



### Central Valley Regional Water Quality Control Board

26 May 2023

Francisco Martinez Mettler County Water District 1822 Stevens Dr. Bakersfield, CA 93313 CERTIFIED MAIL 7021 1970 0001 5446 4467

NOTICE OF APPLICABILITY (NOA); CENTRAL VALLEY WATER BOARD RESOLUTION R5-2018-0085; WAIVER OF REPORTS OF WASTE DISCHARGE AND WASTE DISCHARGE REQUIREMENTS FOR SPECIFIC TYPES OF DISCHARGE WITHIN THE CENTRAL VALLEY REGION; METTLER COUNTY WATER DISTRICT; WATER TREATMENT SYSTEM BACKWASH DISCHARGE; KERN COUNTY

On 8 May 2023, Jeane Hill with Provost and Pritchard Consulting Group submitted a Report of Waste Discharge (RWD) on behalf of the Mettler County Water District (hereafter District or Discharger) for coverage under Resolution R5-2018-0085, Approving Waiver of Reports of Waste Discharge and Waste Discharge Requirements for Specific Types of Discharge Within the Central Valley Region (or Low Threat Waiver) for the discharge of backwash water from a granular activated carbon (GAC) treatment system used to remove 1,2,3-trichloropropane (or 1,2,3-TCP).

Based on the information provided in the letter and additional information provided, the discharge meets the required conditions for approval under the Low Threat Waiver. You are hereby assigned enrollee number **R5-2018-0085-0080**. Please include this number in all correspondence related to this discharge. A copy of the Low Threat Waiver is enclosed and available on the Central Valley Water Board's website at (https://www.waterboards.ca.gov/centralvalley/board\_decisions/adopted\_orders/waivers/r5-2018-0085.pdf).

Please familiarize yourself with the contents of the Low Threat Waiver, including the Conditions of Discharge (Attachment A of the Low Threat Waiver). The discharge must be managed in accordance with the requirements contained in the Conditions of Discharge and with the information submitted in the letter and this Notice of Applicability (NOA). The Low Threat Waiver will expire on **7 December 2023.** Prior to this date, the Discharger shall contact the Central Valley Water Board and either cease the discharge or submit a new RWD and application fee (if required) to continue the discharge under a renewed waiver, general order, or individual waste discharge requirements.

In accordance with the requirements in Attachment A of the Low Threat Waiver for filter backwash discharges (Table 1, Category 13), this NOA is accompanied by Monitoring

MARK BRADFORD, CHAIR | PATRICK PULUPA, Esq., EXECUTIVE OFFICER

and Reporting Program (MRP) R5-2018-0085-0080 to ensure compliance with the conditions in the Low Threat Waiver.

#### LOCATION

The Discharger plans to construct and operate a GAC drinking water treatment facility near the intersection of Lupine St. and Camellia Dr. in the unincorporated community of Mettler in Kern County, as shown in **Attachment A** (35.0644°, -118.9724°). This portion of Kern County is in the Tulare Lake Basin. The operative Water Quality Control Plan for the Tulare Lake Basin (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the basin.

#### **DISCHARGE DESCRIPTION**

The District is in the process of constructing a new GAC treatment plant to filter source water produced by Wells #3 and #4 (Drinking Water System CA1500401). The GAC treatment system is being installed to remove 1,2,3-TCP from the drinking water and comply with drinking water standards. Well #3 is approximately 40 feet southwest from the GAC facility, and Well #4 is approximately 500 feet to the east. Water quality information collected between 1995 through 2023 for supply wells #3 and #4 are summarized below.

Table 1 – Well Water Quality (Raw)

Constituent	Units	Well #3 (Min – Max) (# of Samples)	Well #4 (Min – Max) (# of Samples)	MCL
Total Alkalinity as CaCO₃	mg/L	161.3 (111.6-180.0) (6) 160.0 (1)		
1,2,3-TCP	μg/L	0.009 (ND-0.03) (33)	ND (ND-0.01) (30)	0.005
Arsenic	μg/L	2.73 (ND-4.8) (7)	3.0 (1)	10
Barium	μg/L	51.6 (ND-77.0) (7)	75.0 (1)	1,000
Chloride	mg/L	18.3 (14.0-26.6) (6) 26.0 (1)		250-500
Hexavalent Chromium	μg/L	0.36 (1) 0.25 (1)		50
Copper	μg/L	18.3 (ND-110.0) (6)	ND (1)	1,000
Fluoride	μg/L	750 (640-810) (7) 740 (1)		2,000
Iron	μg/L	126 (ND-641) (7) ND (1)		300
Manganese	μg/L	4.3 (ND-26.0) (6)	NI ) (1)	

Constituent	Units	Well #3 (Min – Max) (# of Samples)	Well #4 (Min – Max) (# of Samples)	MCL
Nitrate (as N)	mg/L	1.6 9.0 (0.3-7.7) (24) (5.2-13.0) (24)		10.0
рН	Std. Units	8.0 (7.8-8.2) (7)	7.95 (1)	
Sodium	mg/L	44.0 (39.8-47.0) (6)	52.0 (1)	
Electrical Conductivity	µmhos/cm	482 (470-500) (6)	482 592 (1)	
Sulfate	mg/L	48.2 (44.0-53.0) (6) 76.0 (1)		250-500
Total Dissolved Solids	mg/L	296 (220-350) (6)	370 (1)	500- 1,000
Gross Alpha	pCi/L	6.1 (ND-11.4) (5) 5.5 (1)		15
Radium-226	pCi/L	0.15 (1)		5
Radium-228	pCi/L	0.24 (1)		5
Uranium	pCi/L	5.4 (4.6-6.2) (2)		20

The GAC treatment system will include a total of two GAC vessels operated in series. The GAC vessels are backwashed at a filter loading rate of 13.3 gallons per minute per square foot when carbon is loaded into the system. This ensures that fines and entrapped air is flushed from the system. An estimated volume of 90,000 gallons will be pumped to the backwash pond during the initial carbon loading. An estimated 45,000 gallons per vessel will be directed to the backwash pond when the GAC is replaced. According to the information provided, the GAC vessels will need to be backwashed every one to two years, when the GAC has been exhausted. The duration of the discharge will be approximately 30 minutes per vessel during each discharge event.

Backwashing of the GAC system will be done using water supplied by the distribution system. The quality of the GAC treatment backwash water is projected to be similar to the treated groundwater with the addition of carbon fines flushed from the GAC vessel. Solids accumulation in the onsite backwash pond is expected to be minimal and will primarily consist of NSF-61 carbon fines.

The proposed backwash pond will be unlined and have a storage volume of up to 200,000 gallons with one foot of freeboard. The backwash pond is designed to only receive backwash water. All backwash water will be contained within the pond.

#### **FACILITY SPECIFIC REQUIREMENTS**

The Low Threat Waiver and this NOA covers the discharge of GAC treatment backwash water from Wells #3 and #4 for the Mettler County Water District. The Discharger shall comply with the requirements specified in the Low Threat Waiver and the facility-specific requirements listed below.

- 1. Discharge of filter backwash water shall be conducted as described in the RWD and in accordance with the requirements contained in the Low Threat Waiver.
- 2. Discharge of filtered backwash water at a location or in a manner different from that described in this NOA is prohibited.
- 3. The Discharger shall comply with the attached Monitoring and Reporting Program (MRP) R5-2018-0085-0080.
- Runoff or discharge of filter backwash water to a wetland, surface water (other than the Backwash Pond specified above), surface water drainage course, or biologically or culturally sensitive area is prohibited.
- 5. Failure to comply with the requirements of this NOA, attached MRP R5-2018-0085-0080, and the Low Threat Waiver, could result in enforcement actions as authorized by provisions of the California Water Code.
- The Discharger shall notify the Central Valley Water Board of any change in agreement or proposed use of the discharge of backwash water as described in the letter and this NOA.

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

Facility Name: Mettler County Water District Drinking Water System Backwash

Discharge

**Program:** Non-15

**Resolution:** R5-2018-0085-0080

**CIWQS Place ID:** 888376

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 – Fresno Office 1685 E Street Fresno, CA 93706

All documents, including responses to inspections and written notifications, submitted to comply with this Waiver shall be directed, via the paperless office system, to the

Compliance and Enforcement Unit, attention to Omar Mostafa. Mr. Mostafa can be reached at (559) 445-5197 or <a href="mailto:omar.Mostafa@waterboards.ca.gov">omar.Mostafa@waterboards.ca.gov</a>. Questions regarding permitting aspects of the Waiver, and notification for termination of coverage under the Waiver shall be directed, via the paperless office system, to the Waste Discharge Requirements Permitting Unit, attention Cruz Romero. Mr. Romero can be reached at (559) 445-5036 or by email at <a href="mailto:cruz.Romero@waterboards.ca.gov">cruz.Romero@waterboards.ca.gov</a>.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, 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 Resources Control 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 or provided upon request.

(https://www.waterboards.ca.gov/public\_notices/petitions/water\_quality/).

Original Signed by Scott J. Hatton for: Patrick Pulupa, Executive Officer

Attachments: Attachment A – Site Plan

Enclosures: Low Threat Waiver Resolution R5-2018-0085

MRP R5-2018-0085-0080

#### cc's w/o encl:

- Chris Moskal, State Water Resources Control Board, OCC (via email)
- Tricia Wathen, State Water Resources Control Board, DDW (via email)
- Omar Mostafa, Central Valley Water Board, Fresno (via email)
- Kern County Environmental Health, Bakersfield
- Jeane Hill, Provost and Pritchard, Bakersfield (via email)
- Regina Houchin, Mettler County Water District, Bakersfield (via email)



**ATTACHMENT A - SITE PLAN** 

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

## MONITORING AND REPORTING PROGRAM R5-2018-0085-0080 FOR

# METTLER COUNTY WATER DISTRICT WATER TREATMENT SYSTEM BACKWASH DISCHARGE KERN COUNTY

On 26 May 2023 the Central Valley Regional Water Quality Control Board (Central Valley Water Board) Executive Officer issued Mettler County Water District (District or Discharger) Notice of Applicability (NOA) R5-2018-0085-0080, for coverage under Resolution R5-2018-0085, Approving Waiver of Reports of Waste Discharge and Waste Discharge Requirements for Specific Types of Discharge Within the Central Valley Region (Low Threat Waiver or Waiver). The NOA regulates the discharge of filter backwash to land from backwashing the granular activated carbon (GAC) vessels used in the City's Wells #3 and #4 Water Treatment System for removal of 1,2,3-trichloropropane (1,2,3-TCP). This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until the Central Valley Water Board adopts, or the Executive Officer issues, a revised MRP.

Section 13267, subsection (b)(1) of the California Water Code states:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters 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."

The Discharger owns the water system subject to NOA R5-2018-0085-0080, and the monitoring reports are necessary to ensure the Discharger complies with the NOA and the conditions specified in the Low Threat Waiver. Pursuant to Water Code section 13268, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

Section 13268 of the California Water Code states, in 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 a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying and 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."

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. All flow monitoring systems shall be appropriate for the conveyance system (i.e., open channel flow or pressure pipeline) and liquid type. The measurements may be based on flow meter readings or pump run time estimate. The method of measurement must be specified. 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. The Central Valley Water Board Executive Officer 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 MRP:

Monitoring Location	Monitoring Location Description		
EFF-001	Location where a sample of the backwash water can be collected prior to discharge to the Backwash Pond.		
BWP-001 Backwash Pond where the backwash water is discharged to.			

**Table 2 - Monitoring 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. Field test instruments (such as those used to measure pH, temperature, electrical conductivity, dissolved oxygen, wind speed, and precipitation) may be used provided that:

- A. The operator is trained in proper use and maintenance of the instruments;
- B. The instruments are field calibrated at the frequency recommended by the manufacturer;
- C. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
- D. 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 (US EPA) or the State Water Resources Control Board (State Water Board), Division of Drinking Water's Environmental Laboratory Accreditation Program (ELAP). The Discharger may propose alternative methods for approval by the Executive Officer. Where technically feasible, laboratory reporting limits shall be lower than the applicable water quality objectives for the constituents to be analyzed.

#### II. SPECIFIC MONITORING REQUIREMENTS

#### A. WATER SYSTEM BACKWASH

Monitoring of the backwash water from the Mettler County Water District's Water Treatment System shall consist of the following:

#### **Effluent Monitoring**

The Discharger shall monitor the backwash water discharged to the Backwash Pond. Samples shall be taken of the backwash water at **EFF-001** before it enters the Backwash Pond. At a minimum, effluent monitoring shall consist of the following:

Constituent/ Parameter	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow	Gallons	Meter	Continuous	Annually
рН	Std. Units	Grab	Once/event (see 1 below)	Annually
EC	µmhos/cm	Grab	Once/event (see 1 below)	Annually
TSS	mg/L	Grab	Once/event (see 1 below)	Annually
1,2,3-TCP	μg/L	Grab	Once/event (see 1 below)	Annually
General Minerals	various	Grab	Once/event (see 2 below)	Annually

**Table 3 - Effluent Monitoring (EFF-001)** 

- 1. Samples shall be collected once during each backwash event.
- 2. Samples shall be collected once during the initial backwash event.

#### **B. POND MONITORING**

The Discharger shall inspect the Backwash Pond at **BWP-001** prior to and during each backwash event. The results of the inspection shall be included as part of the annual monitoring report. Basin monitoring shall include the following:

Parameter	Units	Sample Type	Reporting Frequency
Freeboard	Feet	Measurement	Annually
Nuisance Odors or Vectors		Observation	Annually
Berm Condition		Observation	Annually

**Table 4 - Pond Monitoring** 

#### C. SOLIDS DISPOSAL MONITORING

The Discharger shall report the handling and disposal of all solids associated with the water system and discharge of backwash water (e.g., filter material, sludge from the unlined basin, etc.). Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed, the disposal facility name and address, and copies of any analytical data required by the entity accepting the waste. These records shall be

submitted as part of the annual monitoring report.

#### III. REPORTING REQUIREMENTS

All monitoring reports should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50 MB should be emailed to: <a href="mailto:centralvalleyfresno@waterboards.ca.gov">centralvalleyfresno@waterboards.ca.gov</a>. 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 Region 5 – Fresno Office 1685 E St. Fresno, California 93706

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 transmittal sheet:

Facility Name: Mettler County Water District Water Treatment System Backwash

Discharge

Program: Non-15

Resolution: R5-2018-0085-0080

County: Kern

CIWQS Place ID: 888376

A transmittal letter shall accompany each monitoring report. The letter shall include a discussion of all violations of 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. 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, groundwater, 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 shall be included in the monitoring reports. All laboratory reports must also be retained for a minimum of three years. For a discharger conducting any of its own analyses, reports must also be signed and

certified by the chief of the laboratory.

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.

#### A. ANNUAL MONITORING REPORTS

The Annual Monitoring Report shall be submitted to the Central Valley Water Board by February 1st of each year. The report shall bear the certification and signature of the Discharger or his/her authorized representative. At a minimum, the annual report shall include the following information.

- Results of all required monitoring data shall be presented in tabular format. If no discharge occurred during the calendar year the annual report shall so state.
- Copies of all laboratory analytical report(s) and chain of custody form(s) for inhouse and contracted laboratory analyses.
- The names and contact information for the operator(s) responsible for operation, maintenance, and monitoring of the treatment system and discharge of filter backwash water.
- 4. A discussion and summary of the compliance record for the reporting period identifying all corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or Low Threat Waiver.
- 5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this MRP, 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 Resources Control Board by 5:00 p.m. on the next

business day. <u>Copies of the law and regulations applicable to filing petitions</u> may be found on the internet:

(https://www.waterboards.ca.gov/public\_notices/petitions/water\_quality/) or will be provided on request.

The Discharger shall begin implementing the above monitoring program the date of this MRP.

Ordered by:	Original Signed by Scott J. Hatton for:
	PATRICK PULUPA, Executive Officer
	5/26/2023
	(Date)

#### **GLOSSARY**

1,2,3-TCP 1,2,3-trichloropropane

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

CaCO<sub>3</sub> Calcium Carbonate

DO Dissolved Oxygen

EC Electrical Conductivity at 25°C

FDS Fixed dissolved solids
TDS Total dissolved solids
TKN Total kjeldahl nitrogen
TSS Total suspended solids

Continuous The specified parameter shall be metered 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

Once/3 Years Samples shall be collected at least once every three years.

Daily Every Day.

Monthly Once per calendar month.

Quarterly Once per calendar quarter (i.e., January – March).

Semi-Annually

Twice per year. Semi-annual samples shall be collected in the second

and fourth quarters (i.e, April – June and October – December).

Annually Once per year.

mg/L Milligrams per liter

mg/kg Milligrams per kilogram

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

Analysis shall include; alkalinity (as CaCO<sub>3</sub>), bicarbonate (as CaCO<sub>3</sub>),

boron, calcium, carbonate (as CaCO<sub>3</sub>), chloride, iron, magnesium,

General Minerals manganese, nitrate (as N), phosphate, potassium, sodium, sulfate,

and verification that the analysis is complete (i.e., cation/anion

balance).