



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

11 October 2017

John Mackenzie
Environmental Manager
7906 Razor Drive
Frisco, TX 75034

CERTIFIED MAIL
7017 1450 0000 8128 2286

NOTICE OF APPLICABILITY (NOA); LIMITED THREAT GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2016-0076; THE VENDO COMPANY, GROUNDWATER REMEDIATION SYSTEM, FRESNO COUNTY

Our office received a Notice of Intent (NOI) application on 25 May 2017 from the Vendo Company (hereinafter Discharger), for discharge of treated groundwater to surface water at its Pinedale Phase III Groundwater Remediation System (hereinafter Facility), a groundwater extraction and treatment facility. Additional monitoring information was later submitted to the Central Valley Regional Water Quality Control Board (Central Valley Water Board), and the application was deemed complete on 10 July 2017. Based on the application packet and subsequent information submitted by the Discharger, the Facility meets the required conditions for approval under the General Order for Limited Threat Discharges to Surface Water (Limited Threat General Order), as a Tier 2 discharge. This Facility is hereby assigned Limited Threat General Order R5-2016-0076-021 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG995002. Please reference your Limited Threat General Order number, **R5-2016-0076-021**, in your correspondence and submitted documents.

Discharges to surface water from the Facility are regulated by an individual NPDES permit, Order R5-2013-0018 (NPDES No. CA0083046) issued by the Central Valley Water Board on 11 April 2013. This NOA providing coverage under the Limited Threat General Order shall become effective on **20 October 2017**, when the existing individual NPDES permit for the Facility, Order R5-2013-0018, is scheduled for rescission by a separate action of the Central Valley Water Board at its regularly scheduled Board meeting.

The enclosed Limited Threat General Order may also be viewed at the following web address: http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076_mod.pdf. You are urged to familiarize yourself with the contents of the entire document. The Limited Threat General Order prescribes mandatory discharge monitoring and reporting requirements. The project activities shall be operated in accordance with the requirements contained in this NOA and the Limited Threat General Order.

PROJECT DESCRIPTION

The Discharger is the owner and operator of the Facility, a groundwater extraction and treatment system that is addressing impacts of a variety of industries, including the manufacturing of mattresses, military hardware, airplane parts, mainframe computers, and automatic teller machines. Groundwater in the vicinity has been polluted by metals and volatile organic compounds (VOCs). The Facility is part of a larger groundwater remediation project in north Fresno. Beginning 1999,

portions of the system were installed for use in the interim groundwater treatment system. The remainder of the system was completed in January 2005.

Two groundwater extraction wells, E-1B and E-2B, were utilized in the treatment system, until July 2006 when extraction well E-1B was removed from service due to decreased groundwater elevations. Since then, the system has only treated groundwater extracted from well E-2B. The treatment system currently consists of two 20,000-pound granulated activated carbon (GAC) vessels, operated in series. Extracted groundwater passes through the GAC units, where constituents of concern are adsorbed. The treated groundwater is sent to Fresno Irrigation District's Bullard Canal. Bullard Canal is hydraulically connected to the San Joaquin River, a water of the United States. See enclosed project map. The maximum daily average flow through the Facility is 1.44 million gallons per day (MGD). In July 2015 the pump in extraction well E-2B failed. Beginning July 2015, the system ceased operation in order to explore the possibility of shutting down the Facility. The Discharger has not yet finalized the future plans for the Facility. In the event startup is required, the system is estimated to begin operations again in early 2018 after implementing repairs.

CALIFORNIA TOXICS RULE / STATE IMPLEMENTATION POLICY MONITORING

The Limited Threat General Order incorporates the requirements of the California Toxics Rule (CTR) and the State Water Resources Control Board's (State Water Board), *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, 2005, also known as the State Implementation Policy (SIP). Screening levels for CTR constituents and other constituents of concern are found in Attachment I of the Limited Threat General Order. The Discharger has an established treatment system with years of effluent and receiving water data. Therefore, these data have been used for comparison to the screening levels. Review of your water quality data in comparison to the screening values showed reasonable potential for the discharge to cause or contribute to exceedances of water quality objectives for copper and zinc in Bullard Canal. Water Quality-Based Effluent Limitations have been established for copper and zinc based on the discharge's reasonable potential to exceed water quality standards. Additionally, the influent is routinely monitored for VOCs listed in Table 2a of the SIP. The Discharger's monitoring data have shown the system's ability to consistently reduce VOC concentrations below the detection limits. Technology-Based Effluent Limitations have been established for 1,1-Dichloroethane, 1,1-Dichloroethylene, cis-1,2-Dichloroethylene, Tetrachloroethylene, and Trichloroethylene due to the presence of these constituents in groundwater and based on the expected performance of the treatment technology.

EFFLUENT LIMITATIONS

Effluent limitations are specified in Section V. Effluent Limitations and Discharge Specifications of the Limited Threat General Order. The following effluent limitations are applicable to this discharge and are contained in Section V.A and V.B of the Limited Threat General Order:

Table 1. Effluent Limitations

Parameter	Units	Effluent Limitations		Section Reference
		Average Monthly	Maximum Daily	
Copper	µg/L	6.6	13	V.A.1.g
Zinc	µg/L	55	110	V.A.1.g
1,1-Dichloroethane	µg/L	--	0.5	V.B.2
1,1-Dichloroethylene	µg/L	--	0.5	V.B.2

Parameter	Units	Effluent Limitations		Section Reference
		Average Monthly	Maximum Daily	
cis-1,2-Dichloroethylene	µg/L	--	0.5	V.B.2
Tetrachloroethylene	µg/L	--	0.5	V.B.2
Trichloroethylene	µg/L	--	0.5	V.B.2

1. **Flow (Section V.A.1.a).** The maximum daily discharge flow shall not exceed 1.44 million gallons per day.
2. **pH (Section V.A.1.b.i).** The pH of all limited threat dischargers within the Sacramento and San Joaquin River basins (except Goose Lake) shall at all times be within the range of 6.5 to 8.5.
3. **Whole Effluent Toxicity, Chronic (Section V.A.2.a).** There shall be no chronic toxicity in the discharge.
4. **Whole Effluent Toxicity, Acute (Section V.A.3.a).** Survival of aquatic organisms in 96-hour bioassays of undiluted waste for all limited threat discharges shall be no less than:
 - i. 70%, minimum for any one bioassay; and
 - ii. 90%, median for any three consecutive bioassays.

The receiving water, Bullard Canal, is not listed under the Clean Water Act 303(d) List of impaired water bodies. No additional 303(d) based effluent limitations or monitoring requirements will be added to this Limited Threat General Order.

MONITORING AND REPORTING

Monitoring and reporting requirements are contained in Attachment C of the Limited Threat General Order. The Discharger is required to comply with the following specific monitoring and reporting requirements in accordance with Attachment C of the Limited Threat General Order.

Monitoring Locations – The Discharger shall monitor the effluent and the receiving water at the specified locations as follows:

Table 2. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	A location where a representative sample of the effluent can be collected prior to discharging Bullard Canal.
--	RSW-001U	In Bullard Canal, approximately 200 feet upstream of Discharge Point 001.
--	RSW-001D	In Bullard Canal, approximately 1,500 feet downstream of Discharge Point 001 at the northeast corner of Palm and Herndon Avenues.

Effluent Monitoring – When discharging to Bullard Canal, the Discharger shall monitor the effluent at EFF-001 as follows:

Table 3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Meter	Continuous	
pH	standard units	Grab	1/Month	1,2
Temperature	°F	Grab	1/Month	1,2
Electrical Conductivity @ 25 °C	µmhos/cm	Grab	1/Quarter	1,2
Copper, Total Recoverable	µg/L	Grab	1/Quarter	2,3
Zinc, Total Recoverable	µg/L	Grab	1/Quarter	2,3
Volatile Organic Compounds ⁴	µg/L	Grab	1/Quarter	2,3
Hardness, Total (as CaCO ₃)	mg/L	Grab	2/Year ⁵	2
Standard Minerals ⁶	mg/L	Grab	1/Year	2
Acute Toxicity	% survival	Grab	1/Year	2,7,8
Chronic Toxicity	TUc	Grab	1/Year	2,7

¹ A hand-held field meter may be used, provided the meter utilizes a USEPA-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.

² Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

³ For priority pollutant constituents the reporting level shall be consistent with Sections 2.4.2 and 2.4.3 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California.

⁴ Volatile Organic Compounds shall include the following: 1,1-Dichloroethane, 1,1-Dichloroethene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,2-dichloroethene (cis and trans), 1,3-Dichlorobenzene, 1,3-Dichloropropene, 1,4-Dichlorobenzene, Acrolein, Acrylonitrile, Benzene, Bromoform, Bromomethane, Carbon Tetrachloride, Chlorobenzene, Chlorodibromomethane, Chloroethane, Chloroform, Chloromethane, Dichloromethane, Dichlorobromomethane, Ethylbenzene, Tetrachloroethylene, Toluene, Trichloroethylene, and Vinyl Chloride.

⁵ Monitoring for hardness shall be performed concurrently with effluent sampling for copper and zinc.

⁶ Standard Minerals shall include the following: boron, calcium, iron, magnesium, potassium, sodium, chloride, manganese, phosphorus, total alkalinity (including alkalinity series), and hardness, and include verification that the analysis is complete (i.e., cation/anion balance).

⁷ See the Limited Threat General Order MRP (Attachment C, section V) for toxicity monitoring requirements.

⁸ The test species for acute toxicity testing shall be fathead minnows (*Pimephales promelas*).

Receiving Water Monitoring – When discharging to Bullard Canal, the Discharger shall monitor the receiving water at RSW-001U and RSW-001D as follows:

Table 4. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	standard units	Grab	1/Quarter	1,2
Temperature	°F	Grab	1/Quarter	1,2
Dissolved Oxygen	mg/L	Grab	1/Quarter	1,2
Turbidity	NTU	Grab	1/Quarter	1,2
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Quarter	1,2

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Hardness, Total (as CaCO ₃)	mg/L	Grab	1/Quarter	1,2

- ¹ A hand-held field meter may be used, provided the meter utilizes a USEPA-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.
- ² Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

In conducting receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by RSW-001U and RSW-001D. Attention shall be given to the presence or absence of:

- a. Floating or suspended matter
- b. Discoloration
- c. Bottom deposits
- d. Aquatic Life
- e. Visible films, sheens, or coatings
- f. Fungi, slimes, or objectionable growths
- g. Potential nuisance conditions

Notes on receiving water conditions shall be summarized in the monitoring reports.

Monitoring Report Submittals - Monitoring in accordance with the Limited Threat General Order shall begin on initiation of discharge. Self-Monitoring Reports (SMRs) shall be submitted to the Central Valley Water Board on a quarterly basis, beginning with the **Fourth Quarter 2017**. This report shall be submitted on **1 February 2018**. If no discharge occurs during the quarter, the monitoring report must be submitted stating that there has been no discharge. Table 5, below, summarizes the monitoring report due dates required under the Limited Threat General Order. Quarterly monitoring reports must be submitted until your coverage is formally terminated in accordance with the Limited Threat General Order, even if there is no discharge during the reporting quarter.

Table 5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	Quarterly Report Due Date
Continuous	NOA Effective Date	All	1 May 1 August 1 November 1 February, of the following year
1/Month	First day of calendar month following NOA effective date or on NOA effective date if that date is the first day of the month	1 st day of calendar month through last day of calendar month	1 May 1 August 1 November 1 February, of the following year
1/Quarter	Closest of 1 January, 1 April, 1 July, or 1 October following NOA effective date	1 January through 31 March 1 April through 30 June 1 July through 30 September 1 October through 31 December	1 May 1 August 1 November 1 February, of the following year

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	Quarterly Report Due Date
2/Year	1 January or 1 July following (or on) NOA effective date	1 January through 30 June 1 July through 31 December	1 August 1 February, of the following year
1/Year	1 January following (or on) NOA effective date	1 January through 31 December	1 February, of the following year

The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website http://www.waterboards.ca.gov/water_issues/programs/ciwqs/. The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.

TOXICITY REDUCTION EVALUATION REQUIREMENTS

For compliance with the Basin Plan's narrative toxicity objective, the Limited Threat General Order requires all Dischargers of Tier 2 and Tier 3 discharges to conduct chronic whole effluent toxicity (WET) testing, as specified in the Monitoring and Reporting Program (Attachment C, section V). Furthermore, the Toxicity Reduction Evaluation Requirements provision (Section IX.C.2.a) requires the Discharger to investigate the causes of, and identify corrective actions to reduce or eliminate effluent toxicity. The Provision includes a numeric monitoring trigger and accelerated monitoring specifications. This NOA includes a site-specific numeric toxicity monitoring trigger as shown below:

Numeric Toxicity Monitoring Trigger – The numeric toxicity monitoring trigger to initiate accelerated monitoring is >1 TUc (where TUc = 100/NOEC) for all chronic toxicity end points. The monitoring trigger is not an effluent limitation; it is the toxicity threshold at which the Discharge is required to begin the accelerated monitoring, as specified in Section IX.C.2.a.ii.

EFFLUENT CHARACTERIZATION MONITORING

The Limited Threat General Order requires effluent characterization monitoring every 5 years from the effective date of the NOA. Effluent samples shall be collected at monitoring location EFF-001 and analyzed for the constituents specified in Table I-1 of Attachment I of the Limited Threat General Order, with results submitted to the Central Valley Water Board by **20 October 2022**. In accordance with Table I-1, the Discharger shall monitor for constituents for Tier 2 discharges of groundwater (not related to mines).

SATISFACTION OF ANTI-BACKSLIDING REQUIREMENTS

The effluent limitations in this NOA are at least as stringent as the effluent limitations in the previous individual NPDES permit, Order R5-2013-0018, with the exception of limitations for copper and zinc. CTR metals criteria are hardness-based, where higher hardness corresponds to higher water quality criteria. Previous Order R5-2013-0018 included effluent limitations for copper and zinc based on ambient hardness of 57 mg/L. The 57 mg/L hardness measurement was taken more than 10 years ago and is unrepresentative of current discharge conditions. Effluent hardness collected during the recent permit term (beginning 31 May 2013), ranged from 98 to 110 mg/L. Thus, an updated hardness of 98 mg/L was used to determine effluent limitations for copper and zinc in accordance with Table 6C and Table 6G of the Limited Threat General Order. Therefore, less stringent effluent limitations are included in this NOA for copper and zinc.

The less stringent requirements for copper and zinc are consistent with the federal anti-backsliding regulations of the Clean Water Act (CWA). CWA section 402(o)(2) provides several exceptions to the prohibition against backsliding. CWA 402(o)(2)(B)(i) allows a renewed, reissued, or modified permit to contain a less stringent effluent limitation for a pollutant if information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance. The new data indicate that a higher reasonable worst-case hardness value is representative of the discharge conditions, and this new information was not available at the time previous Order R5-2013-0018 was adopted. The adjustment of the effluent limits is also consistent with the antidegradation provisions of 40 CFR 131.12. Thus, relaxing the effluent limitations for copper and zinc from Order R5-2013-0018 also meets the anti-backsliding exception in CWA section 303(d)(4)(B). Any impact on existing water quality will be insignificant.

GENERAL INFORMATION AND REQUIREMENTS

The Discharger must notify Central Valley Water Board staff within 24 hours of 1) the start of the discharge, and 2) having knowledge of noncompliance. The Central Valley Water Board shall be notified immediately if any effluent limit violation is observed during implementation of the project.

Discharge of material other than what is described in the application is prohibited. The required annual fee (as specified in the annual billing you will receive from the State Water Resources Control Board) shall be submitted until this NOA is officially terminated. You must notify this office in writing when the discharge regulated by the Limited Threat General Order is no longer necessary by submitting the Request for Termination of Coverage (Attachment E of the Limited Threat General Order). If a timely written request is not received, the Discharger will be required to pay additional annual fees as determined by the State Water Resources Control Board.

ENFORCEMENT

Failure to comply with the Limited Threat General Order may result in enforcement actions, which could include civil liability. Effluent limitation violations are subject to a Mandatory Minimum Penalty (MMP) of \$3,000 per violation. In addition, late monitoring reports may be subject to MMPs or discretionary penalties of up to \$1,000 per day late. When discharges do not occur during a quarterly report monitoring period, the Discharger must still submit a quarterly monitoring report indicating that no discharge occurred to avoid being subject to enforcement actions.

COMMUNICATION

The Central Valley Regional Water Quality Control Board has transitioned to a paperless office system, therefore, please convert all documents to a searchable Portable Document Format (pdf) and email them to CentralValleyFresno@waterboards.ca.gov. Please include the following information in the body of the email: Discharger's name, Facility name, County name, CIWQS Place ID 228035, and the Order number R5-2016-0076-021. Documents that are 50 megabytes or larger shall be transferred to a CD, DVD, or flash drive and mailed to our office at 1685 "E" Street, Fresno, California 93706.

All documents, including responses to inspections and written notifications, submitted to comply with this NOA and the Limited Threat General Order shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention Warren Gross. Mr. Gross can be reached at (559) 445-5128 or Warren.Gross@waterboards.ca.gov.

Questions regarding the permitting aspects of the Limited Threat General Order, and notification for termination of coverage under the Limited Threat General Order, shall be directed, via the paperless

John Mackenzie
Environmental Manager
The Vendo Company
Pinedale Phase III Groundwater Remediation System

11 October 2017

office system, to the NPDES Permitting Unit, attention Nicolette Dentoni. Ms. Dentoni can also be reached at (559) 444-2505 or Nicolette.Dentoni@waterboards.ca.gov.

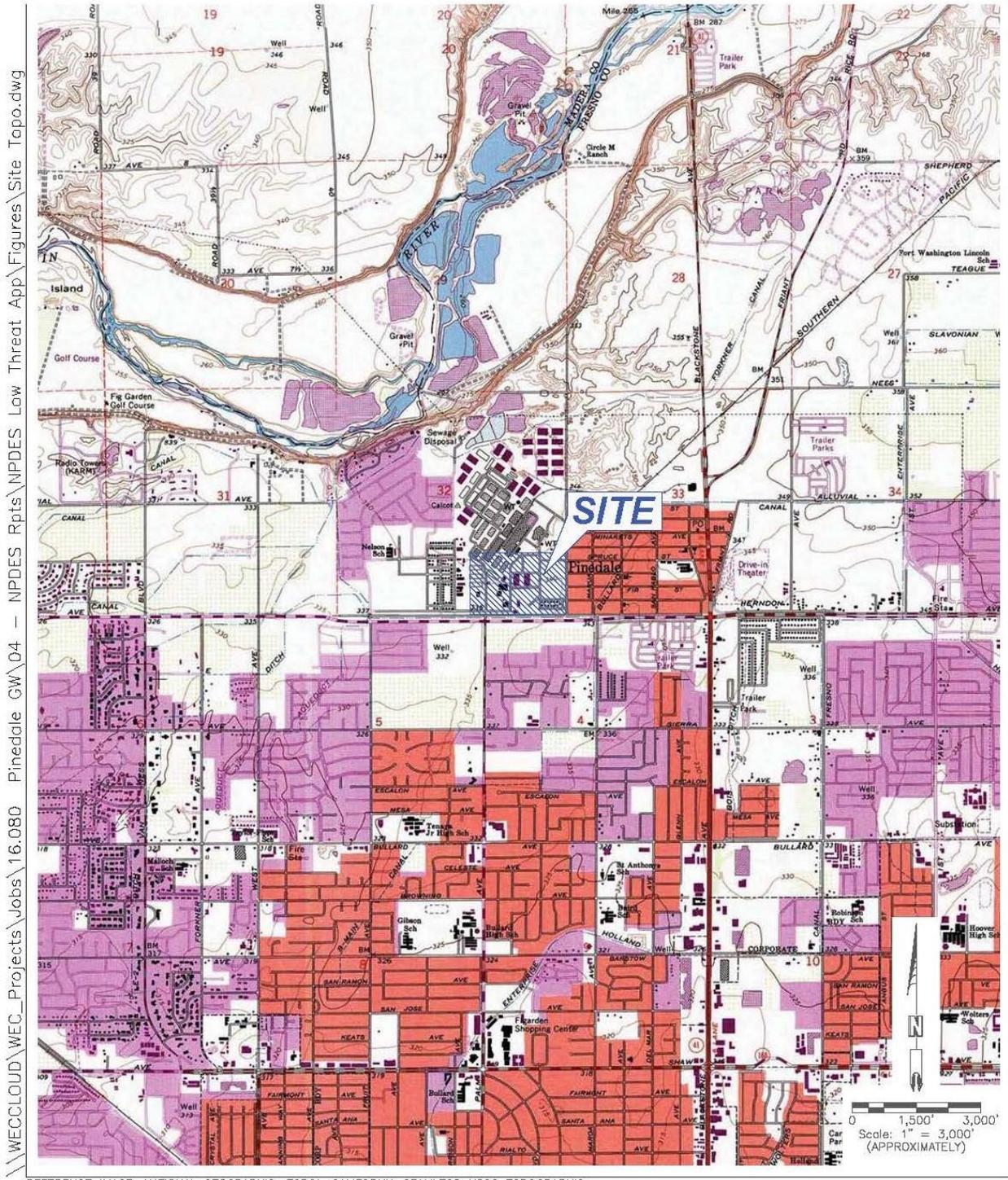
Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Resources Control 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 at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.



for Pamela C. Creedon
Executive Officer

Enclosures: Enclosure A, Project Maps
Limited Threat General Order R5-2016-0076 (Discharger only)

cc: David Smith, U.S. EPA, Region IX, San Francisco (via email)
Division of Water Quality, State Water Board, Sacramento (via email)
Department of Toxic Substances Control Division, Clovis
Noelle Willbanks, Willbanks Environmental Consulting, Inc. (via email)
Laurence Kimura, Fresno Irrigation District, Fresno

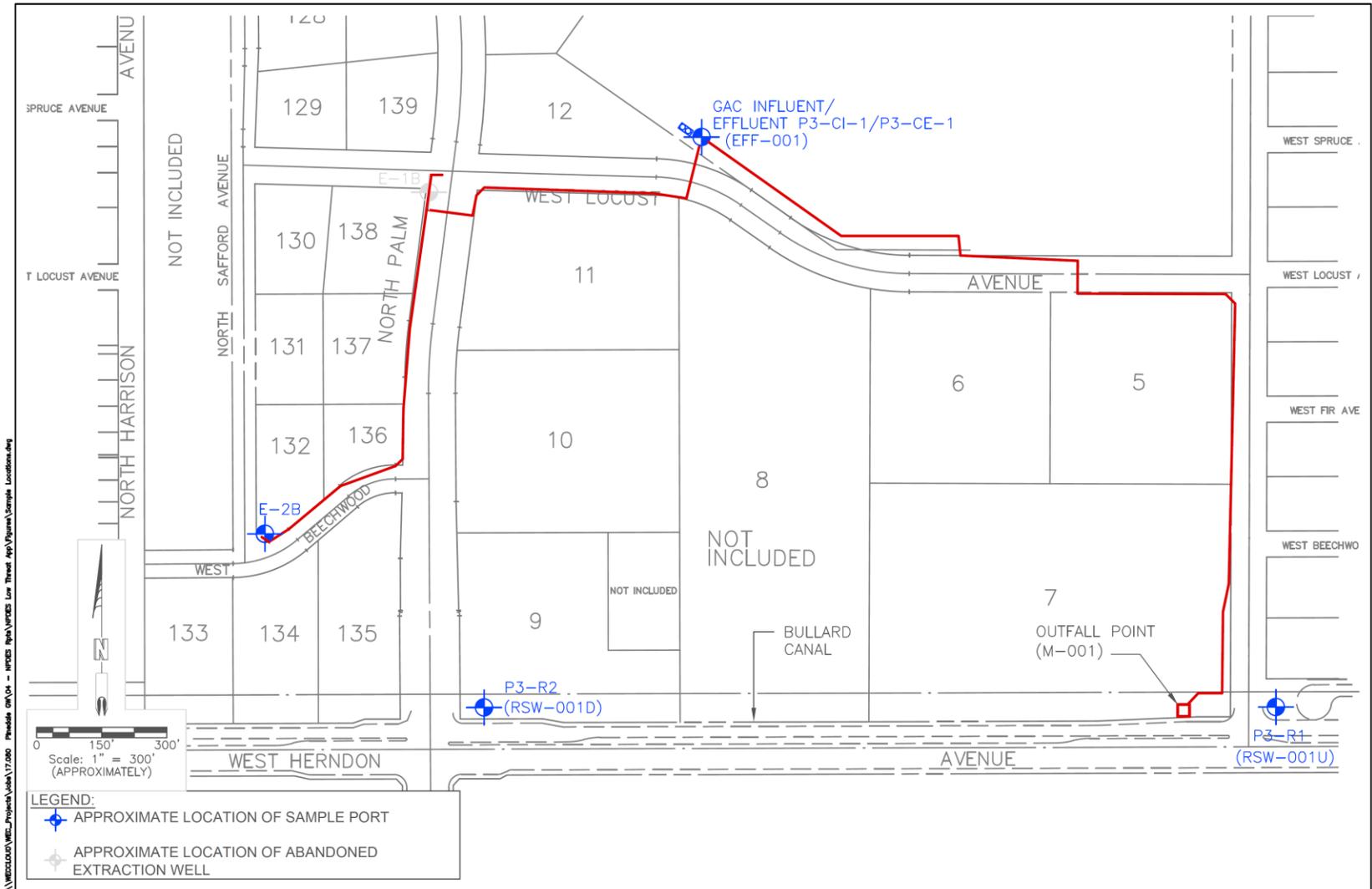


REFERENCE IMAGE: NATIONAL GEOGRAPHIC; TOPOI, CALIFORNIA SEAMLESS USGS TOPOGRAPHIC



VICINITY MAP
 Low Threat NPDES Permit Application
 Pinedale Groundwater Site
 Fresno, California

Enclosure A – Project Maps
 The Vendo Company, Groundwater Remediation System
 R5-2016-0076-021



SAMPLE LOCATIONS
 Low Threat NPDES Permit Application
 Pinedale Groundwater Site
 Fresno, California