xx Month 2020

Mike Koza
Sacramento County
Dept. of Waste Management & Recycling
10863 Gold Center Drive
Rancho Cordova, CA 95670

Certified Mail
xxxx xxxx xxxx xxxx

TENTATIVE DRAFT NOTICE OF APPLICABILITY

WASTE DISCHARGE REQUIREMENTS GENERAL ORDER FOR
IN-SITU GROUNDWATER REMEDIATION AND
DISCHARGE OF TREATED GROUNDWATER TO LAND, ORDER R5-2015-0012
SACRAMENTO COUNTY DEPT OF WASTE MANAGEMENT AND RECYCLING
KIEFER LANDFILL
SACRAMENTO COUNTY

The Sacramento County Department of Waste Management and Recycling (Discharger) submitted a Notice of Intent (NOI), dated 1 November 2019, requesting coverage under Order R5-2015-0012, *Waste Discharge Requirements General Order for In-situ Groundwater Remediation and Discharge of Treated Groundwater to Land* (General Order). The NOI proposes the discharge of treated water from the Kiefer Landfill Groundwater Extraction and Treatment Plant to infiltration basins (Project). Based on information in the submittal, it is our determination that this project meets the required conditions for approval under Order R5-2015-0012. All of the requirements contained in the General Order are applicable to this Project. The project is hereby assigned Order R5-2015-0012-062.

A copy of the General Order is enclosed with this Notice of Applicability (NOA) and is also available at the Central Valley Regional Water Quality Control Board (Central Valley Water Board) Adopted Orders Website (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2015-0012.pdf)

PROJECT LOCATION

The Project is located at the Kiefer Landfill at 12701 Kiefer Boulevard in Sacramento County, Township 8N, Range 7E, Section 35 and Section 34, Mount Diablo Baseline & Meridian as shown on Attachment A. The project is on assessor's parcel numbers (APN) 126-08-02 and 126-09-16.

PROJECT DESCRIPTION

The Kiefer Landfill Groundwater Extraction and Treatment Plant has been operational since 1995 and consists of fifteen extraction wells and two treatment towers. The groundwater treatment system withdraws contaminated groundwater from the Zone A and Zone B water-bearing zones and removes contaminants from the extracted water. Under the Limited Threat General Waste Discharge Requirements R5-2016-0076-033, the treated groundwater was discharged to nearby Deer Creek. In July 2018, the treated groundwater was discharged to an onsite infiltration basin as part of a year-long Pilot Study to evaluate the long-term viability of using infiltration basins for long term discharge of treated effluent.

Treated groundwater continues to be discharged to the onsite infiltration basin in accordance with the Discharge Basin Pilot Study Workplan dated 15 January 2018, which was submitted as an attachment to the NOI. The infiltration basin consists of two separate sub-basins, with an approximate area of 2 acres each. Treated groundwater is discharged to one sub-basin at a time. Discharges are cycled on a 7-day to 21-day interval to allow time for drying (resting period), which will help to maintain aerobic conditions and preserve soil infiltration rates. Discharge to the infiltration basin consists of treated groundwater with no reported volatile organic compound (VOC) concentrations and total dissolved solids (TDS) values of less than 450 milligrams per liter (mg/L). Discharges to the infiltration basin also include annual discharge pipeline maintenance flushing water, up to 50,000 gallons per year. If water levels are recorded at 2-feet below the top of an operating sub-basin, discharges will be redirected to the other sub-basin or to the stormwater retention basin. Discharges will also be redirected to the stormwater retention basin during ripping or disking maintenance of the infiltration basin, to be performed only during the dry season.

A water balance was submitted as an attachment to the NOI. The water balance was based on an average discharge rate of 320 gallons per minute (gpm), an infiltration rate of 0.05 feet/hour based on National Resource Conversation Service (NRCS) soil data consistent with those at the site, and the wettest year precipitation data of 35.66 inches from CIMIS Station 131. Based on these parameters, the basin has a monthly infiltration capacity ranging from 136 to 148 acre-feet and can accommodate much higher discharge flows. More recent monitoring data (February 2020 through April 2020), show discharge flow rates up to 480 gpm, the sub-basin infiltrating all water discharged, and the sub-basin was dry prior to operation of next discharge period. The Discharger proposes an average and maximum discharge to the infiltration basin at approximately 450 and 900 gpm, respectively, which are flows expected from the groundwater extraction and treatment system.

Groundwater monitoring will be performed using the existing monitoring network, which includes wells MW-6A, MW-6A1, MW-9A, MW-9B, MW-12A, MW-17A, MW-17B, MW-38A, and MW-39A. Monitoring well MW-9B is included in the well network due to MW-9A being periodically dry since the third quarter of 2013. Monitoring well locations are shown on Attachment B. Constituents of concern from the treated groundwater

include VOCs, TDS, and heavy metals. Groundwater is monitored for these constituents under the Discharger's Title 27 WDRs. Based on the results of the Pilot Study, treated discharges to the infiltration basin are not expected to contribute to groundwater degradation.

This Notice of Applicability (NOA) requires monitoring of groundwater, infiltration basin, freeboard, and treatment plant effluent. Groundwater monitoring reported in accordance with the Title 27 WDRs that are duplicative of the requirements to comply with the General Order shall be reported under this NOA's monitoring and reporting program (MRP) R5-2020-0819. Under this NOA's MRP, data shall be reported electronically to the California State Water Resources Control Board's GeoTracker Database (https://geotracker.waterboards.ca.gov/)

GENERAL INFORMATION AND SITE-SPECIFIC REQUIREMENTS

1. The project will be operated in accordance with the requirements contained in the General Order and in accordance with the information submitted in the NOI and Discharge Basin Pilot Study Workplan and as specified in this NOA.

2. 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 revoked.

3. In-situ placement of materials other than treated groundwater and annual discharge pipeline maintenance flushing water as described in the NOI into the subsurface is prohibited.

4. Discharges of treated groundwater to the infiltration basin shall not exceed 900 gpm as maximum flow.

5. Treated groundwater discharged to the infiltration basin shall meet the following concentration requirements:

    a. Individual VOC concentrations less than 0.5 micrograms per liter (µg/L).

    b. TDS concentration less than 450 mg/L and 1,000 mg/L a daily maximum.

    c. Total residual chlorine concentration of 4.0 mg/L as a daily maximum.

    d. Discharges shall not result in odor or vector nuisance conditions and shall not result in degradation of underlying groundwater.

6. Infiltration basin maintenance activities shall occur during the dry weather months. During these activities, treated groundwater discharged to the storm water retention basin shall be managed such that there are no discharges off-site.

7. Failure to abide by the conditions of the General Order could result in an enforcement action as authorized by provisions of the California Water Code.

8. Sacramento County Department of Waste Management and Recycling and their agents shall comply with the attached MRP R5-2020-0189 and any revisions thereto as ordered by the Executive Officer.

DOCUMENT SUBMITTALS

All monitoring reports should be converted to a searchable portable document format (PDF) and submitted electronically to the California State Water Resources Control Boards' GeoTracker Database (https://geotracker.waterboards.ca.gov/). Additional information regarding electronic submittals is accessible through the information tab on the GeoTracker homepage. After uploading a document via GeoTracker, the submitting party shall notify Central Valley Water Board staff via email at: centralvalleysacramento@waterboards.ca.gov, including the following in the body of the email:

Facility Name:	Kiefer Landfill Groundwater Extraction and Treatment Plant Infiltration Basin
Program:	Non-15 Compliance
Order:	R5-2015-0012-062
CIWQS Place ID:	CW-237981

Now that the Notice of Applicability has been issued, the Board's Compliance and Enforcement section will take over management of your case. Todd Del Frate is your new point of contact for any questions regarding compliance with the Order. If you find it necessary to make a change to your permitted operations, Todd will direct you to the appropriate Permitting staff. You may contact Todd at (916) 464-4737 or at todd.delfrate@waterboards.ca.gov.

_____

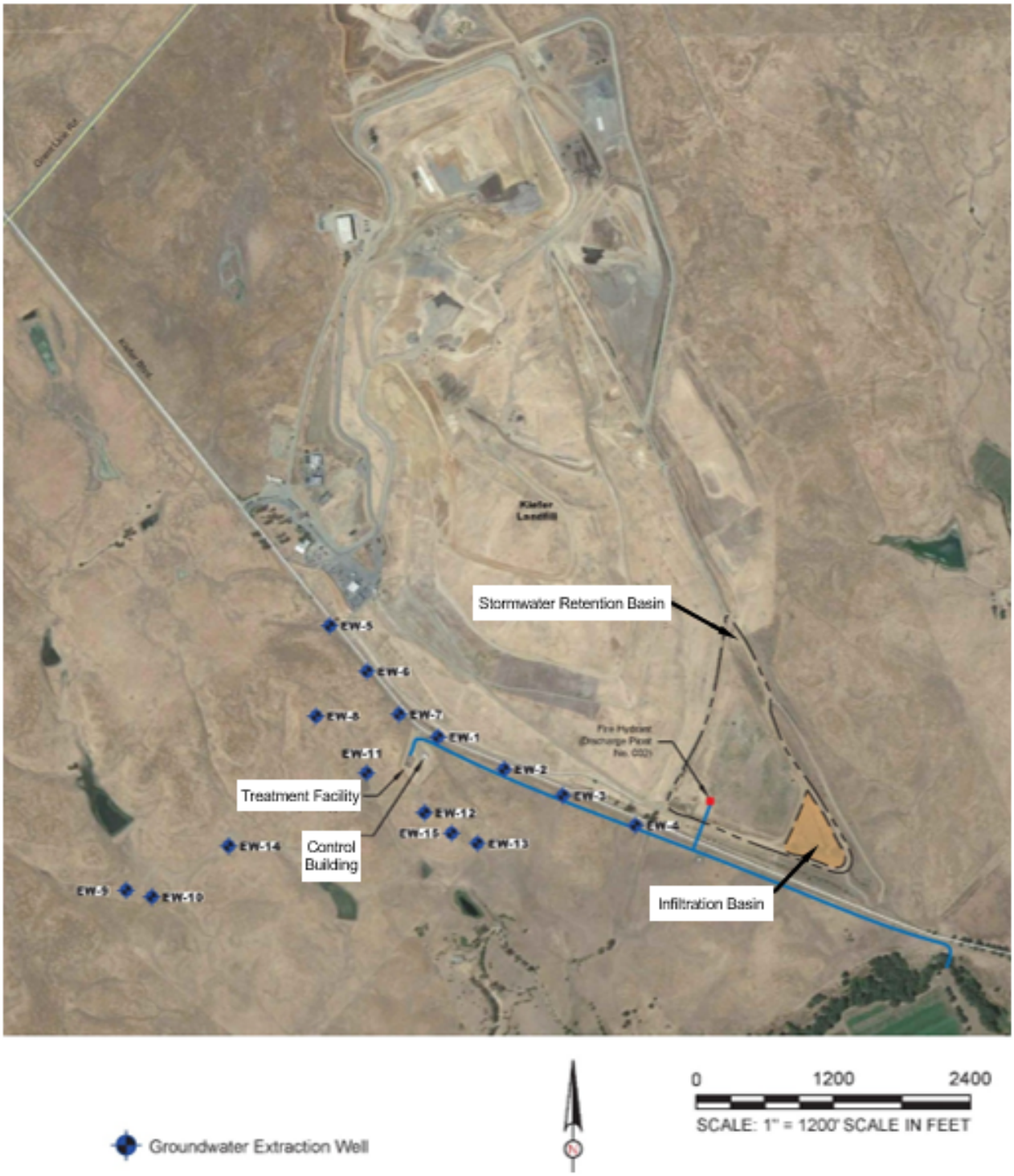
Patrick Pulupa,
Executive Officer

Attachments: Attachment A – Pump and Treatment Groundwater Remediation System Site Map
Attachment B – Site Plan and Monitoring Well Location Map

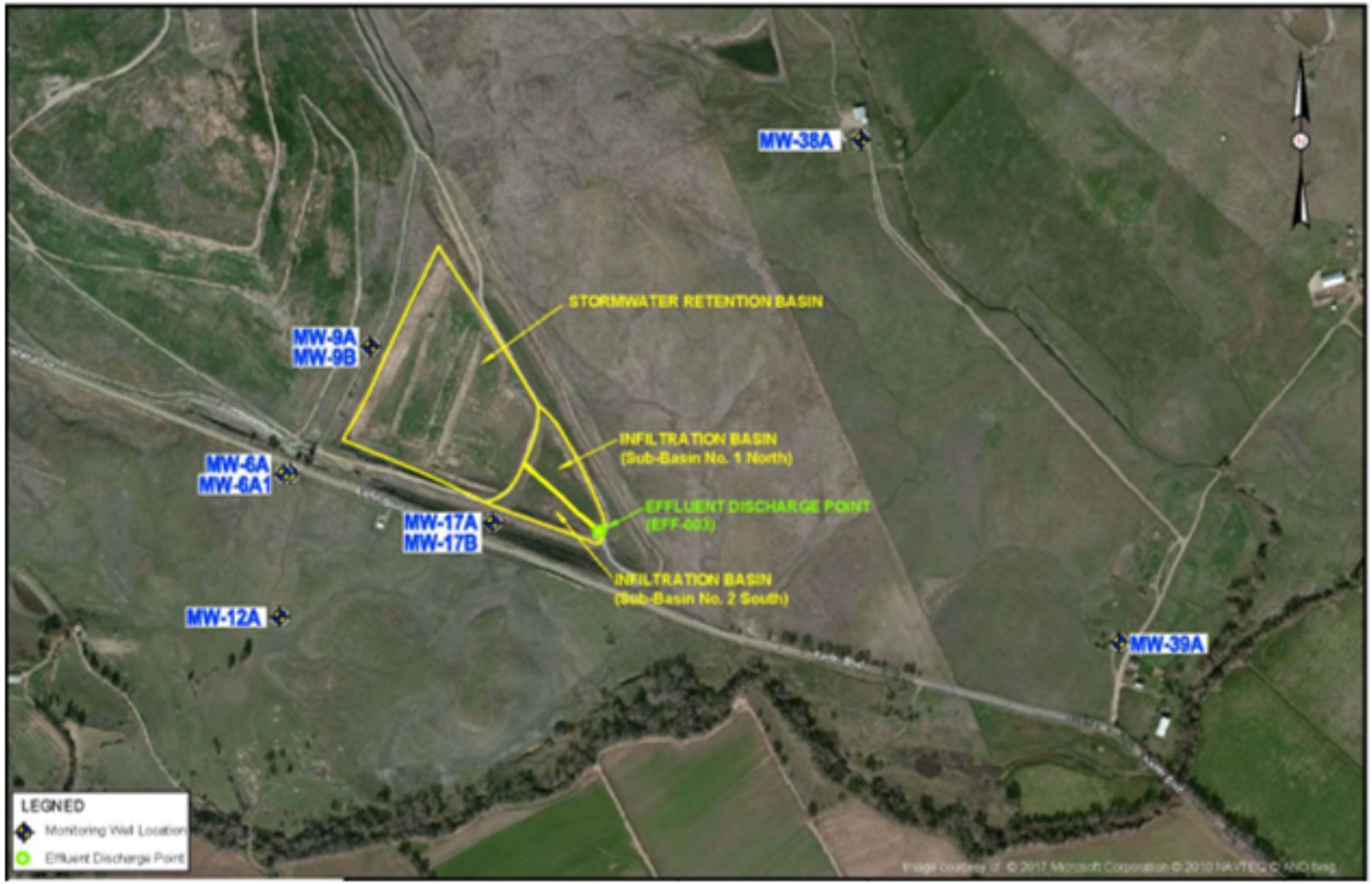
Enclosure and cc: See Next Page

Enclosure(s): Monitoring and Reporting Program R5-2020-0819
General Order R5-2015-0012 (Discharger only)

Cc w/ encl: Sacramento County Environmental Management Department, Mather
Howard Hold, CVWQCB, Rancho Cordova (via email)
Todd DelFrate, CVWQCB, Rancho Cordova (via email)
Melanie Wong, Sacramento County, Dept. of Waste Management & Recycling, Rancho Cordova (via email)



Source:	PUMP AND TREATMENT GROUNDWATER REMEDIATION SYSTEM SITE MAP Kiefer Landfill Sacramento County	Approximate Scale:
Notice of Intent, 1 November 2019		As Noted Above



Source:
Figure 2, Discharge Plot Study Summary Report and Quarterly Report, 1 May 2019 to 31 July 2019 (Kleinfelder)

Approximate Scale
1 inch = 750 feet

SITE PLAN AND MONITORING WELL LOCATION MAP

Kiefer Landfill
Sacramento County