



GUAM ENVIRONMENTAL PROTECTION AGENCY

AHENSIAN PRUTEKSION LINA'LA GUAHAN

EDDIE BAZA CALVO
GOVERNOR OF GUAM

RAY TENORIO
LT. GOVERNOR OF GUAM

BLDG. #17-3304 MARINER AVENUE, BARRIGADA, GUAM 96913

EPA.GUAM.GOV

AUG 10 2017

Christopher A. Lund, P.E.
Vice President
GBB Solid Waste Management Consultants and Receiver
2010 Corporate Ridge, Suite 510
McLean, VA 221102

Subject: Ordot Dump – Certification Approval for Closure

Hafa Adai Mr. Lund,

This is in reference to the Ordot Dump Closure Plan, dated March 13, 2013, as was revised and supplemented in November 2014, and supporting documents, which were submitted to the United States Environmental Protection Agency, Region IX (USEPA Region IX) and Guam Environmental Protection Agency (Guam EPA). We acknowledge receipt of the final Construction Quality Assurance (CQA) Report, dated February 16, 2016, inclusive of 22 appendices; and the Construction Management (CM) Report, dated February 16, 2017, which includes 14 appendices. The supplemental documents reviewed are as follows:

- April 5, 2016 - Appendix K, As-builts for the CM Report
- July 12, 2016 – Revised Appendix N, Geomembrane Data for the CQA Report
- July 12, 2016 – Addition to Appendix V, Final Panel Layout As-build Phase 1 & 2 Drawing
- July 19, 2016 – Appendix V, Final Record Drawings for CQA Report
- July 20, 2016 – Draft Technical Memorandum, Ordot Dump – Landfill Gas Collection and Control System Performance Update and Remedial Plan for Methane Gas Control
- October 19, 2016 - Landfill Gas Data
- October 26, 2016 – Revised Certification and Signature Pages for CM and CQA Reports Dated March 2016
- December 19, 2016 – Response to comments and revised pages for Final Construction Completion Report submitted by the Receiver and dated December 19, 2017 by hard copy only
- March 9, 2017 – Receiver responds to USEPA Preliminary Review Comments dated October 18, 2016, Final Construction Quality Assurance Report (CQA Report), Ordot Dump

Todo Y Nilala Y Tano Man Uno – All Living Things of the Earth Are One

After careful consideration of the information provided on-site reviews and technical consultation with USEPA, Region IX, Guam EPA hereby approves the certification for closure of the Ordot Dump. In addition, this approval is given on the condition that the Receiver and/or the Guam Solid Waste Management Authority comply with the provisions outlined in the letter from USEPA, Region IX (Karen Ueno), dated May 12, 2017, regarding *U.S. EPA Region IX Acceptance of Certification of Closure Construction Complete at Ordot Landfill Superfund Site, Guam*.

In addition, this Agency acknowledges that the CM (October 26, 2016) and CQA (October 25, 2016) Reports were certified by an independent registered professional engineer. Guam EPA further verifies that closure has been completed in accordance with the closure design documents, which was approved by this Agency on September 20, 2013. Pursuant to 23601(h), please ensure that the certification is placed in the operating record.

Pursuant to 23601(i-j), following closure, the owner or operator must record a notation on the deed to the Ordot Dump property, or some other instrument that is normally examined during the title search. Please notify this Agency that the notation has been recorded and a copy has been placed in the operating record.

Sincerely,



WALTER S. LEON GUERRERO
Administrator

Enclosure: Letter dated May 12, 2017, *U.S. EPA, Region IX, Acceptance of Certification of Closure Construction Complete at Ordot Landfill Superfund Site, Guam*

CC: Karen Ueno, USEPA, Region IX



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

May 12, 2017

Mr. Christopher Lund
GBB
2010 Corporate Ridge, Suite 510
McLean, VA 22102

Electronic copy – Hard copy to follow to above address only

RE: U.S. EPA Acceptance of Certification of Closure Construction Complete at Ordot Landfill Superfund Site, Guam

Dear Chris,

U.S. EPA accepts the certification by Geo-Logic Associates (GLA) that the construction of the final closure system for the Ordot Landfill Superfund Site was completed on March 1, 2016, and was performed in accordance with Guam regulations and with the construction drawings and technical specification developed by the Brown & Caldwell design team. GLA certifies that, as documented in the Final Construction Quality Assurance Report (CQA Report), it conducted the necessary observations and testing to verify that construction was completed in accordance with the CQA Plan that was accepted by U.S. EPA and approved by Guam EPA. U.S. EPA also accepts and appreciates the certification by GHD, Inc. (GHD) who provided the construction management services during closure construction, and who also certifies that the closure system construction has been completed in compliance with the contract drawings and technical specifications developed by the Brown & Caldwell design team. GHD's certification verifies that, as documented in the Final Construction Management Report (CM Report), the closure construction was performed in accordance with the approved design documents.

In accepting the Receiver's certifications of closure construction complete, U.S. EPA accompanied the Receiver on a closure "walk through" at the Site on March 11, 2016, and reviewed the Final CM Report (14 appendices) and the Final CQA Report (22 appendices), dated February 2016, as supplemented and updated between April 2016 and March 2017, below:

- April 5, 2016 - Appendix K, As-builts for the Final CM Report
- July 12, 2016 – Revised Appendix N, Geomembrane Data for the Final CQA Report
- July 12, 2016 – Addition to Appendix V, Final Panel Layout As-build Phase 1 & 2 Drawing
- July 19, 2016 – Appendix V, Final Record Drawings for the Final CQA Report
- July 20, 2016 – Draft Technical Memorandum, Ordot Dump – Landfill Gas Collection and Control System Performance Update and Remedial Plan for Methane Gas Control

- October 19, 2016 - Landfill Gas Data
- October 26, 2016 – Revised Certification and Signature Pages for the Final CM and Final CQA Reports
- December 19, 2016 – Response to US EPA Comments and Revised Pages for Final Construction Completion Report, Dated December 19, 2017 (Hard Copy Only)
- March 7, 2017 – Response to US EPA Comments of October 18, 2016

With respect to the concerns U.S. EPA raised about remediating the methane exceedances at the site boundary, sampling the periodic groundwater seep in the rocky point above the leachate tanks, and the need for a near-term (early 2017) settlement monitoring and evaluation, and a new survey of the entire cover system, U.S. EPA accepts the Receiver's responses and will integrate these activities into the post-closure monitoring program. U.S. EPA is in receipt of and will review the "Additional Landfill Gas Investigation and Pilot Test Workplan," transmitted on May 8, 2017. We also understand that the settlement monitoring and survey have been completed, and we will receive this information soon.

For purposes of ensuring a complete and easily searchable closure administrative record for U.S. EPA, U.S. EPA requests three (3) copies of the complete Final CQA Report and Final CM Report, incorporating all supplemental and updated appendices, on DVD. In the interim, it would also be helpful if a complete copy of these Final Reports could be uploaded to a GBB sharefile site, as you have done in the past.

The Receiver has done a tremendous job in ensuring the proper design and construction of the closure of the Ordot Landfill Superfund Site. The Receiver, on behalf of the Government of Guam, has set a compliant and thorough precedent and model for other landfill closures on Guam, including for the two military landfills at AAFB and the Navy Base. The residents of Ordot Chalan-Pago and Guam have waited decades for the closure of the Ordot Landfill Superfund Site, and deserve decisions and actions that are taken in the best interest of their island community, and that ensure the protection of their health and environment. We commend the Receiver on its results.

Sincerely,



Karen Ueno
U.S. EPA
Region 9

cc: John Tinger, U.S.EPA
Christopher Lichens, U.S. EPA
Conchita Taitano, Guam EPA
Mayor Gogue, Ordot-Chalan Pago