CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER NO. R5-2024-0703

FOR

ARBUCKLE PUBLIC UTILITY DISTRICT

FOR

ARBUCKLE WASTEWATER TREATMENT FACILITY COLUSA COUNTY

This Cleanup and Abatement Order (Order) is issued to Arbuckle Public Utility District (hereafter referred to as Discharger) based on provisions of California's Porter-Cologne Water Quality Control Act (Water Code) section 13304, which authorizes the Central Valley Regional Water Quality Control Board (Central Valley Water Board) to issue an order requiring the cleanup and abatement of wastes, and Water Code section 13267, which authorizes the Central Valley Water Board to require the preparation and submittal of technical reports.

The Executive Officer finds, with respect to the Discharger's acts, or failures to act, the following:

PURPOSE OF THE ORDER

1. This Order requires Arbuckle Public Utility District (PUD) to address the capacity issues at its Wastewater Treatment Facility (WWTF) and to comply with the requirements in Waste Discharge Requirements (WDRs) Order 93-208. In addition, this Order requires the Discharger to operate the WWTF in accordance with the requirements in WDRs and the Standard Provisions and Reporting Requirements, which are part of the WDRs. This Order describes a sequence of events that led to wastewater spills and violations of the WDRs.

ALLEGED VIOLATIONS

- 2. Although the Discharger has contacted and retained a technical consultant and contract operations firm to provide additional assistance, the wastewater treatment system and collection systems are currently experiencing system failures due to the age of the equipment, additional flow volume with increased system connections populations, and inflow and infiltration (I/I) issues from the collection system and/or deferred maintenance. These issues are outlined below.
- 3. This Order outlines a series of events dating back to September 2023 and constraints (i.e. limited resources) have stunted the Discharger's ability to maintain compliance

with the WDRs. In accordance with the State Water Board's Enforcement Policy, following each site inspection a Notice of Violation (NOV) was issued, along with an inspection report. In addition, Central Valley Water Board staff met with the Discharger and as a result have prepared this formal enforcement Order to help the Discharger restore compliance with the WDRs.

BACKGROUND

- 4. Arbuckle PUD owns and operates the Arbuckle Wastewater Treatment Facility (WWTF) which is located just north of Bailey Road outside of the City of Arbuckle. The City of Arbuckle is located at the southern end of Colusa County, is surrounded by agricultural fields, and has a 2024 population of 2,776, down from a 2022 population of 3,072.
- 5. On 29 October 1993, the Central Valley Water Board adopted WDRs Order 93-208, which prescribes requirements for the treatment and disposal of domestic wastewater. The WDRs also include a revised Monitoring and Reporting Program, which includes groundwater monitoring, issued by the Executive Officer on 2 April 2007.
- 6. According to the WDRs, the WWTF consists of an influent pump station, primary clarifier, sludge digester, sludge drying bed, seven unlined wastewater evaporation/percolation ponds, and an unlined emergency wastewater storage pond.
- 7. The WDRs allow for a monthly average dry weather discharge flow not to exceed 0.5 million gallons/day (mgd). The surface area of the seven unlined wastewater ponds is estimated to be approximately 10 acres. Therefore, one foot of freeboard is approximately 3.2 million gallons. Even with the increased population over time, there have been no plant upgrades regarding treatment, flow increase or capacity since the WDRs were issued in 1993.
- 8. The underlying groundwater is the major supplier of water for irrigation as well as drinking water in this area. Groundwater monitoring at the facility is conducted from sampling six groundwater monitoring wells (MWs) 1R through MW-6R, which were installed in 2015 to replace original monitoring wells (MWs) 1 through 6 due to a declining water table. Current groundwater depths range from approximately 57 feet below ground surface (bgs) in MW-1R located within southeast boundary of the treatment plant to approximately 90 feet bgs in MW-4R located south of the facility near Grimes-Arbuckle Road. Regional groundwater flow is generally towards the southeast.
- 9. Groundwater analytical results from June 2015 (Second Quarter 2015) to current indicate that Total Coliform Organisms in MW 1R and MW2R consistently exceeds the Water Quality Objective of 2.2 MPN/100 mL in violation of Groundwater Limitations D.3 of the WDRs, which states: "The discharge, in combination with other sources, shall not cause underlying groundwater to exceed a most probable number of total coliform organisms of 2.2/100 mL over any seven-day period."

- 10. Groundwater analytical results from June 2015 (Second quarter 2015) to current indicate Total Dissolved Solids (TDS) concentrations range 400 mg/L to 720 mg/L in MWs 1R through MW 5R. The Discharger is aware of these concentrations and elected to participate in the Prioritization and Optimization Study under the Salt Control Program. During the same time period, Nitrate as Nitrogen was consistently detected below the U.S. Environmental Protection Agency (EPA) maximum contaminant level (MCL) of 10 milligrams of nitrate (mg/L) as nitrogen for drinking water.
- 11. Directly adjacent to the wastewater treatment facility is Salt Creek drainage, which is an ephemeral stream that flows north in the area, then bends east, and is joined downstream by Elk Creek. Both streams join Sand Creek a half mile northeast of the town and flow in a northeast direction.

COMMUNITY DYNAMICS

- 12. The Discharger is also responsible for the operation and maintenance of the sewage collection system. The collection system consists of two lift stations and is composed of vitrified clay pipe. The Discharger is enrolled in the Statewide Waste Discharge Requirements General Order for Sanitary Sewer Systems 2022-0103-DWQ, which was adopted by the State Water Resources Control Board on 6 December 2022. The effective date of the Notice of Applicability for enrollment under the General Order was 13 July 2023. The Dischargers Waste Discharge Identification (WDID) Number is 5SS020010.
- 13. The Environmental Health Hazard Assessment (OEHHA) California Communities Environmental Health Screening Tool (CalEnviroScreen 4.0) is a methodology that can be used to help identify California communities disproportionately burdened by multiple sources of pollution. The CalEnviroScreen 4.0 Percentile Score for Arbuckle is 65 out of 100.
- 14. In November 2022 the Discharger applied to the State Water Resources Control Board (SWRCB) Division of Financial Assistance to request funding assistance for long-term upgrades to the WWTF. The Planning Grant (Project No. 8708-110) application is in the amount of \$6,369,188 and proposes to evaluate the condition of the existing wastewater treatment system and collection system, as well as determine the best course of action for upgrading the wastewater treatment system and rehabilitating the collection system. During discussions with the Discharger, they stated their goal is to improve the quality of their wastewater so they could become a recycled water purveyor to nearby agriculture in the area. The grant application remains pending with the SWRCB.

Bypass of Treatment

15. A clarifier, within the WWTF treatment train, is generally used to remove solid particulates or suspended solids from liquid for clarification and thickening. During site

inspections conducted on 27 September 2023, 29 November 2023, 22 February 2024 and 4 April 2024, the clarifier was offline in need of repair, and treatment to the wastewater ponds was being by-passed in violation of Discharge Prohibition No. 2 of the WDRs. This has contributed to the increase of sludge in the wastewater ponds.

- 16.A digester in wastewater treatment is a large tank or vessel where sludge, a byproduct of the treatment process, is further treated to break down organic matter. The digester, which receives solids from the clarifier, has also been non-operational at the treatment plant.
- 17. Without the clarifier or digester operating, bypassing the treatment introduces untreated solids into the wastewater ponds. The solids reduced the ponds' design percolation rates and storage capacity.
- 18. Discharge Prohibition No. 2 of the WDRs states: "Bypass or overflow of untreated or partially treated waste is prohibited".
- 19. On 11 June 2024, the Discharger completed repairs to the clarifier and in August 2024 re-established the treatment required by the WDRs. This Order requires the Discharger to operate the clarifier and digester at the facility to comply Discharge Prohibition A.2 of the WDRs and Provision E.2 of the WDRs.

Storage and Disposal Capacity

- 20. During site inspections conducted on 27 September 2023, 29 November 2023, 22 February 2024 and 4 April 2024, the freeboard levels in all the wastewater ponds were exceeded in violation of Discharge Specifications B.8 and B.9 of the WDRs. Central Valley Water Board staff observed no measurable freeboard in the ponds.
- 21. During the 22 February 2024 site inspection, road base material used to raise the heights of the berms was observed on the northern portions of the Pond 1, 2, 3, 4 and 5 berms, and sludge from one of the wastewater ponds was stockpiled onsite. This was also observed during the 4 April 2024 site inspection.
- 22. Discharge Specification B.8 of the WDRs states: "Ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration during the nonirrigation season. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns. Freeboard shall never be less than two feet (measured vertically)."
- 23. Discharge Specification B.9 of the WDRs states: "On or about 1 October of each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specification No.8.

24. This Order requires the Discharger to manage the wastewater, such that the freeboard in all seven wastewater ponds is one foot or greater by **15 December 2024.** This Order allows the Discharger additional time to create capacity in order to comply with Discharge Specifications B.8 and B.9 of the WDRs.

Sludge Disposal

- 25. During a 27 September 2023 site inspection, Central Valley Water Board staff observed that sludge material removed from the wastewater ponds was being used to repair a pond where a spill occurred and to raise the height of the pond levees to increase capacity in the ponds. Then during the site inspections conducted on 22 February 2024 and 4 April 2024, Central Valley Water Board staff continued to observe sludge stockpiled onsite next to the digester at the treatment plant.
- 26. In the Discharger's response to the 2 April 2024 NOV, the Discharger stated that in preparation of a bid package for sludge removal, they had characterized the sludge on 19 March 2024, and then on 16 April 2024, they returned to measure the ponds to formulate an estimate of the volume of sludge to be removed. They hope to execute the dredging operations in the ponds later this year.
- 27. Sludge Disposal Specification C.1 of the WDRs states: "Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with Chapter 15 and approved by the Executive Officer."
- 28. This Order requires the Discharger to remove excess sludge from all wastewater ponds and dispose of it in compliance with the WDRs.

Wastewater Spills

29. From 19 September 2023 to 5 September 2024, Arbuckle PUD reported eighteen wastewater spills totaling approximately 77,000 gallons. All except for one spill was the result of capacity issues at the facility. The one spill reported at approximately 200 gallons was associated with a power failure and an overflow at the treatment plant headworks. The dates and volumes of the spills are summarized in Table 1

Table 1. Summary of Spills

Date	Cal OES Control No.	Spill Volume (gallons)	Discharge to Surface Water
			Drainage Course
19 September 2023	23-6011	100	Yes
21 March 2024	24-1764	700	Yes
23 March 2024	24-1765	200	No
7 April 2024	24-2055	800	Yes
21 April 2024	24-2344	900	No
5 May 2024	24-2595	1,000	No

Date	Cal OES Control No.	Spill Volume (gallons)	Discharge to Surface Water Drainage Course
10 May 2024	24-2703	2,500	Yes
15 May 2024	24-2777	900	No
29 May 2024	24-3082	500	No
2 June 2024	24-3163	900	No
8 June 2024	24-3297	2,000	No
11 June 2024	24-3348	1,500	No
20 June 2024	24-3522	2,000	No
11 July 2024	24-3952	400	No
14 July 2024	24-4023	2,000	No
17 August 2024	24-5016	8,000	No
5 September 2024	24-5039	28,000	Yes
3 October 2024	24-5600	17,000	No

- 30. Discharge Prohibition No. 1 of the WDRs states: "Discharge of wastes to surface waters or surface water drainage courses is prohibited."
- 31. Discharge Prohibition No. 2 of the WDRs states: "Bypass or overflow of untreated or partially treated waste is prohibited."
- 32. This Orders requires the Discharger to comply with all conditions and requirements of the WDRs, which includes ceasing all discharges outside of the approved disposal ponds.

ONGOING AND PROPOSED CORRECTIVE ACTIONS

- 33. Based on information received by Arbuckle PUD in (1) weekly progress reports submitted since the week of 20 November 2023, (2) a 4 April 2024 site meeting, (3) a 1 May 2024 report titled "Arbuckle Public District Response and Update to Central Valley Regional Water Quality Control Board's Continued Notice of Violation, Dated 2 April 2024", (4) a 3 July 2024 collaborative meeting with Arbuckle PUD, and (5) a 15 July 2024 report from Arbuckle PUD in follow-up to the meeting, the following actions have been or will be taken by the Discharger to address the alleged violations and are summarized below:
 - a. Temporarily increase pond capacity by either installing road base material on the berms of the wastewater ponds, and/or place sandbags as necessary to protect those areas of the pond berms from washout and erosion due to the lack of storage and disposal capacity at the facility while freeboard levels are restored.
 - b. To enhance evaporation and increase freeboard levels due to capacity issues as described in Findings 20 through 24 of this Order, a Varimax V-40 evaporator unit

was rented and placed into service in Pond 6 on 28 June 2024. In addition, on 9 July 2024 the Discharger installed a pump with five sprinkler heads next to Pond 3. In addition to the above referenced evaporator unit in Pond 6 and pump with five sprinkler heads next Pond 3, and additional set of sprinklers were added to Pond 3 on 9 August 2024.

- c. To increase the percolation rates in the wastewater ponds due to capacity issues at the facility, on 30 May 2024 the Discharger held a special meeting and approved a bid package to publish and start receiving bids for a project to remove sludge from the wastewater ponds (Pond Cleaning Project). The key components of the project include the dewatering of removed sludge from Ponds 2 and 3 with any solids stored onsite placed on a polyethylene liner with at least a 15-millimeter thickness. Filtrate from the dewatering process will be returned to treatment plant and the sludge will be disposed offsite in accordance with the requirements in the WDRs. On 17 July 2024, a "Notice of Award and Agreement Form" to remove sludge from Ponds 2 and 3 was received from a licensed contractor. On 19 August 2024, the Discharger issued the "Notice to Proceed" to the contractor for the pond dredging activities.
- d. To address the stockpiled sludge as described in Finding 25 of this Order, on 30 July 2024, a total of 1,500 tons of sludge was removed and transported to Yolo Central Landfill for disposal. This area is being prepared to serve as a staging/sludge drying area once the pond dredging is initiated for Ponds 2 and 3.
- e. To address future capacity issues at the facility, the Discharger has obtained quotes from vendors for disposal of wastewater at East Bay Municipal Utility District (EBMUD). On 11 April 2024, Arbuckle PUD Board of Directors approved moving forward with using a licensed contractor for the disposal of wastewater at a large, permitted treatment facility, if necessary.
- f. To comply with the monitoring requirements in the WDRs the Discharger ordered freeboard staff gauges on 3 July 2024. The gauges have been delivered and the Discharger finished installing the gauges in all of the wastewater ponds on 8 August 2024.
- g. The Discharger ordered a replacement influent flow meter on 26 July 2024 to ensure that accurate flow measurements are being recorded. The meter is expected to be delivered in approximately six weeks and the Discharger will install the meter upon delivery.

BENEFICIAL USES AND WATER QUALITY OBJECTIVES

34. The Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin, Fifth Edition, February 2019 (hereafter Basin Plan), designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for

- achieving objectives in all waters of the Basin. The Basin Plan also incorporates by reference, plans and policies adopted by the State Water Board.
- 35. Surface water drainage is to Salt Creek which is a tributary to the Colusa Basin Drain Canal. According to the Central Valley Water Board's Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan), the beneficial uses of the Colusa Basin Drain Canal are agricultural supply; water contact recreation; non-contact water recreation; commercial and sport fishing; aquaculture; warm freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; and wildlife habitat.
- 36. The beneficial uses of the groundwater, as specified in the Basin Plan, are municipal and domestic supply, agricultural supply, industrial service supply and industrial process supply.

LEGAL BASIS OF THE ORDER

37. Water Code section 13304, subdivision (a) states, in relevant part:

"A person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall, upon the order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts."

"Upon failure of any person to comply with the cleanup and abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of and injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant prohibitory or mandatory injunction, either preliminary or permanent as the facts may warrant."

- 38. This Cleanup and Abatement Order is necessary to ensure that threatened unlawful discharges of waste to waters of the state from the site are prevented, and that any impacts to beneficial uses are mitigated. The issuance of this Cleanup and Abatement Order pursuant to Water Code section 13304 is appropriate and consistent with policies of the Central Valley Water Board and State Water Board.
- 39. The technical reports required by this Order are necessary to ensure compliance with this Order, and to ensure the protection of water quality. Arbuckle PUD owns and operates the facility that discharges waste subject to this Order.

TECHNICAL REPORTS REQUIRED

- 40. Water Code section 13267, subdivision (a) provides that the Central Valley Water Board may investigate the quality of any water of the state within its region in connection with any action relating to the Basin Plan.
- 41. Water Code section 13267(b) of the Water Code states, in relevant part:

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

- 42. Water Code section 13268 of the Water Code states in relevant part:
 - "(a)(1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267, failing or refusing to furnish information as required by subdivision (a) or (b) of Section 13267.5, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor, and may be liable civilly in accordance with subdivision (b)."
 - "(b)(1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with Section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs."
- 43. Issuance of this Order is an enforcement action taken by a regulatory agency to enforce the regulatory provision of the Basin Plan and is therefore exempt from provisions of the California Environmental Quality Act (CEQA) (Pub. Res. Code, § 21000 et seq.) in accordance with California Code of Regulations, title 14, sections 15321 (enforcement action taken by a regulatory agency to enforce the regulatory provision of the Basin Plan), 15307 (action by a regulatory agency for the protection of natural resources), and 15308 (action by a regulatory agency for the protection of the environment).

REQUIRED ACTIONS

IT IS HEREBY ORDERED that, pursuant to WDRs, 93-208 and California Water Code sections 13267 and 13304, the Arbuckle Public Utility District shall abate the effects of the discharge of waste at the Arbuckle Wastewater Treatment Facility. Compliance with this requirement must be achieved in accordance with the following approach and conditions:

- 1. Operate the clarifier and digester at the facility to comply with Discharge Prohibition A.2 of the WDRs and Provision E.2 of the WDRs.
- 2. Beginning **15 December 2024**, and monthly thereafter on the first business day of each month thereafter please submit progress reports showing corrective actions taken to achieve compliance with the requirements in the WDRs. The report shall describe the work completed for the month, the freeboard levels in all ponds, as well as a schedule of the work to be completed the following month.
- 3. No later than **15 December 2024**, the Discharger shall submit documentation showing that the replacement influent flow meter has been installed and is calibrated.
- 4. No later than 15 December 2024:
 - a. Provide documentation showing that any sludge removed from the wastewater ponds after issuance of this Order that is temporarily stored onsite shall be managed in accordance with requirements in the California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Handbook under "Stockpile Management (WM-3).
 - b. Provide documentation showing that the sludge dredged from the pond(s) is being removed from the ponds and contained for off-site disposal in a manner that complies with Sludge Disposal Specification C.3 of the WDRs.
- 5. No later than 15 December 2024, the Discharger shall submit a "Spill Prevention and Response Plan", that outlines steps to be taken to prevent a spill from occurring (i.e. off-hauling, bringing in storage tanks, etc....). The plan shall include documentation showing that a contract is in place for the off-hauling or additional wastewater storage at the facility. The plan shall also describe what steps will be taken to protect water quality if a spill occurs. The report shall identify who is responsible for implementing all parts of the plan, including spill notifications to the Central Valley Water Board and California Office of Emergency Services. Because freeboard levels may increase due to work being done by the Discharger this plan may be amended to optimize their ability to prevent wastewater spills.
- 6. No later than **15 December 2024**, the freeboard levels in all seven wastewater ponds at the facility shall not be less than one foot. If freeboard levels are less than

one foot in any one of the seven ponds, the Discharger shall **immediately** notify Central Valley Water Board staff and implement the "Spill Prevention and Response Plan."

- 7. No later than **1 February 2025**, the Discharger shall submit an "Operations and Maintenance Plan" that outlines how each component of the wastewater treatment system will be maintained such that the bypass of treatment or lack of capacity does not occur again. The plan should include measures to be taken to increase percolation rates in each of the wastewater ponds along with the proposed frequency of maintenance for the future (i.e. monthly, quarterly, semiannually, etc.).
- 8. No later than **1 October 2025**, submit the final report documenting the removal and disposal of all sludge from the facility that were either stockpiled, within the individual ponds or in the digester itself. The report shall contain all characterization data, shipping manifests as well as the receipt from the accepting permitted facility.
- 9. No later than **1 October 2025**, all sludge that is removed from the ponds shall be transported offsite for disposal by a licensed hauler to a landfill that will accept the waste. Manifests from the waste hauler shall be provided in the monthly updates, along with an estimate of how much material is remaining.
- 10. No later than 1 October 2025, the Discharger shall submit a "Water Balance Report" that demonstrates that the wastewater treatment system has the capability to treat within the designed flow and meet the requirements in the WDRs. The water balance shall be supported by flow data collected from calibrated flow meters. The water balance shall also address any contribution from the collection system's inundation or infiltration volume. Finally, the water balance shall consider any additional capacity for population changes for the city projected through 2035. The Water Balance Report must include at a minimum the items described in Attachment A to this Order.

GENERAL REQUIREMENTS AND NOTICES

Use of Qualified Professionals

1. All technical reports required by this Order that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geological 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. As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

Signatory Requirements

2. All technical reports submitted by the Discharger shall include a cover letter signed by the Discharger, or a duly authorized representative, certifying under penalty of law that the signer has examined and is familiar with the report and that to their knowledge, the report is true, complete, and accurate. The Discharger shall also state if he agrees with any recommendations/proposals and whether he approves implementation of said proposals. Any person signing a document submitted under this Order 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 knowledge and on my inquiry of 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."

COMPLIANCE WITH OTHER REGULATORY REQUIREMENTS

3. The Discharger shall obtain all applicable local, state, and federal permits necessary to fulfill the requirements of this Order prior to beginning work.

Cost Recovery

4. Pursuant to Water code section 13304, the Central Valley Water Board is entitled to, and may seek reimbursement for, all reasonable costs it incurs investigating and abating the effects of the unlawful discharges of waste and to oversee/supervise the cleanup of such waste, or other remedial action, required by this Order. If requested by the Central Valley Water Board, the Discharger shall enroll in the State Water Board's Cost Recovery Program and shall reimburse the State of California for all reasonable costs actually incurred by the Central Valley Water Board.

Submissions

5. Requested documentation must be converted to a searchable Portable Document Format (PDF) and submitted to centralvalleysacramento@waterboards.ca.gov . The e-mail shall contain the following: (a) Arbuckle Public Utilities District, (b) Arbuckle PUD WWTP, (c) Title and Date of the Report, and (d) CIWQS Place ID No. CW-206149. Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to our office, attention "ECM Mailroom."

Enforcement Authority

6. If the Discharger fails to comply with the requirements of this Order, the Central Valley Water Board or its delegated officer may refer this matter to the Attorney General for

judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of administrative civil liability up to \$5,000 per violation per day, depending on the violation, pursuant to the Water Code sections 13268 and 13350. The Central Valley Water Board reserves the right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 et seq. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: (http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request).

Patrick Pulupa Executive Officer

Attachment A Requirements for Water Balance Update and Calibration

ATTACHMENT A

REQUIREMENTS FOR WATER BALANCE UPDATE AND CALIBRATION

At a minimum, the items described in this document must be considered in all water balance updates and calibrations. All facilities are required to have sufficient treatment, storage, and disposal capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter months. 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. If the resulting water balance shows that the facility does not have the capacity to meet these requirements a workplan to reduce influent flow or a workplan to increase facility capacity must be submitted along with the water balance. All water balances and applicable related reports must be prepared under the direction of, and signed by, a registered geologist or civil engineer licensed by the State of California.

SECTION 1 - Collection and Conveyance Systems and Influent Data

The assessment and associated calculations related to the influent flow and I&I should be take into account the following:

- A. Design wastewater flow rates. For POTWs and private domestic wastewater facilities, include initial baseline influent and I/I flows as well as baseline influent and I/I flows at full build out with an aging sewer system.
- B. Estimates of Inflow and Infiltration (I&I) should take into account storm surge from intense storms, not just monthly averages.
- C. Sanitary Sewer Management Plans and the associated inspection, maintenance, and repair records should be reviewed to determine and verify I&I estimates.

SECTION 2 – Storage and Containment Structures

The normal operations and maintenance of containment structures should be considered. Operations and Maintenance Manuals (O&M Manuals) should be referenced as well as historical monitoring data (i.e. freeboard measurements). Specific conditions of the WDRs should also be taken into account.

- A. A minimum of two feet of freeboard in each pond at all times (unless a registered civil engineer determines that a lower freeboard level will not cause overtopping or berm failure).
- B. Historical local evapotranspiration, pan evaporation, and lake evaporation data (monthly average values).

- C. Projected long-term percolation rates (including consideration of percolation from unlined ponds and the effects of solids plugging on all ponds).
- D. Reduced capacity of ponds and over containment structures due to sludge build up should be taken into account when estimating reduced pond capacity. Worst case scenarios based on historical data, O&M manuals, and WDRs requirements should be used.

SECTION 3 – Treatment System

- A. Operation hours, staffing, and O&M Manuals, and downtime should all be taken into account when calculating treatment capacity.
- B. Run on to the treatment system as well as direct precipitation should be considered.

SECTION 4 – Disposal System

- C. Proposed recycling area/land application area/disposal system hydraulic loading rates distributed monthly in accordance with expected seasonal variations based on crop evapotranspiration rates.
- D. The distribution of precipitation over time is not taken into account (i.e. storm intensity, light rain over a lot of days or heavy rain over a few days), as well as other factors such as wind and saturated conditions must be taken into account when determining the number of days a disposal system can be operated each month. The most reliable way to estimate this is based off of historical records from a water years of intensity similar to that which is being modeled.
- E. It should be specified whether the tailwater is returned to the sprayfields directly or to one of the ponds.
- F. If applicable, storm water runoff is not accounted for in the tailwater return calculations.
- G. Maximum disposal capacity of land application areas should be based on soil studies, percolation studies, and/or operator notes.

SECTION 5 – General Requirements

- A. All water balances start on 1 October.
- B. Local precipitation data with the 100-year return period annual total distributed monthly in accordance with mean monthly precipitation patterns. However, periods of high intensity storms should also be considered in the calculations.

- C. All water balance should be based on all available data, including new and historical data. All data should also be quality controlled and used with discretion.
- D. For each wastewater treatment, storage, or disposal pond and containment structure, provide the following information:
 - a. Identification (name) and function of the pond.
 - b. Surface area, depth, and volumetric capacity at two feet of freeboard.
 - c. Height (relative to surrounding grade), crest width, interior slope, and exterior slope of each berm or levee.
 - d. Materials used to construct each berm or levee.
 - e. Description of engineered liner, if any. Include a copy of the Construction Quality
 - f. Assurance (CQA) Report if one was prepared.
 - g. Estimated steady state percolation rate for each unlined pond.
 - h. Depth to shallow groundwater below the base and pond inverts.
 - i. Overfilling/overflow prevention features.
 - j. Operation and maintenance procedures.