

## CHRONOLOGY OF CONSTRUCTION OF PHASE 1 EXPANSION UNIT AND ENFORCEMENT

The following is a chronology of correspondence between the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) and the United States Marine Corps (USMC), regarding the construction of the Phase 1 expansion unit at the Las Pulgas Landfill, and subsequent violations pertaining to the expansion unit.

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| June 24, 1997  | Letter sent by USMC (LtC K.Quigley) to San Diego Water Board (Mark Alpert). <b>RE: Notification of Intent to Install Leachate Collection and Removal Systems at Las Pulgas and San Onofre Landfills.</b>  |
| March 5, 1998  | Draft Joint Technical Document (JTD) submitted for review and comment.  |
| March 5, 1998  | Submittal of "Final Environmental Assessment for Las Pulgas Landfill permitted Disposal Area Expansion and Leachate and Recovery System Installation" by USMC.  |
| March 11, 1998 | Submittal of "Final Environmental Assessment for Las Pulgas Landfill permitted Disposal Area Expansion and Leachate and Recovery System Installation" by USMC.  |
| March 12, 1998 | Letter sent from San Diego Water Board (Mark Alpert) to Mr. Tom DeCosta, Waste Management Division. <b>RE: Reporting Schedule and Information update for the San Onofre and Las Pulgas Sanitary Landfills Pursuant to Regional Board Order No. 93-86.</b> San Diego Water Board conducting information update for landfills.  |
| April 24, 1998 | Letter from the USMC (LtC. R. Tiberg) to San Diego Water Board (Mark Alpert). Letter contains the completed Joint Application for Landfill expansion, and the Report of Facility Information.   |
| May 1, 1998    | Letter from USMC (Tom DeCosta) to San Diego Water Board (Brian McDaniel). <b>RE: Contractor Quality Control Specifications for Construction of Landfill Liner Systems at San Onofre and Las Pulgas Landfills.</b> Letter contained the construction quality assurance (CQA) guidelines from the contract specifications for construction of the leachate collection and recovery system (LCRS) systems at both landfills. |
| July 22, 1998  | Revisions to JTD submitted to San Diego Water Board from the USMC. Attached was the geosynthetic clay liner (GCL) technical evaluation.   |
| August 3, 1998 | Report submittal from EMCON to San Diego Water Board. <b>RE: Alternative liner design for lateral expansion of Las Pulgas and San Onofre Landfills.</b>   |

- August 24, 1998 Revised Report of Waste Discharge (ROWD) submittal in the form of a Joint Technical Document for lateral expansion of Las Pulgas Landfill.
- September 15, 1998 **Letter** sent from San Diego Water Board (John Robertus) to USMC (Tom DeCosta). **RE: Joint Technical Document / Report of waste Discharge; San Onofre and Las Pulgas Sanitary Landfills.** Letter acknowledges receipt of JTD (March 5, 1998), and subsequent revisions (July 22, August 3, August 24, and September 2, 1998). Letter outlines the conditions under which the USMC may proceed with the construction of the landfills as per the Water Code and Title 23.
- November 20, 1998 Letter from USMC (Tom DeCosta) sent to San Diego Water Board (Mark Alpert). Letter was a summary of submittal dates for the ROWD for the expansion of the Las Pulgas and San Onofre Landfills.
- December 1, 1998 Letter from San Diego Water Board (John Robertus) to USMC (Commanding General). **RE:** Letter explains that the 150-day waiting period to begin construction on the project expired on September 5, 1998 and therefore the USMC can commence with the construction of the lateral expansions of the landfills.
- May 24, 1999 Construction of the liner and LCRS at Las Pulgas Landfill completed.
- August 12, 1999 Letter from San Diego Water Board (Mark Alpert) sent to Commanding General. **RE: Compliance Inspection – Las Pulgas and San Onofre Landfills.** A portion of the letter outlines what is required in the CQA Liner Certification Report, as requested by USMC Environmental Security during a post-inspection briefing.
- December 3, 1999 Letter from San Diego Water Board (John Robertus) to Commanding General. **RE: Notice of Violation No. 99-193: Las Pulgas Landfill, U.S. Marine Corps Base Camp Pendleton.** Failure to submit a final CQA Documentation Report.
- December 17, 1999 Submittal of CQA Final Documentation Report for the Las Pulgas liner expansion project.
- March 8, 2000 Letter sent by San Diego Water Board (John Robertus) to the USMC (Theresa Trost). **RE: Construction Quality Assurance (CQA) Plan and Final Documentation Report, San Onofre and Las Pulgas Landfills, U.S. Marine Corps Base, Camp Pendleton, CA.** San Diego Water Board informs USMC that the submittal of 12/17/99 fails to meet the requirements for a final CQA report.
- March 24, 2000 Letter sent from San Diego Water Board (John Robertus) to the Commanding General. **RE: Waste Discharge Requirement Update – Request for Information.** Letter requests the submittal of any additional information reflecting changes that have occurred since the submittal of the 1998 Joint Technical Document.

- May 10, 2000 **Adoption of WDR Order No. 2000-54 by San Diego Regional Board.**
- June 6, 2000 Submittal of Testing Summary for Camp Pendleton Landfills from Ninyo and Moore. This submittal was submitted as the final CQA Report for the Phase 1 expansion unit.
- April 21, 2003 **NOTICE OF VIOLATION NO. R9-2003-0154.** On April 8, 2003, the San Diego Water Board conducted a routine compliance inspection at the Las Pulgas Landfill after receiving an inspection report from the San Diego County LEA, informing the San Diego Water Board of a series of violations at the site. The San Diego Water Board staff observed that temporary measures had been installed on the affected slopes in an attempt to control erosion and runoff. On April 16, 2003, the San Diego Water Board conducted a follow-up inspection after another storm event. The USMC had failed to implement effective erosion and drainage control measures in the Phase 1 Expansion cell at the facility. Additional measures are required to effectively prevent further erosion and damage to drainage conveyance system parameters due to high volumes of runoff from the upper and lower decks of the Phase 1 expansion unit.
- May 13, 2003 **INVESTIGATIVE ORDER NO. R9-2003-0206:** Technical Report of Damage to Waste Management Unit and Stormwater Conveyance System at the Las Pulgas Landfill. The Order set a due date of September 27, 2003 for the USMC to provide the San Diego Water Board with a technical report containing the results of their evaluation.
- July 2003 USMC voluntarily halts discharges of solid waste into Phase 1 expansion cell at Las Pulgas Landfill.
- December 16, 2003 San Diego Water Board receives technical report: "Technical Evaluation of Soil Slumping and Geosynthetic Liner Damage and Construction Quality Assurance Report for Liner Repairs, Las Pulgas Landfill", prepared by Brown and Caldwell (dated November 2003).
- January 30, 2004 **NOTICE OF VIOLATION NO. R9-2004-0044:** Upon review of a technical report (Brown and Caldwell, 2003), the San Diego Water Board staff identified a number of technical discrepancies between the as-built construction and the design specifications for the expansion of the Phase 1 waste cell. Some of those conditions are also associated with violations of WDR Order No. 2000-54.
- In addition, reporting deficiencies were also identified in technical reports submitted to the San Diego Water Board by the USMC pursuant to WDR Order No. 2000-54: "Waste Discharge Requirements for the U.S. Marine Corps, Marine Corps Base Camp Pendleton, Las Pulgas Landfill, San Diego County." These deficiencies were

associated with the WDR Discharge Specification No. B.34 requiring the U.S. Marine Corps to submit an acceptable final Construction Quality and Assurance (CQA) Report for the Phase 1 expansion unit at the Las Pulgas Landfill. Additionally, the cover letter failed to contain certification statement required by Order R9-2004-0044.

- August 16, 2004 San Diego Water Board receives a technical report from the USMC: "Work Plan Evaluation of Liner and Leachate Collection and Removal System and Preparation of a Construction Quality and Assurance Report, Las Pulgas Landfill", prepared by Environmental Remediation Resources (ERRG) and dated August 2004.
- December 1, 2004 San Diego Water Board receives technical reports from the USMC: Liner and Leachate Collection and Removal System Evaluation, Las Pulgas Landfill, Marine Corps Base Camp Pendleton, prepared by ERRG and dated November 2004.
- Construction Quality Assurance Report Liner, Leachate Collection and Removal System Phase 1 Construction, Las Pulgas Landfill, prepared by ERRG and dated November 2004.
- December 6, 2004 San Diego Water Board staff requested (via email) the USMC to provide complete copies of the following technical reports:
- Liner, Leachate Collection and Removal System (LCRS) at the Marine Corps Base Camp Pendleton, prepared by EMCON, May 1997 (Contract Document).
- Geotechnical Report for Las Pulgas and San Onofre Landfills, Camp Pendleton, prepared by EMCOM, dated August 1996 (Geotechnical Report).
- December 9, 2004 San Diego Water Board staff received the technical reports from the USMC, as requested in the December 6, 2004 e-mail.
- December 13, 2004 San Diego Water Board staff met with USMC staff/management from Environmental Security, Facilities Maintenance and ROICC staff to discuss EO/staff concerns and pending enforcement actions for Las Pulgas Landfill.
- December 21, 2004 San Diego Water Board staff sent comment letter to USMC on technical reports prepared by Brown and Caldwell (2003) and EERG (2004).
- February 1, 2005 **NOTICE OF VIOLATION NO. R9-2005-0040.** San Diego Water Board issued Notice of Violation No. R9-2005-0040 for violations of WDR Order No. 2000-54, caused by approximately 1,000 gallons of leachate overflowing the LCRS above ground tank, and discharging to unlined areas.

- February 9, 2005 **NOTICE OF VIOLATION NO. R9-2005-0071.** San Diego Water Board issued Notice of Violation No. R9-2005-0071 for a leachate seep discovered by the USMC, on the side slope of the Phase 1 expansion unit.
- February 11, 2005 **INVESTIGATIVE ORDER NO. R9-2005-0075.** San Diego Water Board issued investigative Order No. R9-2005-0075 for sampling of the leachate seep at the Las Pulgas Landfill. The analytical summary report was due by April 11, 2005.
- February 28, 2005 San Diego Water Board developed Cleanup and Abatement Order No. R9-2005-0029 for violations of waste discharge requirements (Order No. 2000-54) for solid waste disposal operations at Las Pulgas Landfill.
- April 22, 2005 **NOTICE OF VIOLATION NO. R9-2005-0119.** San Diego Water Board issued Notice of Violation No. R9-2005-0119 for failure to submit the technical report regarding the leachate seep, as required under Investigative Order No. R9-2005-0075.
- July 21, 2005 **NOTICE OF VIOLATION NO. R9-2005-0217.** San Diego Water Board issued Notice of Violation No. R9-2005-0217 for failure to submit complete information in the technical report required under Investigative Order No. R9-2005-0075.
- January 27, 2006 **CLEANUP AND ABATEMENT ORDER NO. R9-2006-0016.** San Diego Water Board issued Cleanup and Abatement Order (CAO) No. R9-2006-0016 to the USMC requiring the USMC to develop and implement a Corrective Action Plan for the Phase I expansion area of the Las Pulgas Landfill.
- February 24, 2006 **CLEANUP AND ABATEMENT ORDER NO. R9-2006-0016.** San Diego Water Board reissued CAO No. R9-2006-0016, revising the compliance date to December 31, 2006 for the USMC to submit the Corrective Action Plan.
- December 26, 2006 USMC submitted a Corrective Action Plan for the Phase I expansion area in accordance with CAO No. R9-2006-0016.
- February 23, 2007 San Diego Water Board issues a comment letter to the USMC informing the USMC that the submitted Corrective Action Plan fails to comply with the minimum requirements of the CAO (Directive B.1.c) for implementation of an alternative remedial action.
- April 13, 2007 **ADDENDUM NO. 1 TO CAO NO. R9-2006-0016.** San Diego Water Board issued Addendum No. 1 to CAO No. R9-2006-0016, revising the due date for the Corrective Action Plan to December 14, 2007.

- December 13, 2007 USMC submitted a Corrective Action Plan for the Phase I expansion area at the Las Pulgas landfill in accordance with CAO No. R9-2006-0016 and addenda thereto.
- March 21, 2008 San Diego Water Board issued a letter to the USMC indicating that the Corrective Action Plan submitted in December 2007 fulfills the requirements of CAO No. R9-2006-0016 (with addenda). In that same letter, the San Diego Water Board provided the USMC with several comments regarding the Corrective Action Plan.
- July 1, 2008 The USMC submitted a revised Corrective Action Plan addressing the San Diego Water Board comments from March 2008. The revised Corrective Action Plan also includes a schedule for implementation of the Corrective Action Alternative.
- December 9, 2008 The USMC submitted a Report of Waste Discharge in the form of a Joint Technical Document detailing the liner design for the Phase II expansion area at the Las Pulgas Landfill. After the adoption of waste discharge requirements and upon completion of construction activities in Phase II, the USMC will implement corrective actions for the Phase I expansion area.