

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2019-0078
AMENDING WASTE DISCHARGE REQUIREMENTS
ORDER R5-2016-0045-01 (NPDES PERMIT CA0085146)

BEAR VALLEY WATER DISTRICT
BEAR VALLEY WASTEWATER TREATMENT FACILITY
ALPINE COUNTY

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

1. On 7 April 2017, the Central Valley Water Board adopted Waste Discharge Requirements Order (WDR) R5-2016-0045-01, amending NPDES Permit CA0085146, which prescribes waste discharge requirements for the Bear Valley Water District Wastewater Treatment Facility, Alpine County. For the purposes of this Order, Bear Valley Water District is hereafter referred to as “Discharger” and the Wastewater Treatment Facility is hereafter referred to as “Facility.”
2. The Discharger owns and operates the Facility. The treatment system consists of a comminutor; biological treatment in a 14.18 million-gallon aeration pond; disinfection in a 12,000-gallon chlorine contact tank; and effluent storage and polishing in a 76.4 million-gallon unlined storage/polishing reservoir. The Facility has a design treatment capacity of 0.50 million gallons per day (MGD).
3. Order R5-2016-0045-01 (NPDES Permit) authorizes the seasonal (1 January through 30 June) maximum daily surface water discharge of up to 2.5 MGD and an average monthly surface water discharge of 1.0 MGD of disinfected secondary treated wastewater to Bloods Creek, a water of the United States and a tributary to the North Fork Stanislaus River. The Discharger is also authorized by WDR Order 5-01-208 to dispose of disinfected secondary treated wastewater via spray irrigation on an approximately 80 acres of leased land adjacent to the Facility.
4. Per the NPDES Permit requirements, discharges to Bloods Creek may only occur during the discharge season (January–June) and when there is 20:1 flow ratio in the receiving water (Bloods Creek flow:Effluent flow).
5. The NPDES Permit requires effluent sampling twice a week for biochemical oxygen demand (BOD₅), total suspended solids (TSS), ammonia nitrogen, electrical conductivity (EC), settleable solids, temperature, total coliform organisms, and turbidity, when discharging to Bloods Creek. Collecting effluent

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samples twice a week during those months when an effluent discharge may occur can be difficult due to heavy snowfall conditions resulting in limited access to the effluent sample location and trouble locating the sample location.

Additionally, transporting samples to an ELAP-certified lab at a twice-a-week frequency in heavy snowfall conditions can be hazardous, expensive, and puts the sample at risk for exceeding hold times.

6. The NPDES Permit also requires receiving water sampling for pH, dissolved oxygen, EC, temperature, turbidity, and hardness during May and once during June, regardless of whether a discharge is occurring to Bloods Creek. Bloods Creek is an ephemeral stream and during May and June, there can be little to no flow present. When there is not enough flow for a discharge to occur, receiving water quality can vary greatly from the quality when the creek is flowing with 20:1 snowmelt. Monitoring when no discharge is occurring does not accurately represent the impact of the effluent on the receiving water.
7. By letter dated 30 August 2018, the Discharger requested to reduce effluent monitoring of BOD₅, TSS, ammonia nitrogen, EC, settleable solids, temperature, total coliform organisms, and turbidity from 2/week to 1/week. The Discharger also requested that the requirement to sample Bloods Creek for pH, dissolved oxygen, EC, temperature, turbidity, and hardness in May and June when a discharge is not occurring be removed.
8. Consistent with the federal regulations (40 CFR Part 122(j)(1)), reducing sampling frequency to once per week justifies collection of representative effluent data and is sufficient to evaluate compliance with effluent limits. Effluent is discharged from a large storage/polishing reservoir so there is very low variability in the effluent quality on a day-to-day basis. Similarly, requiring receiving water monitoring only when discharge is occurring is sufficient to assess compliance with receiving water limitations and the impacts of the discharge on the receiving stream. In addition, sufficient receiving water data exists for Central Valley Regional Board staff to determine reasonable potential for the permit renewal. Therefore, this Order modifies the effluent monitoring frequency and receiving water monitoring requirements, as shown in Attachment A.
9. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) ("CEQA") pursuant to Water Code section 13389, since the adoption or modification of a NPDES permit for an existing source is statutorily exempt and this Order only serves to modify a NPDES permit (*Pacific Water Conditioning Ass'n, Inc. v. City Council of City of Riverside* (1977) 73 Cal.App.3d 546, 555-556.).

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10. The Central Valley Water Board has notified the Discharger and interested agencies and persons of its intent to amend WDR Order R5-2016-0045-01 for this discharge and has provided them with an opportunity to submit written comments.

IT IS HEREBY ORDERED THAT:

Waste Discharge Requirements Order R5-2016-0045-01 (NPDES Permit CA0085146) is amended to 1) reduce effluent monitoring to weekly for BOD₅, TSS, ammonia nitrogen, EC, settleable solids, temperature, total coliform organisms, and turbidity, when discharging to Bloods Creek; and 2) require receiving water monitoring only when discharging to Bloods Creek.

Effective immediately upon adoption, Order R5-2016-0045-01 is amended as shown in underline/strikeout format in items 1 through 6 below.

- 1. Title Page.** Update information found in the title page of the NPDES Permit to reflect the new order number (changing from R5-2016-0045-01 to R5-2016-0045-02), delete previous amending order number R5-2017-0041, add new amending order number R5-2019-0078 and adoption date of new amending order (5 December 2019), and new Executive Officer (changing from Pamela Creedon to Patrick Pulupa).

<p>CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION</p> <p>11020 Sun Center Drive, #200 Rancho Cordova, California 95670-6114 Phone (916) 464-3291 • Fax (916) 464-4645 http://www.waterboards.ca.gov/centralvalley</p> <p>ORDER R5-2016-0045-021 AS AMENDED BY ORDER R5-2017-0041 NPDES NO. CA0085146</p> <p>WASTE DISCHARGE REQUIREMENTS FOR THE BEAR VALLEY WATER DISTRICT BEAR VALLEY WASTEWATER TREATMENT FACILITY ALPINE COUNTY</p>

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I, ~~Patrick Pulupa~~ PAMELA C. CREEDON, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on **24 June 2016**, ~~and~~ amended by Order R5-2017-0041 on **7 April 2017**, and amended by Order R5-2019-0078 on 5 December 2019.

PAMELA C. CREEDON PATRICK PULUPA, Executive Officer

2. **Order Number.** Change the Order number throughout to R5-2016-0045-02.
3. **Attachment E, Table E-3, Effluent Monitoring.** Change minimum sampling frequency to once per week for BOD₅, TSS, ammonia nitrogen, EC, settleable solids, temperature, total coliform organisms, and turbidity.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Meter	Continuous	--
Dilution Ratio	--	Calculated ⁸	1/Day ⁹	--
Conventional Pollutants				
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	Grab	<u>12/Week</u>	1
	lbs/day	Calculate	<u>12/Week</u>	--
pH	standard units	Meter	Continuous ²	1
Total Suspended Solids	mg/L	Grab	<u>12/Week</u>	1
	lbs/day	Calculate	<u>12/Week</u>	--
Priority Pollutants				
Copper, Total Recoverable	µg/L	Grab	1/Month	1,3
Lead, Total Recoverable	µg/L	Grab	1/Month	1,3
Non-Conventional Pollutants				
Aluminum, Total Recoverable	µg/L	Grab	1/Month	1
Ammonia Nitrogen, Total (as N)	mg/L	Grab	<u>12/Week</u> ⁴	1
	lbs/day	Calculate	<u>12/Week</u>	--
Chlorine, Total Residual	mg/L	Meter	Continuous	1,5
Electrical Conductivity @ 25°C	µmhos/cm	Grab	<u>12/Week</u>	1
Iron, Total Recoverable	µg/L	Grab	1/Month	1
Manganese, Total Recoverable	µg/L	Grab	1/Month	1
Hardness, Total (as CaCO ₃)	mg/L	Grab	1/Month ⁶	1
Nitrate Plus Nitrite (as N)	mg/L	Grab	1/Month	1
Settleable Solids	ml/L	Grab	<u>12/Week</u>	1
Temperature	°C	Grab	<u>12/Week</u> ^{2,7}	1
Total Coliform Organisms	MPN/100 mL	Grab	<u>12/Week</u>	1, 10
Turbidity	NTU	Grab	<u>12/Week</u>	1

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4. Attachment E, Table E-7, Receiving Water Monitoring. Remove footnote 2 from table and provide clarifying language to footnotes requiring effluent ammonia and metals sampling.

Table E-7. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Meter	Continuous ¹	--
Conventional Pollutants				
pH	standard units	Grab	1/Week ^{2,3}	3,4,5
Non-Conventional Pollutants				
Dissolved Oxygen	mg/L	Grab	1/Week ²	3,4,5
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Week ²	3,4,5
Hardness, Total (as CaCO ₃)	mg/L	Grab	1/Month ^{2,65}	34
Temperature	°C	Grab	1/Week ^{2,3}	3,4,5
Turbidity	NTU	Grab	1/Week ²	3,4,5

¹ Monitoring only required upstream of the discharge.

² ~~In addition to the monitoring required during discharge events, monitoring for dissolved oxygen, electrical conductivity, pH, temperature, turbidity, and hardness shall be conducted once during the month of May and once during the month of June each discharge season, regardless if a discharge is occurring to Bloods Creek. If monitoring occurs during May and/or June for these constituents during discharge events, this additional monitoring is not required for the month(s) that monitoring occurred. If an effluent discharge is not occurring at the time of sampling, the analytical data shall not be used for determining compliance with receiving water limitations.~~

³ pH and temperature shall be recorded at the time of effluent ammonia sample collection.

⁴ Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

⁵ A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

⁶⁵ Hardness samples shall be collected concurrently with effluent metals (copper, lead, and aluminum) samples.

5. Attachment F, Section I, Permit Information. Add statement summarizing last two permit amendments.

E. This Order was amended by Order R5-2017-0041 on 7 April 2017 to modify the effluent monitoring location for total coliform, and by Order R5-2019-0078 on 5 December 2019 to 1) reduce the effluent monitoring frequency of BOD₅, TSS, ammonia, electrical conductivity, settleable solids, temperature, total coliform organisms, and turbidity to once per week and 2) require receiving water monitoring only when discharging to Bloods Creek.

6. Attachment F, Section VII.B.1, Rationale for Effluent Monitoring. Update rationale for monitoring and reporting section to update changes to effluent monitoring frequencies.

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B. Effluent Monitoring

1. Pursuant to the requirements of 40 C.F.R. section 122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations, assess the effectiveness of the treatment process, and to assess the impacts of the discharge on the receiving stream and groundwater.

Effluent monitoring frequencies and sample types for flow (continuous), ~~BOD₅ (twice per week)~~, pH (continuous), ~~TSS (twice per week)~~, turbidity (twice per week), copper (monthly), lead (monthly), aluminum (monthly), ~~ammonia (twice per week)~~, chlorine (continuous), ~~electrical conductivity (twice per week)~~, iron (monthly), manganese (monthly), ~~settleable solids (twice per week)~~, ~~total coliform organisms (twice per week)~~, and hardness (once per month), ~~and temperature (twice per week)~~ have been retained from Order R5-2011-0053 to determine compliance with effluent limitations, where applicable, and characterize the effluent for these parameters. Due to limited or difficult access to the effluent sampling location during the discharge season (1 January to 30 June) because of heavy snowfall conditions, this Order was amended by Order R5-2019-0078 on 5 December 2019 to reduce effluent monitoring from twice a week to once a week for BOD₅, TSS, ammonia, electrical conductivity, settleable solids, temperature, total coliform, and turbidity.

7. Attachment F, Section VII.D.1, Rationale for Surface Water Monitoring.

Update rationale for monitoring and reporting section to update changes to receiving water monitoring.

D. Receiving Water Monitoring

1. Surface Water

- a. Receiving water monitoring is necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge on the receiving stream.
- b. Receiving water monitoring requirements at Monitoring Locations RSW-001 and RSW-002 have been retained for flow (continuous), pH (weekly), dissolved oxygen (weekly), electrical conductivity (weekly), hardness (monthly), temperature (weekly), and turbidity (weekly). To assess compliance with receiving water limitations and the impacts of the discharge on the receiving stream, this Order was amended by Order R5-2019-0078 on 5 December 2019 to require receiving water monitoring only when discharge is occurring to Bloods Creek.

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 CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date that this Order becomes final, except that if the thirtieth day following the date that this Order becomes final 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 the

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[Water Quality Petitions webpage:](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

(http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

I, Patrick Pulupa, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on **5 December 2019**.



PATRICK PULUPA, Executive Officer