



Central Valley Regional Water Quality Control Board

12 June 2020

Chandra Johannesson East Bay Municipal Utility District 375 11th Street, MS 704 Oakland , CA 94607 Certified Mail 7019 2280 0001 9243 5319

NOTICE OF APPLICABILITY

GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS ORDER WQ 2014-0153-DWQ FOR EAST BAY MUNICIPAL UTILITY DISTRICT CAMANCHE NORTH SHORE WASTEWATER TREATMENT PLANT AMADOR COUNTY

The East Bay Municipal Utility District (EBMUD, hereafter Discharger) submitted a Report of Waste Discharge (RWD) dated 21 November 2019 describing Camanche North Shore Wastewater Treatment Plant (WWTP) in Amador County. On 13 May 2020, the Discharger submitted a RWD amendment. Based on the provided information, the proposed domestic wastewater treatment system and discharge is consistent with the requirements of the State Water Resources Control Board (State Water Board) General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems, Order WQ 2014-0153-DWQ (General Order). This Notice of Applicability (NOA) provides notice that the General Order is applicable to the site as described below. You are hereby assigned Order WQ 2014-0153-DWQ-R5338 for the discharge. A copy of the <u>General Order</u> is enclosed and also available at:

(http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/w qo2014_0153_dwq.pdf)

You should familiarize yourself with the entire General Order and its attachments, which describe mandatory discharge and monitoring requirements. The General Order contains operational and reporting requirements by wastewater system type. Sampling, monitoring, and reporting requirements applicable to your treatment and disposal methods must be completed in accordance with the appropriate treatment system sections of the General Order and the attached Monitoring and Reporting Program (MRP) WQ 2014-0153-DWQ-R5338. The Discharger is responsible for all the applicable requirements that exist in the General Order and this NOA.

KARL E. LONGLEY SCD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

REGULATORY BACKGROUND

WDRs 95-175, adopted by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) on 23 June 1995, prescribes requirements for the facility, and allows a monthly average dry weather discharge flow of 0.1 million gallons per day (MGD). WDRs Order 95-175 will be rescinded at an upcoming Central Valley Water Board meeting. Effective upon rescission of Order 95-175, the discharge described in this NOA shall be regulated pursuant to the General Order.

EXISTING FACILITY AND DISCHARGE DESCRIPTION

The WWTP is located at 2000 Camanche Road, lone, in Amador County in Section 35, T5N, R9E, MDB&M as shown on attachment A, which is incorporated herein. The Assessor's Parcel Numbers (APN) is 003-460-004. The WWTP provides wastewater treatment and disposal for 535-acre recreation area (Recreation Area) on the north shore of Camanche Reservoir in Amador County. The Recreation Area and the WWTP are owned and operated by the Discharger.

The Recreation Area has an administration office, cafe, full-service marina with fishcleaning station, four triplex and six duplex cottages, two mobile home parks (total of 159 units), and a six-unit capacity recreational vehicle (RV) park with a holding tank dump station. There are also 203 campsites equipped with portable toilets, showers, and laundry facilities. In addition, there is a maintenance shop that is used by EBMUD staff for routine maintenance and repair work. The Recreation Area is open to the public year-round. Peak usage is in the summer.

The source of the potable water is groundwater. There are three supply wells; two are routinely used and the third serves as a back-up unit. Raw water is treated with sodium hypochlorite, followed by pressure injection through a pyroluslite media system. The potable water has high levels of naturally-occurring manganese. Based on five sets of annual data collected from 2015 through 2019, the raw potable water has an average manganese concentration of 161 ug/L, which exceeds the secondary Maximum Contaminant Level (MCL) of 50 ug/L for manganese. The treated water has an average Total Dissolved Solids (TDS) concentration of 255 mg/L based on data collected annually from 2015 through 2019.

The WWTP consists of a collection system equipped with five lift stations, six ponds, and five acres of Land application Areas (LAAs). The ponds are located about three quarters of a mile from Camanche Reservoir. The site plan is shown on Attachments B, which is incorporated herein. All ponds are unlined except for Pond 5, which is clay lined. Ponds 1 through 3 are aerated treatment ponds with a total storage capacity of 4.9 acre-feet based on two feet of free board. Pond 6 is an effluent storage pond. Ponds 4 and 5 serve as backup ponds when extra storage is needed in the wet season. The total capacity of Ponds 4, 5 and 6 is 19.5 acre-feet based on two feet of free board. The depths of Ponds 1 through 5 rang from six to eight feet and Pond 6 has a depth of four feet.

Treated wastewater from Pond 3 is pumped into the effluent storage Pond 6 and then is applied to the LAAs for disposal via sprinkle systems. A tailwater-return system was installed around the LAAs in order to return irrigation runoff to Pond 6 by gravity. Both influent and effluent are measured by flow meters. The process schematic is shown on Attachment C, which is incorporated herein. The WWTP is connected to the Discharger's Supervisory Control and Data Acquisition system for operation monitoring.

The influent wastewater is pumped directly from Lift Station No. 1 to Pond 1 with no upstream screening or solids removal. The settled solids in the lift stations are pumped out on a quarterly basis and handled appropriately by a licensed contractor. Solids are hauled to Sierra Septic located in the City of Sutter Creek where the liquid and solids are separated. Wastewater generated from solid separation at Sierra Septic is hauled to Sutter Creek Wastewater Treatment Plant (regulated under WDRs 94-152) and the solids are taken to Forward Landfill in French Camp. Settled solids in the ponds are removed as needed. In 2007, solids were removed from Ponds. 1, 2, 3, and 6 and disposed of at a licensed landfill.

The 2014-2019 five-year monthly average flow rates during the peak summer season ranged from 0.018 MGD in July to 0.013 MGD in September. For the nonpeak season, including wet weather, the January flow rates ranged from 0.012 MGD in November to 0.016 MGD. The RWD states that the WWTP does not experience significant inflow and infiltration due to improvements and repairs that have been completed by the Discharger.

WDRs Order 95-175 contains a flow limit of 0.1 MGD as a monthly average weather discharge flow. The Discharger states that flow rates are much less than the permitted flow rate. Based on a water balance submitted in the RWD amendment, the Discharger requested to reduce the flow limit to 0.032 MGD. Therefore, this NOA contains a flow limit of 0.032 MGD as an influent average dry weather flow.

Based on the data collected from January 2014 through December 2019, the influent had an average BOD₅ of 181 mg/L. Effluent quality is summarized below.

Constitute	2014-2019 Effluent Average Concentration (mg/L)
BOD ₅	16
TDS	687
Nitrate as Nitrogen	0.27

Although the Recreation Area has a RV park, the capacity is only six units and the RV waste stream is minimal compared to domestic wastewater from the use of core facilities, including the mobile home parks. Historical analytical data show that formaldehyde and phenols were below the respective detection limits. Zinc was detected at low levels.

GROUNDWATER CONCERNS

Monitoring wells MW-1 through MW-9 were installed in October 2003 as showed on Attachment B. Groundwater data was collected quarterly from October 2003 through November 2011. After a revised MRP was issued on 8 November 2011, groundwater has since been monitored semi-annually. Based on data collected from October 2003 through December 2019, groundwater is shallow, with water depths ranged from 4 to 26 feet below ground surface. The general horizontal groundwater flow directions are southwest to southeast, however it is to the north near Pond 6. Based on historical groundwater elevation data, monitoring wells MW-2 and MW-3 are up-gradient wells and the rest of seven wells are down-gradient wells. Since July 2014, monitoring well MW-3 has been dry occasionally or groundwater levels in the well were too low to obtain representative groundwater quality samples. The Discharger has planned to install a deeper well to replace MW-3. In January 2015, down-gradient monitoring well MW-5 was reported to be filled with roots. EBMUD staff also reported that this well similarly had roots in it several years ago. Although the roots had been cleared in early 2016, roots were again found in the well in the second semi-annual 2018 and first semiannual 2019 events. Given the history of roots in the well and concerns about recent water quality results, the Discharger plans to install a potential replacement well for MW-5.

The following table summarized groundwater quality based on monitoring data collected from October 2003 through December 2019 for the seven monitoring wells listed below. Monitoring data for Wells MW-3 and MW-5 are not included in the table due to their abnormal conditions.

	TDS	Nitrate as	Sodium	Chloride	Iron	Manganese
Wells	(mg/L)	N (mg/L)	(mg/L)	(mg/L)	(µg/L)	(µg/L)
MW-2	302	12	16	8.7	4,862	234
MW-1	533	12	42	68	17,793	526
MW-4	454	0.5	48	40	1,091	3,638
MW-6	376	8.4	19	57	4,141	103
MW-7	269	4.1	28	24	12,149	181
MW-8	401	7.4	45	42	16,447	472
MW-9	322	2.6	29	30	4,792	250

Average TDS concentrations in down-gradient wells MW-4, MW-6, MW-7, MW-8 and MW-9 are less than the recommended Secondary MCL of 500 mg/L. Although the average TDS concentration in down-gradient monitoring well MW-1 (TDS 533 mg/L) is slighter higher than the recommended Secondary MCL, TDS trend for MW-1 has declined with an average of 496 mg/L since July 2013. The NOA requires the Discharger continually monitor groundwater to determine degradation for salinity.

Up-gradient monitoring well MW-2 and down-gradient well MW-1 both have average nitrate as nitrogen concentrations of 12 mg/L, which are slighter greater than the Primary MCL of 10 mg/L for nitrate as nitrogen. Average nitrate concentrations in other down-gradient wells are less than the Primary MCL for nitrate as nitrogen. Based on historical effluent data from October 2003 through April 2008, the effluent had an average total nitrogen of 5.5 mg/L with average ammonia concentration of 0.5 mg/L, total kjeldahl nitrogen of 4.7 mg/L, and nitrate as nitrogen of 0.3 mg/L. Since the average effluent total nitrogen concentration is less than the primary MCL of 10 mg/L for nitrate as nitrogen, it is unlikely that the discharge could cause groundwater nitrogen degradation beyond the primary MCL for nitrate as nitrogen. Therefore, the nitrate exceedance in groundwater may be contributed by other sources. Therefore, this NOA does not contain an effluent nitrogen limit.

Average iron concentrations in all monitoring wells exceed the secondary MCL of 300 ug/L for iron. Average manganese concentrations in all monitoring wells also exceed the secondary MCL of 50 ug/L for manganese. It is likely that all high iron and manganese concentrations are present in groundwater naturally.

SITE-SPECIFIC REQUIREMENTS

The Discharger shall comply with all applicable sections in the General Order, including:

- 1. Requirements A. Prohibitions
- 2. Requirements B.1.a.

The Discharger shall comply with the following flow limit:

The influent flow entering the WWTP shall not exceed **0.032 MGD** as an average dry weather flow defined as the total flow for the months of July through September divided by 92 days; and the annual total influent flow shall not exceed **7.2 MG**.

3. Requirements B.1.b. through B.1.I

For Section B.1.I, the Discharger shall comply with the following setback requirements listed in Table 3 of the General Order:

Equipment or Activity	Domestic Well	Flowing Stream	Ephemeral Stream Drainage	Property Line	Lake or Reservoir
Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System	150 ft.	50 ft.	50 ft.	5 ft.	200 ft.
LAA	150 ft.	100 ft.	100 ft.	50 ft.	200 ft.
Impoundment	150 ft.	150 ft.	150 ft.	50 ft.	200 ft.

- 4. Requirements B.5 Pond Systems
- 5. Requirements B.7 Land Application Systems
- 6. Requirements B.8 Sludge/Solids/Biosolids Disposal
- 7. Requirements C. Groundwater and Surface Water Limitations
- 8. Requirements D. Effluent Limitations

D.1.a. Effluent discharged to the storage ponds shall not exceed BOD₅ of 40 mg/L as a monthly average and 80 mg/L as a daily maximum.

9. Provision E.2 and E.3

MONITORING AND REPORTING PROGRAM

Upon activation of this NOA, the Discharger shall comply with MRP WQ 2014-0153-DWQ-R5338, which is incorporated herein.

ENFORCEMENT

Please review this NOA carefully to ensure that it completely and accurately reflects the discharge. Discharge of wastes other than those described in this NOA is prohibited. Prior to allowing changes to the wastewater strength, generation rate, or to the method of waste disposal, you must contact the Central Valley Water Board to determine if submittal of an RWD is required.

The Discharger generates the waste subject to the terms and conditions of WQ 2014-0153- DWQ-R5338 and maintains exclusive control over the discharge. As such, EBMUD is primarily responsible for compliance with this NOA, MRP, and General Order, with all attachments. Failure to comply with the requirements in the General Order or this NOA could result in an enforcement action as authorized by provisions of the California Water Code.

DOCUMENT SUBMITTAL

All monitoring reports and other correspondence should be converted to searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50 MB should be emailed to:

centralvalleysacramento@waterboards.ca.gov.

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or any documentation submitted to the mailing address for this office:

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Facility Name: Camanche North Shore Wastewater Treatment Plant Program: Non-15 Compliance Order: WQ 2014-0153-DWQ-R5338 CIWQS Place ID: CW-212847

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

Central Valley Regional Water Quality Control Board ECM Mailroom 11020 Sun Center Drive, Suite 200 Rancho Cordova, CA 95670

Now that the Notice of Applicability has been issued, the Board's Compliance and Enforcement section will take over management of your case. Kenny Croyle is your new point of contact for any questions about the General Order. If you find it necessary to make a change to your permitted operations, Kenny will direct you to the appropriate Permitting staff. You may contact Kenny at (916) 464-4676 or at <u>kcroyle@waterboards.ca.gov</u>.

Patrick Pulupa <u>Pulupa</u> Digitally signed by Patrick Pulupa Date: 2020.06.12 10:38:13 <u>Water B07'00'</u> PATRICK PULUPA. Executive Officer

Enclosures: Water Quality Order WQ 2014-0153-DWQ Monitoring and Reporting Program WQ 2014-0153-DWQ-R5338 Attachment A, Site Location Map Attachment B, Site Plan Attachment C, Process Schematic

cc w/out enc: Michael Israel, Amador County Environmental Health Department



ATTACHMENT A

WQ 2014-0153-DWQ-R5338

WQ 2014-0153-DWQ-R5338

ATTACHMENT B



