



Central Valley Regional Water Quality Control Board

14 May 2024

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NOTICE OF APPLICABILITY (NOA); GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2022-0006-02 FOR LIMITED THREAT DISCHARGES TO SURFACE WATER; RECOLOGY HAY ROAD, BORROW PIT DEWATERING PROJECT, SOLANO COUNTY

Our office received a Notice of Intent (NOI) on 30 December 2022 from Recology Hay Road (hereinafter Discharger), for discharge of groundwater to surface water, for enrollment under the General Order for Limited Threat Discharges to Surface Water (Limited Threat General Order) R5-2022-0006-02. Based on the NOI submitted by the Discharger, staff has determined that the project meets the required conditions for approval under the Limited Threat General Order, as a groundwater source. This project is hereby assigned Limited Threat General Order NOA number R5-2022-0006-032 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG995002. Please reference your Limited Threat General Order NOA number, **R5-2022-0006-032**, in your correspondence and submitted documents.

Discharges to surface waters from the Facility were previously regulated by Limited Threat General Order R5-2016-0076-01, Notice of Applicability (NOA) R5-2016-0076-012. The Limited Threat General Order was renewed in 2022 and amended in 2023, as current Order R5-2022-0006-02. This NOA, authorizing coverage under Limited Threat General Order R5-2022-0006-02, shall become effective on the date of this NOA, and at which time the terms and conditions in NOA R5-2016-0076-012 will cease to be effective except for enforcement purposes. To meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements contained in the Limited Threat General Order R5-2022-0006-02 and as specified in this NOA.

You are urged to familiarize yourself with the entire contents of the enclosed [Limited Threat General Order](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2022-0006-02.pdf) (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2022-0006-02.pdf).

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

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. Review of your water quality data in comparison to the screening values, showed reasonable potential for the discharge to cause or contribute to an exceedance of iron, manganese, and turbidity water quality objectives in the A-1 channel of Alamo Creek, which is a water of the United States. Based on the effluent data it appears that the Discharger can comply with the effluent limits without additional treatment.

PROJECT DESCRIPTION

The Discharger's Recology Hay Road Borrow Pit Dewatering Project (Project) is located in Solano County. The Discharger currently conducts dewatering activities from a soil borrow area (Borrow Pit) located west of the landfill and a French Drain located along the northern boundary of unlined disposal module DM-1 and gravity drains into the Borrow Pit (see Attachment A for Project Maps). Dewatering of the Borrow Pit is necessary to harvest earthen material as landfill cover and for base liner construction. The French drain was constructed in July 2016 consisting of perforated galvanized pipe around the northern boundary of unlined disposal module DM-1 in order to maintain a 5-foot separation between groundwater and the base of waste disposal within module DM-1. This separation is required by Title 27 Waste Discharge Requirements Order R5-2022-0047 (Title 27 WDRs) regulating the landfill.

Dewatered groundwater from the French drain and Borrow Pit via the Borrow Pit is pumped to an onsite storm water channel that drains into a Habitat Preservation Area (Bird Sanctuary Pond) created by the Discharger in order to mitigate landfill impacts on local migratory bird populations. The Bird Sanctuary Pond discharges through a siphon into the A-1 Channel of the Alamo Creek. The A-1 Channel extends under Highway 113 and flows southeast approximately three miles to discharge into Ulatis Creek.

Dewatering is expected to occur throughout the year and flow rates may fluctuate seasonally in both the French drain and Borrow Pit. The maximum daily discharge flow from the combined Borrow Pit and French drain, is approximately 3.0 million gallons per day (MGD). Periodic or seasonal treatment of the discharge water is currently necessary to decrease the pH to within the effluent limitation range, primarily during the summer months. The Discharger sparges carbon dioxide into the water prior to discharge. The combined discharge will continue to need periodic pH treatment.

DISCHARGE PROHIBITIONS

Discharge prohibitions are specified in Section IV Discharge Prohibitions of the Limited Threat General Order. Based on the information provided in the NOI, the following discharge prohibitions are applicable to this discharge:

- Prohibition IV.A
- Prohibition IV.B
- Prohibition IV.C
- Prohibition IV.D. The flow rate shall not exceed 3.0 MGD.

EFFLUENT LIMITATIONS

Effluent limitations are specified in Section V. Effluent Limitations and Discharge Specifications of the Limited Threat General Order. Based on the information provided in the NOI, effluent limitations are only required for the parameter identified in items 1-4, below:

1. **pH (Section V.A.1.b.i).** The pH of all limited threat discharges within the Sacramento and San Joaquin River Basins (except Goose Lake in Modoc County) shall at all times be within the range of 6.5 and 8.5.
2. **Whole Effluent Toxicity, Chronic (Section V.A.2.a).** There shall be no chronic toxicity in the discharge.
3. **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.
4. **Constituents and Parameters of Concern (Section V.A.1.e).** The following constituents and parameters in Table 1 below have been identified as having reasonable potential to cause or contribute to an in-stream excursion from water quality objectives and shall not exceed the effluent limitations as listed.

Table 1. Effluent Limitations for Constituents and Parameters of Concern

Parameter	Units	Average Monthly Effluent Limitations	Maximum Daily Effluent Limitations	Section Reference
Iron, Total	µg/L	470	930	V.A.1.e
Manganese, Total	µg/L	80	160	V.A.1.e

The Receiving Water is not listed under the Clean Water Act 303(d) List of impaired water bodies. Therefore, no additional 303(d) based effluent limitations or monitoring requirements will be added to this Limited Threat Notice of Applicability.

RECEIVING WATER LIMITATIONS

The Limited Threat General Order includes receiving surface water limitations in Section VIII.A. Based on the information provided in the NOI, only the following receiving surface water limitations are applicable to this discharge:

- Bacteria (VIII.A.2);
- Biostimulatory substances (VIII.A.3);
- Chemical constituents (VIII.A.4);
- Color (VIII.A.5);
- Dissolved oxygen (VIII.A.6.a.i, ii, and iv)
- Floating material (VIII.A.7);
- Oil and grease (VIII.A.8);
- pH (VIII.A.9.a);
- Pesticides ((VIII.A.10);
- Radioactivity (VIII.A.11);
- Suspended sediments (VIII.A.12);
- Settleable substances (VIII.A.13);
- Suspended material (VIII.A.14);
- Taste and odors (VIII.A.15);
- Temperature (VIII.A.16.a);
- Toxicity (VIII.A.17); and
- Turbidity (VIII.A.18.a).

SPECIAL PROVISIONS

The Limited Threat General Order contains Provisions in Section IX.C. Based on information provided in the NOI the following site-specific special provisions are applicable to the Project.

Salinity Evaluation and Minimization Plan – The Limited Threat General Order in Section IX.C.3.c requires Dischargers with projects greater than or equal to 180 days in duration to submit and implement a Salinity Evaluation and Minimization Plan to identify and address sources of salinity discharged from the Facility. The Limited Threat General Order allows under limited circumstances to waive this requirement, such as for construction dewatering project where salinity is naturally high. In this case, however, the Project utilizes ponds to store the naturally high salinity groundwater prior to discharging, which can result in salinity concentration increases due to evapotranspiration. Therefore, best management practices through implementation of a Salinity Evaluation and Minimization Plan are necessary to manage salinity levels. A Salinity Evaluation and Minimization Plan shall be submitted by **1 April 2025**.

For enrollees under the Salinity Control Program's Alternative Salinity Permitting Approach, Table 15 of the Limited Threat General Order includes performance-based electrical conductivity (EC) triggers to be included in the NOA to ensure the Salinity Evaluation and Minimization Plan is effective. The Discharger submitted a Notice of Intent for the Salinity Control Program in July 2021 indicating its intent to comply with the Alternative Salinity Permitting Approach and participate in the CV-SALTS Prioritization and Optimization Study. Based on effluent EC data from January 2020 to December 2022, the maximum annual average effluent concentration for EC was 1,000 µmhos/cm, which results in an annual average EC effluent trigger of 1,300 µmhos/cm per Table 15 of the Limited Threat General Order. If the calendar annual average

effluent EC exceeds 1,300 µmhos/cm, the Salinity Evaluation and Minimization Plan shall be reviewed and updated. The updated Salinity Evaluation and Minimization Plan shall be submitted by 1 April following the calendar year in which the electrical conductivity concentration exceeded the trigger.

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 for the effluent in accordance with Attachment C of the Limited Threat General Order.

Monitoring Locations – The Discharger shall monitor the effluent at the specified location 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 to the on-site storm water channel.

Effluent Monitoring – When discharging to surface water, the Discharger shall monitor the effluent at EFF-001 in accordance with Table C-3 of the Limited Threat General Order and this NOA. The applicable monitoring requirements are as follows in Table 3 and subsequent Table 3 Notes:

Table 3. Effluent Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
Discharge Flow Rate	MGD	Calculated	1/Day
Electrical Conductivity @ 25 °C	µmhos/cm	Grab	1/Month
Manganese, Total	µg/L	Grab	1/Quarter
Iron, Total	µg/L	Grab	1/Quarter
pH	standard units	Grab	1/Day
Turbidity	NTU	Grab	1/Month
Temperature	°F	Grab	1/Month
Dissolved Oxygen (DO)	mg/L	Grab	1/Month
Selenium	µg/L	Grab	1/Year
Chronic Toxicity	--	Grab	See table notes 3 and 4

Table 3 Notes:

- 1. Electrical conductivity, pH, turbidity, temperature, and DO.** 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.

2. **All parameters, except flow.** 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.
3. **Chronic Toxicity.** Chronic toxicity monitoring will be performed quarterly for 12 months, after which bi-annual (twice per year) monitoring will be initiated if there is no exceedance of the chronic whole effluent toxicity effluent trigger in the 12-month period. Bi-annual chronic toxicity monitoring will be performed for the next 12 months, after which monitoring will be reduced to once per year if there is no exceedance of the chronic whole effluent toxicity effluent trigger in the second 12-month period. Once per year chronic toxicity monitoring will be performed for the remainder of the NOA term if there is no exceedance of the chronic whole effluent toxicity effluent trigger. If at any point chronic toxicity monitoring exceeds the chronic whole effluent toxicity effluent trigger, the Discharger shall return to quarterly monitoring.
4. **Chronic Whole Effluent Toxicity Trigger (Section X.K, Compliance Determination).** To evaluate compliance with the chronic whole effluent toxicity effluent trigger, the median chronic toxicity units (TUc) shall be the median of up to three consecutive chronic toxicity bioassays during a six- week period. This includes a routine chronic toxicity monitoring event and two subsequent optional compliance monitoring events. If additional compliance monitoring events are not conducted, the median is equal to the result for routine chronic toxicity monitoring event. If only one additional compliance monitoring event is conducted, the median will be established as the arithmetic mean of the routine monitoring event and compliance monitoring event.

Where the median chronic toxicity units exceed 1 TUc (as 100/NOEC) for any end point, the Discharger will be deemed as exceeding the chronic toxicity effluent trigger if the median chronic toxicity units for any endpoint also exceed a reporting level of 1.3 TUc (as 100/EC25 or 100/IC25) AND the percent effect at 100% effluent exceeds 25 percent. The percent effect used to evaluate compliance with the chronic toxicity effluent trigger shall be based on the chronic toxicity bioassay result(s) from the sample(s) used to establish the median TUc result. If the median TUc is based on two equal chronic toxicity bioassay results, the percent effect of the sample with the greatest percent effect shall be used to evaluate compliance with the chronic toxicity effluent trigger.

Section II.B.2 of the Limitations and Discharge Requirements section of the Limited Threat General Order requires that dischargers submit new analytical results every 5 years for pollutants specified in Table I-1 of Attachment I. The Project is considered a groundwater source discharge. Therefore, the Discharger shall submit monitoring

results by **14 May 2029** for the following constituents shown in Table 4 and subsequent Table 4 Notes, below:

Table 4. Effluent Characterization Monitoring

Parameter	Units	Sample Type
Biochemical Oxygen Demand (BOD)	mg/L	Grab
Total Suspended Solids (TSS)	mg/L	Grab
Dissolved Oxygen (DO)	mg/L	Grab
Hardness	mg/L	Grab
pH	standard units	Grab
Temperature	°F	Grab
Electrical Conductivity @ 25 °C	µmhos/cm	Grab
Turbidity	NTU	Grab
Aluminum, Total	µg/L	Grab
Dissolved Organic Carbon	mg/L	Grab
Iron, Total	µg/L	Grab
Manganese, Total	µg/L	Grab
CTR Priority Pollutants	See Attachment I, Table I-3 of the Limited Threat General Order	See Attachment I, Table I-3 of the Limited Threat General Order

Table 4 Notes

- For all parameters.** The Discharger is not required to conduct effluent monitoring for constituents that have already been sampled in a given month, as required in Table E-3, except for hardness, pH, and temperature, which shall be conducted concurrently with the effluent sampling.
- For all parameters.** 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.
- For DO, pH, temperature, electrical conductivity, and turbidity.** 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.
- For CTR Priority Pollutants.** See Attachment I, Table I-3 of the Limited Threat General Order.

Receiving Water Monitoring - Not required. The on-site storm water channel into which the discharge occurs has multiple inputs prior to the discharge reaching the A-1 channel of Alamo Creek. Therefore, receiving water monitoring in the A-1 channel would not effectively identify possible impacts to the receiving water caused by the

Discharger's effluent. Compliance with receiving water limitations will be evaluated through effluent monitoring.

Monitoring Report Submittals - Monitoring in accordance with this NOA shall begin upon the date of this NOA. Monitoring Reports shall be submitted to the Central Valley Water Board on a quarterly basis, beginning with the **Second Quarter 2024**. This report shall be submitted on 1 August 2024. All Monitoring Reports shall specify the dates during the monitoring period the discharge did or did not occur. If treatment and discharge has not begun there is no need to monitor. However, a certified 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

Monitoring Period for All Sampling Frequencies	Quarterly Report Due Date
First Quarter (1 January through 31 March)	1 May
Second Quarter (1 April through 30 June)	1 August
Third Quarter (1 July through 30 September)	1 November
Fourth Quarter (1 October through 31 December)	1 February of the following year

GENERAL INFORMATION AND REQUIREMENTS

The Discharger must notify Central Valley Water Board staff within 24 hours of having knowledge of 1) the start of each new discharge, 2) noncompliance, and 3) when the discharge ceases. 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 invoice 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). 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

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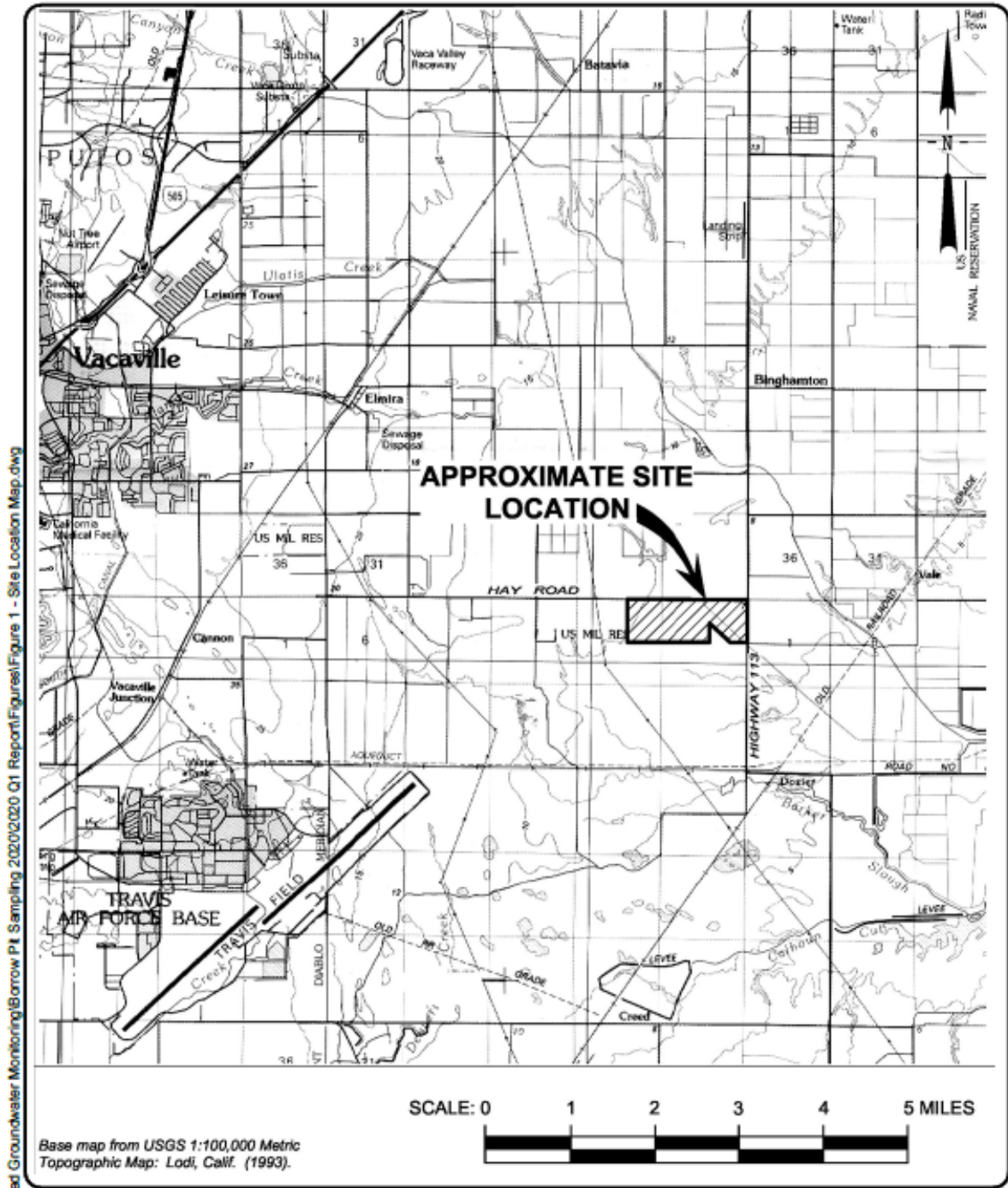
14 May 2024
Borrow Pit Dewatering Project
R5-2022-0006-032

General Order R5-2022-0006-02 (Discharger only)

cc: Peter Kozelka, U.S. EPA, Region IX, San Francisco (email only)
Prasad Gullapalli, U.S. EPA Region IX, San Francisco (email only)
Division of Water Quality, State Water Board, Sacramento (email only)
Dave Adler, Vice President & Inland Group Manager, Recology Hay Road
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Bryan Clarkson, Regional Environmental Manager, Recology Hay Road
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Alexis Krekel, Regional Environmental Manager - Inland, Recology Hay Road
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Greg Acosta, Tetra Tech (email only)

ATTACHMENT A – PROJECT LOCATION MAP

Figure A-1. Site Location Map



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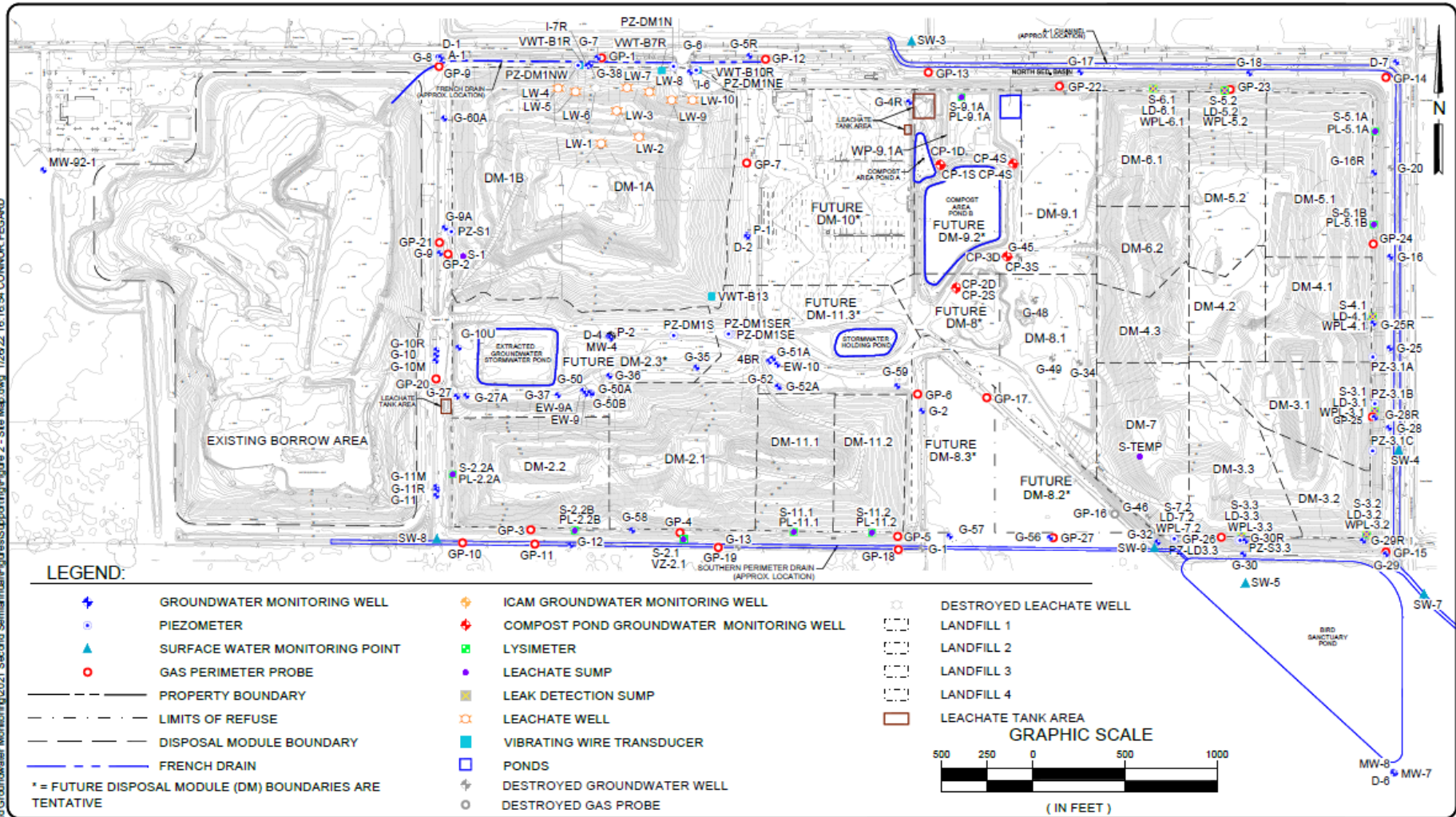
TETRA TECH
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RECOLOGY HAY ROAD LANDFILL

FIGURE 1 - SITE LOCATION MAP

JOB NO. 2019-0012
DATE 04/2019
DRAWN BY FMR
FILE NAME FIGURE 1 - SITE LOCATION MAP

Figure A-2. Site Map



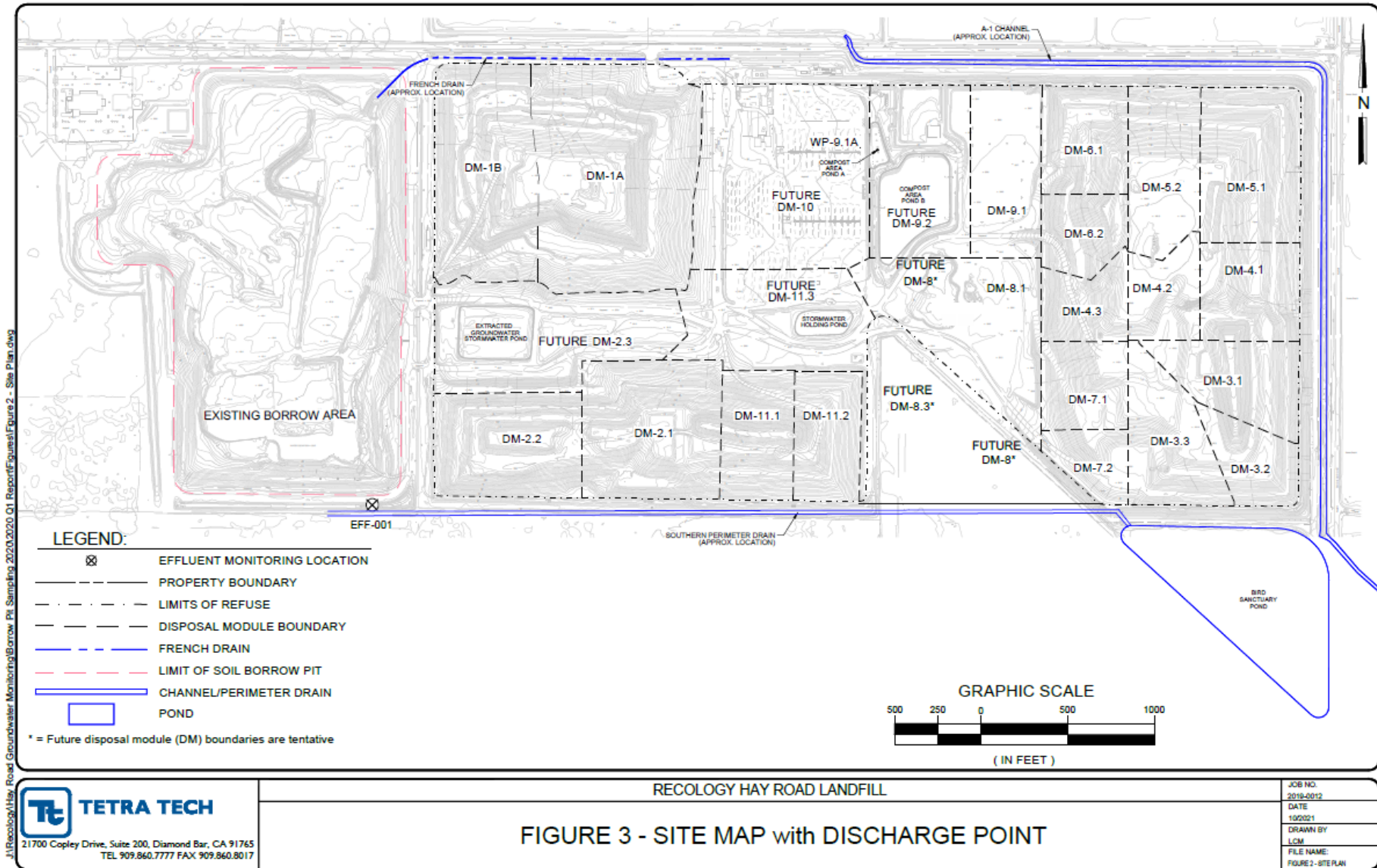
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RECOLOGY HAY ROAD LANDFILL
FIGURE 2 - SITE MAP

JOB NO.	2021-0095
DATE	01/20/22
DRAWN BY	FMR
FILE NAME	FMR2-SITE MAP

Figure A-3. Site Map with Discharge Point



ATTACHMENT B – RATIONALE FOR MONITORING

A. 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.
2. Effluent monitoring frequencies and sample types for dissolved oxygen (1/month), electrical conductivity (1/month), iron (1/quarter), manganese (1/quarter), pH (1/day), selenium (1/year), temperature (1/month), and turbidity (1/month) have been retained from NOA R5-2016-0076-012 to determine compliance with effluent limitations for these parameters.
3. Previous NOA R5-2016-0076-012 required chronic whole effluent toxicity monitoring once per year. Annual monitoring data collected over the previous 5-year NOA term for chronic whole effluent toxicity showed exceedances of the chronic toxicity monitoring trigger in the discharge. To more closely monitor the potential for chronic whole effluent toxicity in the discharge, effluent monitoring for chronic toxicity has been increased from once per year to once per quarter with flexibility for a reduced monitoring schedule based on sampling results.