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GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

San Diego Regional Water Quality Control Board

July 27, 2018

Certified Mail- Return Receipt Requested

Article Number:

7015 0640 0006 1569 9234

Commanding Officer
Marine Corps Base Camp Pendleton
P.O. Box 555015
Camp Pendleton, CA 92055
Attn: Brigadier General Kevin J. Killea

In reply refer to:

236607:AGrove

Subject: Notice of Violation Order No. R9-2018-0118, Las Pulgas Landfill, Marine Corps Base Camp Pendleton, San Diego County

Commanding Officer:

Enclosed is Notice of Violation (NOV) Order No. R9-2018-0118 issued to the United States Marine Corps (Discharger) for violations of:

- Order No. R9-2010-0004 as amended by R9-2011-0039, *Waste Discharge Requirements for United States Marine Corps, Marine Corps Base Camp Pendleton, Las Pulgas Landfill, San Diego County* (Order), and
- California Code of Regulations title 27, and Code of Federal Regulations title 40, part 258.

As described in the NOV, the violations are subject to further enforcement pursuant to the California Water Code and as authorized by federal law. The San Diego Water Board reserves the right to take any further enforcement action authorized by law. To avoid further enforcement, the Discharger must correct the reporting deficiencies and site conditions that resulted in violations of the Order.

In the subject line of any response, please include reference **236607:AGrove**. If you have any questions or comments, please contact Ms. Amy Grove by phone at (619) 521-3920, or by email at Amy.Grove@waterboards.ca.gov.

Sincerely,

Kelly Dorsey, Chief
Site Restoration and Groundwater Protection Branch

KKD:jro:ag

TOMAS MORALES, CHAIR | DAVID GIBSON, EXECUTIVE OFFICER

July 27, 2018

Enclosures: 1) NOV Order No. R9-2018-0118

cc: Ms. Jen Sullivan, Head, RCRA Management Branch via email to Jennifer.a.sullivan@usmc.mil

Mr. Joe Murtaugh, USMC Environmental Security, via email to joseph.murtaugh@usmc.mil

Mr. Ricardo Serrano, Supervising Environmental Health Specialist, County of San Diego Local Enforcement Agency, via email to Ricardo.Serrano@Sdcounty.ca.gov

Ms. Chiara Clemente, Senior, Compliance Assurance Unit, San Diego Water Board, via email to CClemente@waterboards.ca.gov

Technical Staff Info & Use	
NOV Reg Measure ID	422141
Place ID	236607
Party ID	627

NOTICE OF VIOLATION

No. R9-2018-0118

Commanding Officer
Marine Corps Base Camp Pendleton
P.O. Box 555015
Camp Pendleton, CA 92055
Attn: Brigadier General Kevin J. Killea

Violations of Order
Nos. R9-2010-004 and R9-2011-0039

July 27, 2018

The United States Marine Corps (USMC, or Discharger) is the owner and operator of the Las Pulgas Landfill (Landfill), located at Marine Corps Base Camp Pendleton. The Discharger is hereby notified that the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) reserves the right to take any enforcement action authorized by State and federal laws for the violations described herein.

The following reporting deficiencies and field observations document numerous violations of Order No. R9-2010-0004 (as amended by Order No. R9-2011-0039) (Order), *Waste Discharge Requirements for the United States Marine Corps, Marine Corps Base Camp Pendleton, Las Pulgas Landfill, San Diego County*.

A. Background.

In January 2017, the Discharger notified the San Diego Water Board that the side slope liner system failed in the Phase I unit at the Las Pulgas Landfill (Landfill). During a site visit in February 2017, San Diego Water Board staff (Ms. Amy Grove and Mr. John Odermatt) confirmed that the side slope liner system was compromised in the Phase I Unit at the Landfill. The extent of the liner system damage could not be determined at that point in time. During the site visit, San Diego Water Board staff verbally advised the Discharger that an investigation is necessary to determine the extent and cause of the damage to the liner system and assess the work that would be necessary to repair the Phase I liner system as soon as possible.

A field investigation into the nature and extent of the liner system failure was conducted in the Fall of 2017. San Diego Water Board staff met with the Discharger and their consultants in February 2018, to review the results of their field investigation of the side slope liner failure, and determine necessary steps for corrective action. The results of the field investigation suggest that a series of heavy storm events created conditions resulting in unanticipated groundwater seeps on the side slopes beneath the Phase I liner system. The investigation concluded groundwater interacted with the low permeability clay layer and adversely affected the integrity of the clay layer, which subsequently failed in numerous locations along the side slopes of the Phase I Unit. The Discharger indicated a desire to perform a subsequent investigation prior to

proposing corrective actions. To date, the Discharger has not submitted a workplan for either a subsequent investigation or for corrective actions necessary to bring the Phase I area into compliance with current waste discharge requirements (WDRs) and State and federal regulations.

While reviewing the case file, the April 2017-2018 *Annual Groundwater, Maintenance and Monitoring Report*, and the October 2017 – March 2018 *Semi-Annual Groundwater, Maintenance, Monitoring and Corrective Action Evaluation Report*, San Diego Water Board staff observed numerous, continuing violations of the California Code of Regulations, title 27; Code of Federal Regulations (CFR), title 40, parts 257 and 258; Order No. R9-2011-0039, *Waste Discharge Requirement for the United States Marine Corps, Marine Corps Base Camp Pendleton, Las Pulgas Landfill, San Diego County*; and the associated Monitoring and Reporting Program No. R9-2010-0004 (MRP).

B. Summary of Violations of Applicable Regulations.

1. Failure to Comply with California Code of Regulations, Title 27 and Code of Federal Regulations, Title 40.

The Order and MRP are issued pursuant to the California Water Code and implement all applicable regulations found in California Code of Regulations (CCR) title 27 and CFR title 40, Part 258. The following are violations of the applicable regulations:

- a. CFR title 40, part 258.40 (Design Criteria) requires that liner systems, comprised of flexible membrane liners (geomembranes) and clay layer components, must be constructed so that these liner components are in direct and uniform contact at all times. The failure of the clay layer within the side slope liner system created a condition where the liner components are no longer in uniform contact, creating an ongoing violation of this regulatory requirement.
- b. CCR title 27, section 20310(c) requires that landfills be constructed with containment structures capable of preventing degradation of waters of the State as a result of waste discharges to landfills if site characteristics are inadequate. The Discharger has suggested that the presence of seeps within the Phase I side slopes is the cause of the failure of the clay layer within the side slope liner system. The intent of this section of the regulations is to require Dischargers to construct liner systems that are protective of water quality even when site characteristics may not be considered ideal for the siting of a landfill. Therefore, it is not appropriate to use the presence of seeps in the side slope as an excuse for the failed liner system and potential degradation of waters of the State. The failure of the liner system is a violation of this regulatory requirement.

- c. CCR title 27, section 20330(d) requires liners to be installed to cover all natural/native geologic materials (within the Unit) that are likely to be in contact with waste (including landfill gas or leachate). The failure of the clay layer within the side slope liner system created a condition that exposes the underlying natural geology to potential contaminants from the landfill and is a violation of this regulatory requirement.

C. Summary of Violations of Order Discharge Specifications.

1. Failure to Comply with Landfill Operation Specifications.

- a. Order Section D.4 (Landfill Operation Specifications) requires the Discharger to maintain at least five feet of vertical separation between the groundwater and waste material. The presence of seeps in the subsurface of Phase I and their interaction with the clay liner component creates a condition that violates this specification.
- b. Order Section E.3 (Landfill Construction Specifications) requires the Discharger to construct the liner system utilizing materials, both synthetic and natural, with appropriate physical and chemical properties to ensure containment of discharged wastes over the operating life, closure and post-closure maintenance period of the Landfill. The failure of the side slope liner system compromises the integrity of the side slope containment structure and is a violation of this specification.
- c. Order Section E.4.d (Landfill Construction Specifications) requires the Discharger to design, construct, and maintain all containment structures so they are capable of containing wastes, waste constituents, and degradation products of wastes, and to prevent degradation of water quality throughout the life of the Landfill. The failure of the clay layer component of the side slope liner system creates a condition that violates this specification.
- d. Order Section E.6.a (Landfill Construction Specifications) requires the Discharger to construct a 24-inch low permeability layer installed to ensure complete long-term coverage of the underlying subgrade materials. The slumping of the liner system's low-permeability clay layer creates a condition that violates this specification.
- e. Order Section E.6.d.ii (Landfill Construction Specifications) requires the Discharger to ensure construction of the junction between the side slope and the base liner components does not cause, threaten to cause, or contribute to adverse impacts upon the Landfill's ability to contain waste constituents, the integrity and performance of the Landfill's foundation, liner system, or the structures which control leachate, surface water drainage, erosion, or gas. The slumping of the side slope clay liner

component has compromised the integrity of the containment system of the Landfill and violates this specification.

D. Summary of Violations of MRP Reporting Requirements.

1. Failure to Provide Required Reporting Information.

- a. MRP Part I.A.2 (Annual Summary Report) requires the Discharger to submit all analytical data obtained during the previous two six-month reporting periods in tabular form for review and comment. The data must be provided in a format considered acceptable to the San Diego Water Board. Table 5 of the 2017 *Annual Groundwater, Maintenance and Monitoring Report*¹ presents the data collected for each monitoring well sampled at the Landfill for the past ten years. However, the text and font size used in the formatting of this table is too small to be legible for review in hard copy. To assess compliance with waste discharge requirements, State, and federal regulations, the data must be presented in a legible manner. Failure to provide the required information in a format that can be reviewed is a violation of this reporting requirement of the MRP.
- b. MRP Part I.A.5 (Site Conditions) requires the Discharger to inspect the Landfill on a quarterly basis and provide copies of the inspection reports as an appendix to the *Annual Groundwater, Maintenance and Monitoring Report*. The following are violations associated with this reporting requirement:
 - i. Part I.A.5.a requires the submittal of the four quarterly inspection reports that describe site conditions observed during the reporting period (i.e., one year). The 2017-2018 *Annual Groundwater, Maintenance, and Monitoring Report* did not include the second and third quarter 2017 and first quarter 2018 inspection reports. Since the April reporting period ends on April 30, within the second quarter of 2018, a quarterly inspection for April must be included in the 2018-2019 *Annual Groundwater, Maintenance and Monitoring Report*. Failure to provide the required quarterly inspection reports violates this reporting requirements of the MRP.
 - ii. MRP Part I.A.5.a requires the Discharger to include a discussion regarding the general site conditions of the Landfill in each of the inspection reports. The discussion included in the inspection reports provided focused on a description of the ancillary facilities

¹ Submitted in October 2017 in place of the Semi-Annual Groundwater Maintenance and Monitoring, and Corrective Action Evaluation Report.

located at the Landfill and the damage caused by a fire in 2014. Neither of the November 2017 and April 2018 inspection reports discussed the failed liner system in the Phase I Unit or how this damage is impacting operations at the Landfill. Failure to include this information violates this reporting requirement of the MRP.

- iii. MRP Part I.A.5.B requires the Discharger to identify deficiencies or areas of noncompliance in the inspection reports and include photographic documentation of these deficiencies. None of the photographs attached to the inspection reports included in the *Annual Groundwater, Maintenance and Monitoring Report* provide documentation of the status of the liner failure in Phase I. The failure of the side slope liner system is a serious violation and photographic documentation of the status of the failure must be included in every inspection report until the liner system is repaired. Failure to include this information violates this reporting requirement of the MRP.
 - iv. MRP Part I.A.5.c requires the Discharger to provide an evaluation of the Landfill to determine its effectiveness to comply with the applicable requirements found in CCR title 27 and CFR title 40. An evaluation of the effectiveness of the Landfill to contain wastes and perform as designed and constructed was not included in the *Annual Groundwater, Maintenance and Monitoring Report*. Failure to provide this information violates this reporting requirement of the MRP.
- c. MRP Part I.C (Table C.2) provides a schedule for required report submittals. According to Table C.2, the *Annual Groundwater, Maintenance and Monitoring Report* and *Semi-Annual Groundwater, Maintenance, Monitoring and Corrective Action Evaluation Report* are due to the San Diego Water Board by 5:00 pm on April 30th. These reports were not received by our office until May 30, 2018. The 2016-2017 Annual and Semi-Annual reports were not received by our office for review and comment until October 13, 2017.² To date, the San Diego Water Board has not received the April -September 2017 *Semi-Annual Groundwater, Maintenance, Monitoring and Corrective Action Evaluation Report*. Failure to provide the required reports by the due dates violates the reporting requirements of the MRP.
 - d. MRP Part II.E.5 requires the Discharger to perform semi-annual sampling at all monitoring wells containing sufficient water for sample

² Notice of Violation No. R9-2017-0110 was issued to the USMC on September 12, 2017 for failure to submit the monitoring reports due on April 30, 2017.

collection. Table 5 in the *2017 Annual Groundwater, Maintenance and Monitoring Report* presents the sampling data collected over the past ten years, and follows the semi-annual sampling intervals provided in the M&RP until 2017. In 2018, the Discharger failed to sample during the first quarter as directed by the MRP and instead collected and reported samples from the second quarter. The collection of groundwater samples during the second quarterly monitoring period occurred outside of the reporting period for the *Annual Groundwater, Maintenance and Monitoring Report* the 2018. Therefore, the data presented in the above referenced report, is not valid for the 2017-2018 annual reporting period. The Discharger failed to complete the required sampling events for the past two years (2016-2017 and 2017-2018). Failure to collect samples for reporting during the required intervals and provide this information in the *Annual Groundwater, Maintenance and Monitoring Report* and the *Semi-Annual Groundwater, Maintenance, Monitoring and Corrective Action Evaluation Report* violates this sampling and reporting requirement of the MRP.

E. Summary of Potential Enforcement Actions.

Section G.2 of the Order states “Any noncompliance with this Order constitutes a violation of the Water Code and is grounds for: (a) enforcement action, and (b) termination, revocation and re-issuance, or modification of this Order.” The San Diego Water Board may also administer any of the following enforcement actions:

Other Potential Enforcement Actions	Applicable Water Code Section
Technical or Investigative Order	Sections 13267 or 13383
Cleanup and Abatement Order	Section 13304
Cease and Desist Order	Sections 13301 – 13303
Time Schedule Order	Sections 13300, 13308

In addition, the San Diego Water Board may refer the matter to other resource agencies, or refer the matter to the State Attorney General for injunctive relief. The San Diego Water Board reserves the right to take any enforcement action authorized by law.

As a reminder, the Discharger has provided the San Diego Water Board with Financial Assurances Guarantees for Corrective Actions in the form of a Federal Certification, in accordance with CCR title 27, section 22220. The Federal Certification guarantees that funds will be made immediately available to the Discharger to implement corrective actions when required by the San Diego Water Board.

Documents that are 50 megabytes or larger must be transferred to a compact disc (CD) and mailed to the San Diego Water Board. Please ensure electronic files are not

password protected. Larger documents must be divided into separate electronic files no larger than 400 megabytes. The Dischargers must continue to provide paper copies of all figures larger than 8.5 inches by 14 inches (legal size) and electronic copies of all reports to the San Diego Water Board.

All correspondence or reports submitted to the San Diego Water Board in response to this NOV must be provided via email.³ Email submittals must include a signed transmittal letter (with the facility name, facility contact information, and reference code **236607:agrove**), and be sent to sandiego@waterboards.ca.gov. Routine email correspondence however, may be sent to individual San Diego Water Board staff members.

In the subject line of any response, please include the reference code **236607:agrove**. If you have any questions or require additional information, please contact Ms. Amy Grove by phone at (619) 521-3920, or by email at Amy.Grove@Waterboards.ca.gov.

Sincerely,

Kelly Dorsey, Chief
Site Restoration and Groundwater Protection Branch

KD:jro:ag

Technical Staff Info & Use	
Reg. Measure ID	391457/ 374495
NOV Reg Measure ID	422141
Place ID	236607
Violations ID	1044716, 1044718, 1044719, 1044855, 1044856, 1044857, 1044858
Order No.	R9-2011-0039/R9-2010-0004

³ See public notification on electronic reporting on-line at: http://www.waterboards.ca.gov/sandeigo/docs/Electronic_Reporting_Sept2014.pdf

The following represent the photographic documentation taken by San Diego Water Board staff during the February 10, 2017 site visit to confirm the side slope conditions in the Phase I lined expansion area of the Las Pulgas Landfill. Areas of bulging or apparent clay layer failure are circled in red.





