack of data available, it is not possible to determine pre-1968 groundwater quality. Therefore, determination of compliance with Resolution 68-16 for this facility must be based on existing background groundwater quality. Although current data is limited to two sampling events, shallow groundwater does appear to meet WQOs. Shallow groundwater is likely only present seasonally or after significant precipitation events. Local groundwater supplies are derived from fractured volcanic bedrock; typically screened to 120 feet bgs with a static water level of 34 feet.
- 32. Constituents of concern that have the potential to degrade groundwater include salts (primarily TDS, sodium, and chloride), metals and nutrients, as discussed below.

	Concentration (mg/L)					
Constituent	Influent (Pond sample)	Effluent 1	Background Groundwater <sup>2</sup>	Downgradient Groundwater <sup>3</sup>	Potential Water Quality Objective	
TDS	370	350	100	380	450 <sup>4</sup> to 1,500 <sup>8</sup>	
Nitrate (N)	NA	<0.02	0.27	3.1	10 <sup>6</sup>	
Ammonia Nitrogen	NA	0.34	0.047 <sup>J</sup>	0.082 <sup>J</sup>		
Sulfate	NA	17	0.67 <sup>J</sup>	47	250 <sup>7</sup>	
Sodium	NA	32	5.2	9.3	69 <sup>4</sup>	
Chloride	NA	32	0.94	17	106 <sup>4</sup> - 600 <sup>8</sup>	
Manganese	NA	6.5	0.0023	0.390	0.050 <sup>7</sup>	
Iron	NA	12	<0.030	0.330	0.300 7	
Arsenic	NA	0.00084 <sup>J</sup>	<0.00070	<0.00070	0.010 <sup>6</sup>	

NA denotes Not Analyzed, J - Below reporting limits, estimated value

<sup>&</sup>lt;sup>1</sup> EFF- 1, placed in berm of Pond 1, sampled 9/10/18

<sup>&</sup>lt;sup>2</sup> MW-1, upgradient well, sampled 9/10/18

<sup>&</sup>lt;sup>3</sup> MW-2, downgradient well, sampled 9/10/18

<sup>&</sup>lt;sup>4</sup> Lowest agricultural water quality goal.

<sup>&</sup>lt;sup>6</sup> Primary Maximum Contaminant Level.

<sup>&</sup>lt;sup>7</sup> Secondary Maximum Contaminant Level.

<sup>&</sup>lt;sup>8</sup> Secondary Maximum Contaminant Level range

a. **Total Dissolved Solids.** The influent TDS concentration is approximately 370 mg/L, which is low for a typical domestic wastewater treatment facility and appears to drop to 350 mg/L after percolating through the vadose zone below the pond as indicated by Effluent sample above. This appears to indicate that the Discharger's current treatment practices are only slightly effective for TDS reduction. The

background groundwater concentration is 100 mg/L and downgradient concentration is 380 mg/L. TDS is still well below MCLs after 40 years of discharge. An effluent limit is not required to protect groundwater quality.

- 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 effluent nitrate concentration was reported to be less than the laboratory reporting limit of 0.02 mg/L and the background concentration was reported at 0.27 mg/L. Downgradient nitrate concentrations were reported at 3.1 mg/L. The nitrate effluent quality of the existing WWTP is expected to remain the same. Therefore, the discharge is not likely to degrade groundwater quality due to increased nitrate and a nitrate effluent limit is not required to protect groundwater quality.
- c. **Manganese & Iron.** Of the metals run for sampling analysis only manganese and Iron were close or slightly above their respective WQOs. However, sampling from the current well monitoring network has not conclusively established a flow gradient. The slightly elevated concentrations observed could be due to a localized anerobic condition existing beneath the ponds. However, since groundwater flow directions and gradients have not been well defined, the source or cause of the slightly elevated metal concentrations is yet unknown.
- 33. This Order establishes effluent and groundwater limitations for the WWTP that will not unreasonably threaten present and anticipated beneficial uses or result in groundwater quality that exceeds WQOs set forth in the Basin Plan.
  - a. For Nitrate, current groundwater monitoring data indicates that groundwater has been degraded, but the degradation, even if due to the WWTP, has not caused exceedance of a water quality objective. The Discharger has implemented BPTC, so the degradation is allowable under Resolution 68-16.
- 34. The Discharger provides treatment and control of the discharge that includes: Collection system upgrades/replacements (2007-2009), new flow meter installations (2008), liquid depth, freeboard and DO management, control of pond scum, weeds, & floating solids; berm inspection and maintenance.

# **Other Regulatory Considerations**

35. Pursuant to Water Code section 106.3, subdivision (a), it is "the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." Although this Order is not necessarily subject to Water Code section 106.3 because it does not revise, adopt or establish a policy, regulation or grant criterion (see § 106.3, subd. (b)), it nevertheless promotes that policy by requiring discharges to meet MCLs designed to protect human health and ensure that water is safe for domestic use.

- 36. For the purposes of California Code of Regulations, title 23 (Title 23), section 2200 et seq., Facility discharges are classified as "2-B," as defined below:
  - a. Water Quality Threat—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 WQOs, cause secondary drinking water standards to be violated, or cause a nuisance."
  - b. **Complexity—Category B**: "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."
- 37. The wastewater discharges authorized under this Order, and the associated operation of treatment ponds (as described herein), are exempt from the prescriptive requirements set forth in California Code of Regulations, title 27, section 20000 et seq. (See Cal. Code Regs., tit. 27, § 20090, subd. (a,b,c).)
- 38. The statistical data analysis methods specified in the U.S. Environmental Protection Agency's (USEPA) 2009 *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (Unified Guidance) are appropriate for determining whether the discharge complies with Groundwater Limitations of this Order.
- 39. The State Water Board adopted Order 2014-0057-DWQ (NPDES General Permit CAS000001) specifying waste discharge requirements for discharges of storm water associated with industrial activities, and requiring submittal of a Notice of Intent by all affected industrial dischargers. The wastewater treatment facility has a design capacity of 0.55 MGD. The Discharger is therefore not required to obtain coverage under NPDES General Permit CAS000001.
- 40. 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.
- 41. Water Code section 13267, subdivision (b)(1) provides in pertinent part as follows:

[T]he regional board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposes to discharge 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.

The technical reports required by this Order and the attached Monitoring and Reporting Program R5-2019-0061 (MRP) 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.

- 42. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells (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.
- 43. All This Order prescribes WDRs for an existing facility and operation. Accordingly, the adoption of this Order is exempt from the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., pursuant to section 15301 of the CEQA Guidelines (Cal. Code Regs., tit. 14, 1500 et seq.).
- 44. The United States Environmental Protection Agency (EPA) has promulgated biosolids reuse regulations in 40 CFR part 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.
- 45. The Central Valley Water Board is using the Standards in 40 CFR part 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.
- 46. Pursuant to Water Code section 13263(g), the continued ability to discharge waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

#### **Public Notice**

- 47. 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.
- 48. The Discharger(s) 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.
- 49. All comments pertaining to the discharge were heard and considered in a public hearing.

#### REQUIREMENTS

**IT IS HEREBY ORDERED** that Order 5-01-253 is rescinded except for purposes of enforcement, and, pursuant to Water Code sections 13263 and 13267, the Westwood CSD, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted hereunder, 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 Title 22, section 66262.1 et seq., is prohibited.
- 3. Treatment system bypass of untreated or partially treated waste is prohibited, except as allowed by Standard Provision E.2 of the Standard Provisions and Reporting Requirements for Waste Discharge Requirements.
- 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 or land application areas such that biological treatment mechanisms are disrupted.
- 6. The discharge of offsite waste transported to the WWTP (other than that specified elsewhere in this order) for disposal is prohibited unless approved by the Executive Officer.

#### B. Flow Limitations

1. **Effectively immediately**, influent flows to the WWTP shall not exceed the following limits:

Flow Measurement	Flow Limit
Total Annual Flow <sup>1</sup>	122 MG
Average Dry Weather Flow <sup>2</sup>	0.333 MGD

<sup>&</sup>lt;sup>1</sup> As determined by the total flow for the calendar year.

# C. 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.

As determined by the total flow for the months of August through October, inclusive, divided by 92 days.

- 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 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 WWTP shall be prevented through such means as fences, signs, or acceptable alternatives.
- 7. Objectionable odors shall not be perceivable beyond the limits of the WWTP property at an intensity that creates or threatens to create nuisance conditions.
- 8. As a means of discerning compliance with Discharge Specification C. 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 Regional Water Board in writing within 10 days and shall include a specific plan to resolve the low DO results within 30 days.
- 9. The Dischargers shall design, construct, operate, and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. The operating freeboard in any pond shall never be less than two (2) feet (measured vertically from the lowest possible point of overflow). As a means of management and to discern compliance with this requirement, the Dischargers shall install and maintain in each pond a permanent staff gauge with calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.
- 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 continuous 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 C.9 and C.10.

- 12. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes. Specifically:
  - 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. Wastewater contained in any unlined pond shall not have a pH less than 6.0 or greater than 9.0.
- 15. The Dischargers shall monitor debris accumulation in the wastewater storage ponds at least every five years and shall periodically remove debris as necessary to maintain adequate storage capacity. Specifically, if the estimated volume of debris in the reservoir exceeds five percent of the permitted reservoir capacity, the Dischargers shall complete debris cleanout within 12 months after the date of the estimate.

#### D. Groundwater Limitations

Release of waste constituents from any portion of the WWTP shall not cause groundwater to:

- 1. Exceed a total coliform organism level of 2.2 MPN/100mL over any seven-day period.
- 2. Contain constituents in concentrations that exceed either the Title 22 Primary or Secondary MCLs.
- 3. Contain taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.
- 4. Compliance with these limitations shall be determined annually based on comparison of groundwater concentrations to applicable WQOs.

# E. 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 WWTP. 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 WWTP shall be temporary (i.e., no longer than two years) 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, WWTPs, 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 2004-12-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 2004-12-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.

#### F. Provisions

- 1. The following reports shall be submitted pursuant to Water Code section 13267 and shall be prepared as described in Provision Section F.6 of this order:
  - a. By **1 July 2021**, the Discharger shall submit a *Water Quality Assessment Report*.

This report shall summarize and evaluate water quality data collected from the Facility.

- 1) For each monitored constituent identified in the MRP the report shall present a summary of monitoring data and the calculated concentrations of each constituent from each sampling location.
- 2) Effluent monitoring data shall be evaluated to assess whether effluent wastewater concentrations are such that underlying groundwater could be impacted.
- The report shall also assess background groundwater quality which includes a determination of which wells are the background monitoring well(s) and which well(s) are compliance monitoring point's downgradient of the discharge.
- 4) The report will also provide any recommendations that may be necessary to address any data gaps in the current monitoring program. Such as but not limited to the installation of additional monitoring wells for determination of groundwater gradient and direction.
- b. By **1 September 2019**, the Discharger shall submit a *Pond Capacity Evaluation and Maximization Report*. This report shall address capacity and freeboard issues for each pond and the pond system as a whole. The report shall include calculations for percent capacity for each pond and calculations for the capacity of the entire pond system (as built, including 2005 berm height additions) and current pond system capacity with in place bio-solids. The report shall also include a complete water balance calculation for the facility.
- c. By **1 October 2019** the Discharger shall submit a *Bio-Solids Handling and Disposal Plan*. This plan shall address reuse or disposal of current biosolids stored or to be stored at the facility as of 1 January 2020. The plan shall include a detailed outline 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 Facility prior to the onset of the rainy season **(1 October 2020)**. It will also

outline future handling/ treatment of bio-solids at the facility that will comply with section E.2 of this order that specifies no more than 2 years of storage of any bio-solids/sludge removed from the ponds. Additionally, the Discharger will also be required to provide written notification at least **180** days prior to any new sludge removal and disposal as specified in Provision F.3.

- 2. If groundwater monitoring results show that the discharge of waste is causing groundwater to contain any waste constituents in concentrations statistically greater than the Groundwater Limitations of this Order, within 120 days of the request of the Executive Officer, the Discharger shall submit a BPTC Evaluation Workplan that sets forth the scope and schedule for a systematic and comprehensive technical evaluation of each component of the facility's waste treatment and disposal system to determine BPTC for each waste constituent that exceeds a groundwater limitation. The workplan shall contain a preliminary evaluation of each component of the WWTP and effluent disposal system and propose a time schedule for completing the comprehensive technical evaluation. The schedule to complete the evaluation shall be as short as practicable, and shall not exceed one year after receipt of the above workplan.
- 3. 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)**.
- In the past the WWTP has received cooling tower blowdown, boiler blowdown, and plant wash-down water from Mount Lassen Power Cogeneration Facility through a metered, hard-piped connection into the Ponds. Should Mount Lassen Power or other entity resume operations at the Cogeneration Facility, the Discharger shall submit a complete characterization of the industrial discharge, an updated water balance, and a treatability analysis for Executive Office approval at least 90 days prior to the acceptance of industrial wastewater into the Ponds.
- 5. 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 Central Valley Water Board by **31 January**.
- 6. 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 specified herein that contain workplans for investigations and studies, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall bear the professional's signature and stamp.

- 7. 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.
- 8. The Discharger shall comply with the operative MRP (i.e., MRP R5-2019-0061 and subsequent revisions thereto). The submittal dates of Discharger self-monitoring reports shall be no later than the submittal date specified in the MRP.
- 9. The Discharger shall comply with the attached Standard Provisions and Reporting Requirements for WDRs dated 1 March 1991 (SPRRS or Standard Provisions), which are incorporated herein.
- 10. 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.
- 11. 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 includes 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.
- 12. The Discharger shall use the best practicable cost-effective control technique(s) including proper operation and maintenance, to comply with this Order.

- 13. The Discharger shall provide certified wastewater treatment plant operators in accordance with Title 23, division 3, chapter 26.
- 14. 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.
- 15. In the event that the Discharger reports toxic chemical release data to the State Emergency Response Commission (SERC) pursuant to section 313 of the Emergency Planning and Community Right to Know Act (42 U.S.C. § 11023), the Discharger shall also report the same information to the Central Valley Water Board within 15 days of the report to the SERC.
- 16. The Discharger shall comply with the requirements of the Statewide General Waste Discharge Requirements (General WDRs) for Sanitary Sewer Systems (Water Quality Order 2006-0003), the Revised General WDRs Monitoring and Reporting Program (Water Quality Order 2008-0002-EXEC), and any subsequent revisions thereto. Water Quality Order 2006-0003 and Order 2008-0002-EXEC require 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.
- 17. The Discharger shall not allow pollutant-free wastewater to be discharged into the wastewater collection, treatment, and disposal systems in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of pollutants.
- 18. At least **90 days** prior to termination or expiration of any lease, contract, or agreement involving disposal or recycling areas or off-site reuse of effluent, used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Central Valley Water Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.
- 19. In the event of any change in control or ownership of the WWTP, 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.
- 20. 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.

- 21. A copy of this Order including the 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.
- 22. 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 or with the WDRs 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 Central Valley Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. The State Water Board must receive the petition by 5:00 p.m. on the 30th day after the date of this Order; if the 30th day 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 are available on the Internet (at the address below), and will be provided upon request.

http://www.waterboards.ca.gov/public notices/petitions/water quality

I, PATRICK PULUPA, 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 7 June 2019.

PATRICK PULUPA, Executive Officer

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

# MONITORING AND REPORTING PROGRAM R5-2019-0061 FOR WESTWOOD COMMUNITY SERVICES DISTRICT WASTEWATER TREATMENT/DISPOSAL PONDS LASSEN COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system. This MRP is issued by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) pursuant to Water Code section 13267, subdivision (b)(1). The Discharger shall not implement any changes to this MRP unless and until a revised version is issued by the Central Valley Water Board or its Executive Officer.

A glossary of terms used in this MRP is included on the last page.

# I. General Monitoring Requirements

### A. Flow Monitoring

Hydraulic flow rates shall be measured at the monitoring points specified in this MRP. Central Valley Water Board staff shall approve any proposed changes to flow monitoring locations prior to implementation of the change. All flow monitoring systems shall be appropriate for the conveyance system (i.e., open channel flow or pressure pipeline) and liquid type. Unless otherwise specified, each flow meter shall be equipped with a flow totalizer to allow reporting of cumulative volume as well as instantaneous flow rate. Flow meters shall be calibrated at the frequency recommended by the manufacturer; typically, at least once per year and records of calibration shall be maintained for review upon request.

# B. Monitoring and Sampling Locations

Samples shall be obtained at the monitoring points specified in this MRP and depicted on Attachment B. Central Valley Water Board staff shall approve any proposed changes to sampling locations prior to implementation of the change.

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

Location	Description		
Pond 2 (or secondary treatment	Location of a representative sample		
pond)	of treated effluent		

Location	Description
MW-1 through MW-3	Groundwater monitoring well
	locations.

# C. Sampling and Sample Analysis

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. Except as specified otherwise in this MRP, grab samples will be considered representative of water, wastewater, soil, solids/sludges and groundwater.

The time, date, and location of each sample shall be recorded on the sample chain of custody form. All analyses shall be performed in accordance with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, dated 1 March 1991 (Standard Provisions).

Field test instruments (such as those used to measure pH, electrical conductivity, dissolved oxygen, wind speed, and precipitation) may be used provided that:

- 1. The operator is trained in proper use and maintenance of the instruments;
- 2. The instruments are field calibrated at the frequency recommended by the manufacturer;
- 3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
- 4. Field calibration reports are submitted as described in the "Reporting" section of this MRP.

Laboratory analytical procedures shall comply with the methods and holding times specified in the following (as applicable to the medium to be analyzed):

- 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, Division of Drinking Water's (DDW) Environmental Laboratory Accreditation Program (ELAP). The Discharger may propose alternative methods for approval. Where technically feasible, laboratory reporting limits shall be lower than the applicable water quality objectives for the constituents to be analyzed

If monitoring consistently shows no significant variation in 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. This monitoring program shall remain in effect unless and until a revised MRP is issued.

# II. Specific Monitoring Requirements

### A. Influent Monitoring

Influent flow rates shall be monitored, and influent samples shall be collected upstream of the treatment system at the location(s) before entering the pond(s). At a minimum, influent shall be monitored as specified below:

Constituent	Units	Sample Type	Sample	Reporting
Flow Rate <sup>a</sup>	gpd	Meter	Continuous	Quarterly

gpd denotes gallons per day. mg/L denotes milligrams per liter.

<sup>&</sup>lt;sup>a</sup> At a minimum, the total flow shall be measured monthly to calculate the average daily flow for the month.

# B. **Effluent Monitoring**

Effluent samples shall be taken from Pond 2 as shown on Attachment B. At a minimum, effluent shall be monitored as specified below:

Constituent	<u>Units</u>	<u>Sample</u> <u>Type</u>	Sampling and Reporting Freq.
Dissolved Oxygen	mg/L	Grab	Quarterly
рН	standard	Grab	Quarterly
EC	umhos/cm	Grab	Quarterly
BOD	mg/L	Grab	Quarterly
TDS	mg/L	Grab	Quarterly
FDS	mg/L	Grab	Quarterly
Total Kjeldahl Nitrogen	mg/L	Grab	Quarterly
Ammonia as N	mg/L	Grab	Quarterly
Nitrate as N	mg/L	Grab	Quarterly
Nitrite as N	mg/L	Grab	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly
Manganese	mg/L	Grab	Quarterly
Iron	mg/L	Grab	Quarterly

mg/L denotes milligrams per liter.

# C. Pond Monitoring

Pond 1 or pond used for primary treatment, storage, or disposal of wastewater shall be monitored as specified below. Dissolved oxygen

monitoring applies to any pond containing more than two feet of standing water:

Constituent	<u>Units</u>	Sample Type	Sampling and Reporting Freq.
Dissolved Oxygen	mg/L	Grab	Quarterly
рН	standard	Grab	Quarterly
EC	umhos/cm	Grab	Quarterly
BOD	mg/L	Grab	Quarterly
TDS	mg/L	Grab	Quarterly
FDS	mg/L	Grab	Quarterly
Total Kjeldahl Nitrogen	mg/L	Grab	Quarterly
Ammonia as N	mg/L	Grab	Quarterly
Nitrate as N	mg/L	Grab	Quarterly
Nitrite as N	mg/L	Grab	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly
Manganese	mg/L	Grab	Quarterly
Iron	mg/L	Grab	Quarterly
Freeboard	0.1 feet	Measurement	Quarterly
Berm condition		Observation	Quarterly

mg/L denotes milligrams per liter.

Samples shall be collected opposite the pond inlet at a depth of one foot.

Freeboard shall be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 feet.

In addition, the Discharger shall inspect the condition of the ponds monthly and document visual observations. Notations shall include observations of:

- 1. Presence of weeds in the water or along the berm;
- 2. Accumulations of dead algae, vegetation, scum, or debris on the pond surface;
- 3. Animal burrows in the berms;
- 4. Evidence of seepage from the berms or downslope of the ponds;
- 5. Evidence of tears, abrasions, cracks, and holes in geosynthetic liners.

#### III. GROUNDWATER MONITORING

The Discharger shall maintain the groundwater monitoring well network. If a groundwater monitoring well is dry for more than four consecutive sampling events or is damaged, the Discharger shall submit a work plan and proposed time schedule to replace the well(s). The well(s) shall be replaced following approval of the work plan.

The Discharger shall monitor groundwater quality as required herein from Monitoring Wells MW -1 (background compliance well), MW-2 (cross-gradient compliance well) and MW-3 (downgradient compliance well).

# A. Groundwater Sampling and Analysis

Prior to purging or sampling, the groundwater depth shall be measured in each well to the nearest 0.01 feet. Groundwater elevations shall then be calculated to determine groundwater gradient and flow direction.

Low or no-purge sampling methods are acceptable, if described in an approved Sampling and Analysis Plan. Otherwise, each monitoring well shall be purged of at least 3 to 5 casing volumes until pH, electrical conductivity and turbidity have stabilized prior to sampling. Groundwater monitoring for all monitoring wells shall include, at a minimum, the following:

Constituent	<u>Units</u>	Sample Type	Sampling/Reporting Frequency	
Groundwater	0.01 Feet	Calculated	Quarterly	

Constituent	<u>Units</u>	Sample Type	Sampling/Reporting Frequency
Depth to Groundwater	0.01 Feet	Measurement	Quarterly
Gradient	Feet/Feet	Calculated	Quarterly
Gradient Direction	degrees	Calculated	Quarterly
рН	Std. Units	Grab	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Nitrate as N	mg/L	Grab	Quarterly
Total Kjeldahl Nitrogen	mg/L	Grab	Quarterly
Ammonia as N	mg/L	Grab	Quarterly
Nitrite as N	mg/L	Grab	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly
Sodium	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly
Manganese	mg/L	Grab	Quarterly
Iron	mg/L	Grab	Quarterly
Total Coliform Organisms <sup>b</sup>	MPN/100 mL	Grab	Quarterly

MPN/100 mL denotes most probable number per 100 mL sample. Std. Units denotes standard units. mg/L denotes milligrams per liter.

# IV. SLUDGE/BIOSOLIDS MONITORING

Sludge and/or biosolids monitoring shall be conducted as required in Title 40 of the Code of Federal Regulations (40 CFR), Part 503.8(b)(4) at the following frequency, depending on volume of sludge generated and removed from the

a. Groundwater elevation shall be based on depth to water using a surveyed measuring point elevation on the well and a surveyed reference elevation.

b. Using a minimum of 15 tubes or three dilutions.

1

wastewater treatment system for disposal or treated for beneficial reuse as biosolids:

Volume Generated <sup>1</sup> (dry metric	Monitoring	Reporting
tons/year)	Frequency	Frequency
0 to 290	Annually	Annually
290 to 1,500	Quarterly	Monthly
1,500 to 15,000	Bimonthly	Monthly
Greater than 15,000	Monthly	Monthly

For the purpose of this MRP, "generated" means produced as a separate waste stream by sludge wasting or pond cleanout. It does not apply to sludge that accumulates in treatment or storage ponds until the sludge is removed for treatment or disposal.

At a minimum, sludge/biosolids samples shall be analyzed to determine the total concentration in mg/Kg for arsenic, lead, nickel, cadmium, mercury, selenium, copper, molybdenum, zinc, total nitrogen, and total solids.

Sludge and/or biosolids monitoring records shall be retained for a minimum of five years in accordance with 40 CFR, Part 503.17. A log shall be kept of sludge quantities generated and of handling, application, and disposal activities. The frequency of entries is discretionary; however, the log should be complete enough to serve as a basis to report sludge monitoring.

The Discharger shall demonstrate that treated sludge (i.e., biosolids) meets Class A or Class

B pathogen reduction levels by one of the methods listed in 40 CFR, Part 503.32, and shall maintain records of the operational parameters used to comply with the Vector Attraction Reduction requirements in 40 CFR, Part 503.33(b), as well as records of offsite disposal (quantity, date, disposal site).

#### V. REPORTING REQUIREMENTS

All monitoring reports should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyredding@waterboards.ca.gov.

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the subject line of the email:

Westwood CSD/Lassen/WDR WDID #5A180102001

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board 364 Knollcrest Drive, Suite 205 Redding, CA 96002

A transmittal letter shall accompany each monitoring report. The letter shall include a discussion of all violations of the WDRs and this MRP during the reporting period and actions taken or planned for correcting each violation. If the Discharger has previously submitted a report describing corrective actions taken and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. Pursuant to Section B.3 of the Standard Provisions and General Reporting Requirements, the transmittal letter shall contain a statement by the Discharger or the Discharger's authorized agent certifying under penalty of perjury that the report is true, accurate and complete to the best of the signer's knowledge.

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

Laboratory analysis reports do not need to be included in the monitoring reports; however, all laboratory reports must be retained for a minimum of three years in accordance with Standard Provision C.3. For a Discharger conducting any of its own analyses, reports must also be signed and certified by the chief of the laboratory.

In addition to the requirements of 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.

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.

In the future, the State Water Board or Central Valley Regional Water Board may require electronic submittal of monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site

(<u>http://www.waterboards.ca.gov/ciwqs/index.html</u>) or similar system. Electronic submittal to CIWQS, when implemented, will meet the requirements of our Paperless Office System.

# A. Monthly Monitoring Reports

Monthly monitoring reports shall be submitted to the Board by the 1<sup>st</sup> day of the second month following the end of the reporting period (i.e. the January monthly report is due by **March 1**<sup>st</sup>). At a minimum, each monitoring report shall include the following:

- 1. Results of monthly Influent and Effluent Monitoring.
- 2. Results of Pond Monitoring.
- 3. Results of Industrial Wastewater Monitoring, if applicable.
- 4. Results of Sludge/Biosolids Monitoring, if applicable, and verification of classification of biosolids as nonhazardous per 22 California Code of Regulations (CCR), Article 11, Criteria for Identification of Hazardous and Extremely Hazardous Waste (California Assessment Manual procedures).
- 5. Copies of laboratory analytical report(s).
- 6. A comparison of monitoring data to the effluent limitations and discharge specifications and an explanation of any violation of those requirements.
- 7. A copy of inspection log page(s) documenting inspections completed during the month.
- 8. A calibration log verifying calibration of all monitoring instruments and devices used to fulfill the prescribed monitoring program.

# **B.** Quarterly Monitoring Reports

Quarterly monitoring reports shall be submitted to the Board by the 1<sup>st</sup> day of the second month after the quarter (i.e. the January-March quarterly report is due by May 1<sup>st</sup>). Each Quarterly Monitoring Report shall include the following:

1. Results of Groundwater Monitoring, if performed during the quarter, including:

- a. A narrative description of all preparatory, monitoring, sampling, and sample handling for groundwater monitoring.
- b. A field log for each well documenting depth to groundwater; method of purging; parameters measured before, during, and after purging; sample preparation (e.g., filtering); and sample preservation.
- Calculation of the groundwater elevation at each monitoring well, and determination of groundwater flow direction and gradient on the date of measurement.
- d. Summary data tables of historical and current water table elevations and analytical results.
- e. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells, surface waters, and groundwater elevation contours referenced to an appropriate datum (e.g., NGVD).
- f. Results of and Sludge/Biosolids Monitoring, if applicable, and verification of classification of biosolids as nonhazardous per 22 CCR, Article 11, Criteria for Identification of Hazardous and Extremely Hazardous Waste (California Assessment Manual procedures).
- g. Copies of laboratory analytical report(s).
- h. A comparison of monitoring data to the groundwater limitations, and discharge specifications and an explanation of any violation of those requirements.
- i. A copy of inspection log page(s) documenting inspections completed during the quarter.
- 2. A copy of calibration log page(s) verifying calibration of all handheld monitoring instruments performed during the quarter.

# **C.** Annual Monitoring Reports

The Fourth Quarterly Monitoring Report will serve as an **Annual Monitoring Report**. The Fourth Quarterly Monitoring Report for each calendar year shall include the following in addition to the items listed above.

- 1. Effective 2019, and every five years thereafter, an evaluation of sludge depth and sludge removal plans pursuant to Discharge Specification D.15.
- Concentration vs. time graphs for each monitored constituent using all historic groundwater monitoring data. Each graph shall show the background groundwater concentration range, the trigger concentration specified above, and the Groundwater Limitation as horizontal lines at the applicable concentration.
- 3. Sludge/Biosolids monitoring results, if sludge or biosolids were removed for off-site disposal during the year.
- 4. A summary of all biosolids/sludge analytical data and verification of compliance with the biosolids/sludge monitoring requirements.
- 5. A summary of information on the disposal of sludge and/or solid waste during the calendar year.
- 6. An evaluation of the performance of the WWTP, including discussion of capacity issues, infiltration and inflow rates, nuisance conditions, and a forecast of the flows anticipated in the next year, as described in Standard Provision E.4.
- A discussion of compliance and the corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.
- 8. A copy of the certification for each certified wastewater treatment plant operator working at the facility and a statement about whether the Discharger is in compliance with Title 23, CCR, Division 3, Chapter 26.
- 9. Monitoring equipment maintenance and calibration records, as described in Standard Provision C.4.
- A statement of when the wastewater treatment system Operation and Maintenance Manual was last reviewed for adequacy and a description of any changes made during the year.
- 11. A discussion of any data gaps and potential deficiencies or redundancies in the monitoring system or reporting program.

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

I, PATRICK PULUPA, 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 7 June 2019.

PATRICK PULUPA, Executive Officer

#### **GLOSSARY**

BOD<sub>5</sub> Five-day biochemical oxygen demand

CaCO3 Calcium carbonate

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-hr Composite Samples shall be a flow-proportioned composite consisting of at least

eight aliquots over a 24-hour period.

Daily Every day

Twice Weekly Twice per week on non-consecutive days.

Weekly Once per week.

Twice Monthly Twice per month during non-consecutive weeks.

Monthly Once per calendar month.

Bimonthly Once every two calendar months (i.e., six times per year) during non-

consecutive months.

Quarterly Once per calendar quarter.

Semiannually Once every six calendar months (i.e., two times per year) during non-

consecutive quarters.

Annually Once per year.

mg/L Milligrams per liter

mL/L Milliliters [of solids] per liter

μg/L Micrograms per liter

µmhos/cm Micromhos per centimeter

gpd Gallons per day

mgd Million gallons per day

MPN/100 mL Most probable number [of organisms] per 100 milliliters

MTF Multiple tube fermentation

#### **INFORMATION SHEET**

ORDER R5-2019-0061 WESTWOOD COMMUNITY SERVICES DISTRICT WASTEWATER TREATMENT/DISPOSAL PONDS LASSEN COUNTY

## **Background**

The Westwood Community Services District (hereafter Discharger) submitted a complete Report of Waste Discharge, dated 26 December 2018 to renew waste discharge requirements for the Westwood Wastewater Ponds. The facility provides sewage treatment for the community of Westwood (population 1,700). The average monthly flow is 308,000 gallons per day (gpd). The property (Assessor's Parcel Nos. 123-090-75 and 123-110-10) is owned by the Discharger. The ponds are in Section 7, T28N, R9E, MDB&M, with surface water drainage to Mountain Meadows Reservoir, which is tributary to Lake Almanor.

The WWTP is currently regulated under WDRs Order 5-01-253 which allows discharge of up to 555,000 gpd to 4 unlined treatment ponds. Due to declining population the facility currently discharges approximately 308,000 gallons per day of domestic waste. Therefore, the facility's effluent flow limitation is being set at 333,000 gallons per day.

#### **EXISTING FACILITY**

The treatment facilities include a comminutor, Parshall Flume and four unlined treatment ponds. The flow is measured at the Parshall Flume prior to Pond 1 and the flow data is electrically transmitted to the District office. The four stabilization ponds operate in series with the flexibility of the influent being discharged into pond No. 1, or into pond No. 2 via a by-pass pipe. This allows the primary pond No. 1 to be drained, dried and the sludge removed whenever it becomes necessary. Wastewater then flows to Pond No. 2, to the west, and then to Pond No. 3, located west of Pond No. 2. This wastewater stream consists solely of domestic waste. Ponds are unlined and are adjacent to Mountain Meadows Reservoir. Previous testing of soils beneath the pond indicated a permeability of  $3x10^{-6}$  cm/sec. However, the rate of pond percolation is unknown.

The disposal ponds receive approximately 308,000 gpd of domestic sewage (2015 - 2017) from 800 residential and commercial connections; there are no industrial connections to the system. However, the system also receives approximately 2% (0.002 gpd) of septage supernatant generated by an independent septage hauler. The septage enters a dewatering station near the headworks, about 500 feet east of the wastewater ponds. A Polymer (polyacrylamide or equal) is added to the septage for dewatering, the supernatant is then discharged to the treatment plant, and after removal from the drying beds the solids delivered to an appropriate disposal facility in Nevada.

Influent wastewater does not receive treatment before entering the ponds. Treatment in the ponds consists of natural aeration, and decomposition (after percolating through a shallow soil profile of silts, sands and gravels).

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Constituents of concern that have the potential to degrade groundwater include salts (primarily TDS, sodium, and chloride), and nutrients, as discussed below.

<u>Parameter</u>	Units	Supply, 09/10/18	MW-1 (upgradient) 09/10/18	MW-3 (downgradient) 09/10/18	EFF- 1, (Pond 1, Western Berm) 09/10/18	Maximum Contaminant Level
Sodium	mg/L	5.2	34	5.9	32	NE
Potassium	mg/L	1.8	0.61 <sup>J</sup>	<0.10	0.35 <sup>J</sup>	NE
Bicarbonate	mg/L	92	220	420	310	NE
Chloride	mg/L	0.94	16	17	32	250
Nitrate as N	mg/L	0. 72	<0.021	3.1	<0.021	10
Ammonia as N	mg/L	0.047 <sup>J</sup>	4.2	0.055 <sup>J</sup>	.034	NE
Total Kjeldahl Nitrogen	mg/L	<0.084	4.3	<0.084	1	NE
Total Dissolved Solids	mg/L	100	250	270	350	500
Sulfate	mg/L	0.67 <sup>J</sup>	2.5	47	17	250
рН	pH units	8.09	8.37	7.49	7.98	6.5 – 8.5
Electrical Conductivity	µmhos/cm	144	362	320	499	900

J denotes Lab interference, -- denotes Not Analyzed, NE denotes Not Established

#### **GROUNDWATER CONDITIONS**

The Facility is not located within a groundwater basin as delineated by the California Department of Water Resources (DWR). The Facility lies to the east of the Sacramento Valley basin. Shallow groundwater beneath the Facility occurs near the contact of the clastic materials that overlie the volcanic bedrock, with first water observed at 17.5 feet below ground surface (bgs) during the recent installment of effluent monitoring point (EFF-1), with the static water eventually rising to about 10 feet bgs. There is limited historical water-level data from the existing wells and the boring logs for those wells cannot be located. Therefore, interpretation of groundwater conditions is based solely on recently measured water levels.

In response to Central Valley Water Board's request for RWD renewal, the discharger's consultant installed one (1) groundwater sampling point (EFF-1) in September 2018 to complete an Anti-degradation analysis. EFF-1 was installed to obtain a sample of percolating/mounded effluent at the groundwater interface below ponds 1 & 2. Recent monitoring from the EFF-1 and the original 3 monitoring wells indicates groundwater gradient is northwesterly, opposite of surface topography.

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The occurrence of groundwater at sampling point EFF-1 suggests that the uppermost groundwater is confined and originates in the volcanic bedrock. Drilling refusal in the volcanic bedrock at 24.5 feet bgs suggests that the bedrock becomes less fractured with depth and may be an aquitard under portions of the ponds. Based on records from the California Department of Water Resources, deeper, regional groundwater occurs at 50 to over 100 feet bgs and is also confined.

## BASIN PLAN, BENEFICIAL USES, AND REGULATORY CONSIDERATIONS

The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition, revised May 2018 (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. The beneficial uses of underlying groundwater as set forth in the Basin Plan are Municipal and Domestic Supply (MUN), Hydropower Generation (POW), Water Contact Recreation (REC-1) and Non-contact Water Recreation (REC-2); including canoeing and rafting, Wildlife Habitat (WILD) and other aquatic resources.

### **ANTIDEGRADATION**

The Discharger initiated groundwater monitoring at the Facility in 1994. Based on the data available, it is not possible to determine pre-1968 groundwater quality. Therefore, determination of compliance with Resolution 68-16 for this Facility must be based on existing background groundwater quality.

The discharge and the potential for groundwater degradation allowed in this Order is consistent with the Antidegradation Policy since; (a) the limited degradation allowed by this Order will not result in water quality less than the water quality objectives, or unreasonably affect present and anticipated beneficial uses, (b) the Discharger has implemented BPTC to minimize degradation, and (c) the limited degradation is of the maximum benefit to the people of the State.

#### **CEQA**

The adoption of this Order for an existing WWTP is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to California Code of Regulations, title 14, section 15301, which exempts the "operation, repair, maintenance, [and] permitting ... of existing public or private structures, facilities, mechanical equipment, or topographical features" from environmental review.

### TITLE 27

Title 27 of the California Code of Regulations (hereafter Title 27) contains regulatory requirements for the treatment, storage, processing, and disposal of solid waste. 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. Title 27, section 20090 states in part:

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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 sludge 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 leach fields if the following conditions are met:
  - 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 . . .
- (c) Reuse Recycling or other use of materials salvaged from waste, or produced by waste treatment, such as scrap metal, compost, and recycled chemicals, provided that discharges of residual wastes from recycling or treatment operations to land shall be according to applicable provisions of this division.

### **Proposed Order Terms and Conditions**

#### DISCHARGE PROHIBITIONS, SPECIFICATIONS AND PROVISIONS

- 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 66261.1 et seq., is prohibited.
- 3. Treatment system bypass of untreated or partially treated waste is prohibited, except as allowed by Standard Provision E.2 of the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*.
- 4. Discharge of waste at a location or in a manner different from that described in the Findings is prohibited.

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- The Discharger shall not allow toxic substances to be discharged into the wastewater treatment system or land application areas such that biological treatment mechanisms are disrupted.
- 6. Discharge to the overland flow/land application area is prohibited unless approved by the Executive Officer.
- 7. The discharge of offsite waste transported to the WWTP (except as specified elsewhere in this order) for disposal is prohibited unless approved by the Executive Officer.

### MONITORING REQUIREMENTS

Section 13267 of the California Water Code authorizes the Central Valley Water Board to require the Discharger to submit monitoring and technical reports as necessary to investigate the impact of a waste discharge on waters of the State.

The proposed Order includes influent, effluent, pond, and groundwater monitoring. This monitoring is necessary to characterize the discharge, evaluate compliance with effluent limitations prescribed by this Order, and evaluate groundwater quality and the extent of degradation, if any, caused by the discharge.

The Proposed order also requires the submittal of the technical reports following the adoption of this Order. A Bio-Solids Handline and Disposal Plan to address the reuse or disposal of current and further biosolids stored and generated at the Facility is due by 1 October 2019. A Pond Capacity Evaluation and Maximization Report to address capacity and free board issues observed at the Facility is due by 1 September 2019. A Water Quality Assessment Report that will summarized and evaluation groundwater quality data collected from the Facility is due by 1 September 2019.

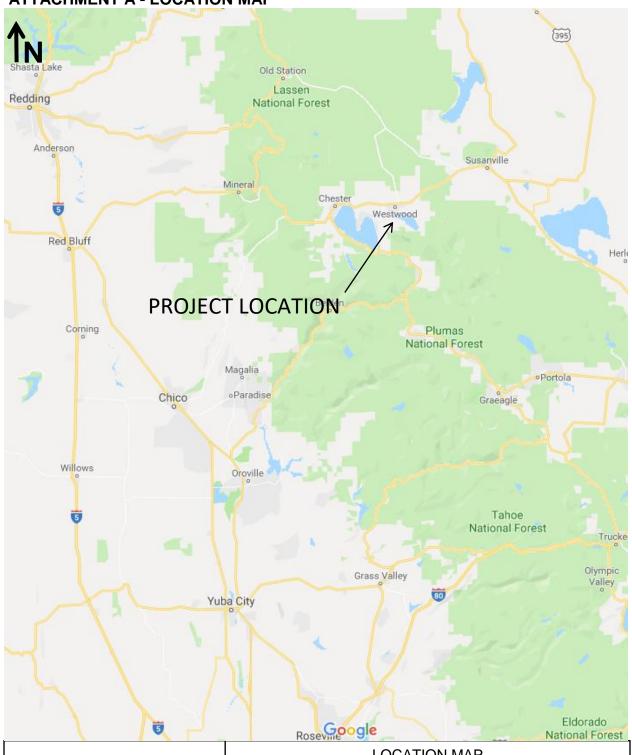
#### **REOPENER**

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.

### 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.

# **ATTACHMENT A - LOCATION MAP**



DRAWING REFERENCE: **GOOGLE EARTH** 

MAP DATA: © 2018 GOOGLE

**NO SCALE** 

**LOCATION MAP** 

WESTWOOD COMMUNITY SERVICES DISTRICT WASTEWATER TREATMENT/DISPOSAL PONDS LASSEN COUNTY

# ATTACHMENT B - FACILITY MAP



DRAWING REFERENCE: GOOGLE EARTH MAP DATA: © 2016 GOOGLE NO SCALE **FACILITY MAP** 

WESTWOOD COMMUNITY SERVICES DISTRICT WASTEWATER TREATMENT/DISPOSAL PONDS LASSEN COUNTY

# 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. For a partnership or sole proprietorship: 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 industrial 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:

# STANDARD PROVISION AND REPORTING REQUIREMENTS Waste Discharge to Land

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

and

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Revised January 2004 to update addresses and phone numbers