



Guam SOLID WASTE RECEIVER



Status Report of the Receivership for the Government of Guam Guam Solid Waste Authority Pursuant to the Order of the United States District Court of Guam

Presented by
Gershman, Brickner & Bratton, Inc.
August 3, 2022





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Status Report Outline

1. Ordot Dump Construction Team
2. Background – Timeline Review
3. Ordot Dump Review
4. Certifications Required to End the Consent Decree
5. Financial Review
6. Next Steps





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Ordot Dump Construction Team



Gershman, Brickner & Bratton, Inc.
Solid Waste Management Consultants,
Receiver



Brown and Caldwell

Design Engineer, and Brown and Caldwell
Constructors Operations

- ❖ PLUS: Many other
firms/contractors/agencies participated





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Background – Timeline Review

Summer 2011

- August 31, 2011: Ordot Dump Closed (ceased receiving waste)
- September 1, 2011: Layon Landfill Opens

2011-2013

Ordot Dump Investigation & Characterization for Closure Plan Design

- February 2013: Guam EPA approved design
- March 2013: Draft Closure Plan & Post-Closure Care Plan submitted
- Primary Remedial Action is ceasing uncontrolled leachate discharge with the Leachate Collection and Removal System
- June 2013: US EPA issues “No Further Comment” to Closure Plan





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Background – Timeline Review

December 2013

Construction commenced – PCCP under review by EPA

February 2016

Certification of Closure Construction

Cessation of uncontrolled Leachate Discharges to Water of the U.S.

May 12, 2017

USEPA, Region IX, Acceptance of Certification of Closure Construction Complete at Ordot Landfill Superfund Site





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Background – Timeline Review

August 10, 2017

Guam EPA issues Certification Approval for Closure

- Construction Quality Assurance (CQA) Report – Feb.16, 2016
- Construction Management (CM) Report – February 16, 2017
- Supplemental Documents

January 2020 to June 2021

US EPA, Guam & Receiver submit schedules to District Court of Guam:

- 1st schedule (Deadline: November 25, 2020)
- 2nd schedule (Deadline: June 17, 2021)
- 3rd schedule (Deadline: January 14, 2022)





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Background – Timeline Review

2020 - 2021

Receiver Submits Draft Final PCCP & Supporting Documents to US EPA

September 24, 2021

Receiver Submits Draft Final Post-Closure Care Plan / Application / Supporting Documents to US EPA & Guam EPA

October 19, 2021

Receiver Submits Final Post-Closure Care Plan / Application / Supporting Documents to Guam EPA

November 9 – December 27, 2021

Public Comment Period





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Ordot Dump Aerial - 2006



GBB
SOLID WASTE
MANAGEMENT
CONSULTANTS



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Ordot Dump Aerial - 2014





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Ordot Dump Aerial - 2017





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Ordot Dump Aerial – January 2021





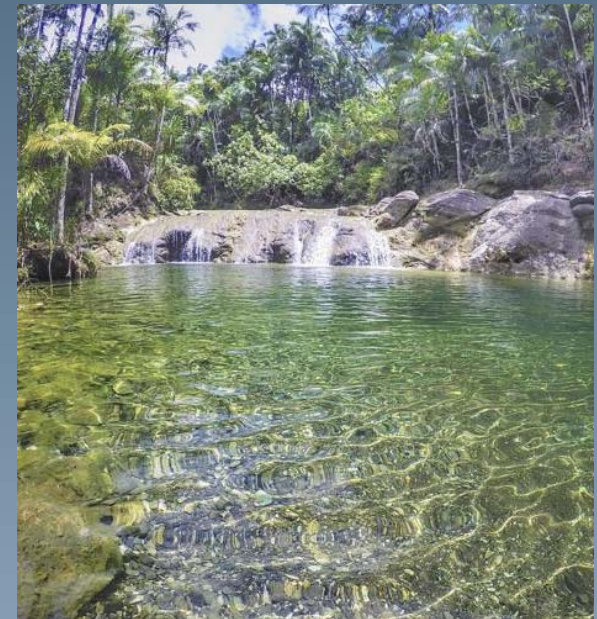
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Key Areas of Ordot Dump Closure Design

***Design Objective:
Cease Pollutant Discharges into
U.S. Waters***

- Cover (Cap) System
- Leachate Collection and Removal System
- Stormwater Management
- Gas Collection and Control System
- Soil Vapor Extraction System
- Perimeter Monitoring System for Groundwater and Gas



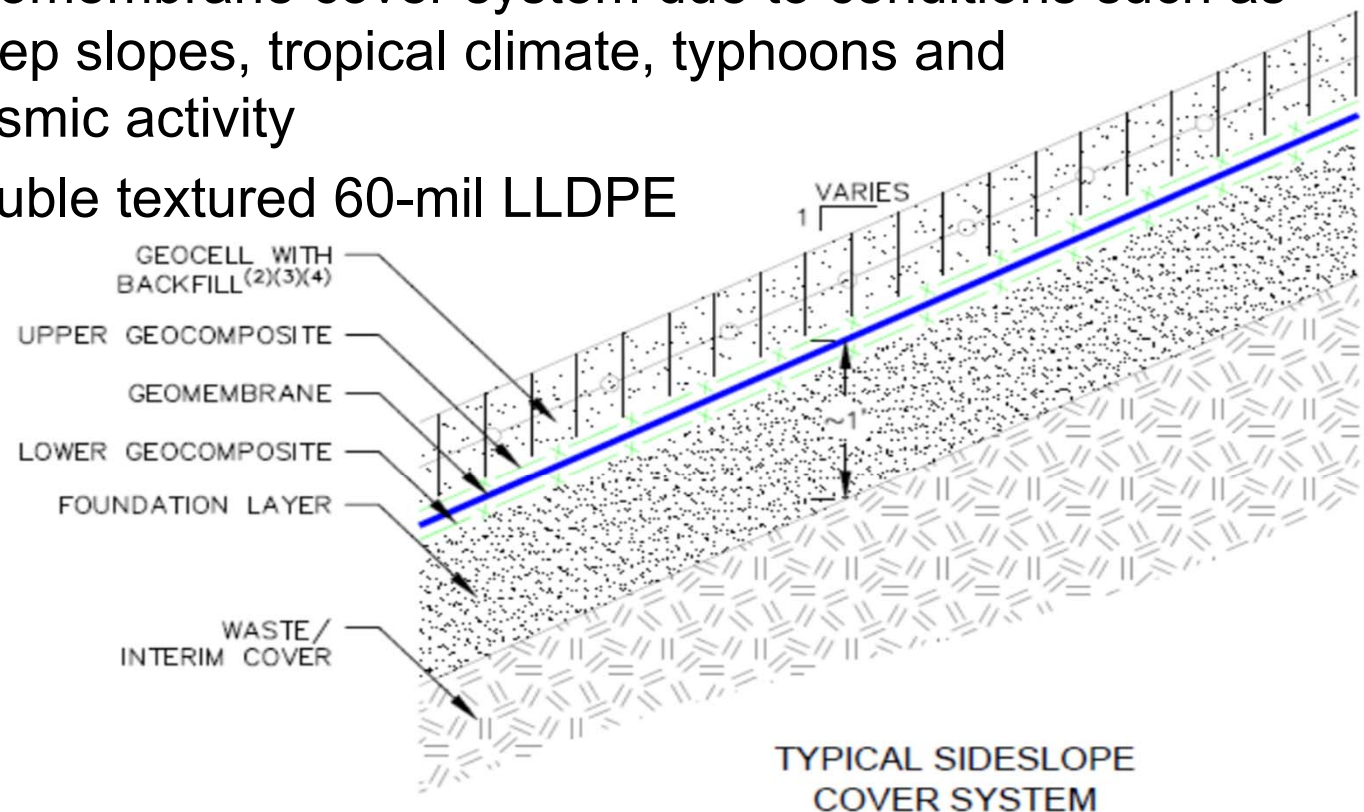


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Ordot Dump Cover (Cap) Design

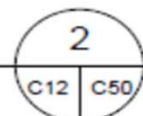
- Geomembrane cover system due to conditions such as steep slopes, tropical climate, typhoons and seismic activity
- Double textured 60-mil LLDPE



TYPICAL SIDESLOPE
COVER SYSTEM

DETAIL

1" = 1'





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Ordot Dump Leachate Collection

- Protects the environment by preventing millions of gallons of leachate from polluting the Lonfit River and ground water
- Leachate meets GWA system requirements for treatment





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Ordot Dump Leachate Collection

- Leachate discharged to GWA Hagåtña Wastewater Treatment Plant for treatment
- Leachate system began to discharge collected leachate in January 2015
- Quarterly technical memos on leachate quality and volume
- Data in technical reports include
 - Chemical oxygen demand
 - Total Kjeldahl nitrogen
 - Alkalinity
 - Ammonia
 - Nitrate
 - total dissolved solids
 - TSS
 - dissolved oxygen
 - pH
 - specific conductance
 - Temperature
 - Metals
 - Semi-volatile organic compounds
- Data used to estimate the BOD, ammonia & mass loading on the GWA system





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Ordot Dump Cover System Swale

- Stormwater Swales and Chutes
 - Channels to collect and convey stormwater runoff
- Quarterly reports
- NPDES MSGP for Closed Landfill site





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Ordot Dump Surface/Storm Water Management

- System collects stormwater and conveys it off the cover system to 4 detention ponds for control of peak flows allowing it to return to the environment without impact
- Regular Post Rainstorm inspections
- Post-closure work includes:

- Periodic Inspections
- Maintenance as needed





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Ordot Dump Monitoring Wells

- Gas Collection and Control System
Protects the environment by collecting and treating millions of cubic feet of greenhouse gases
- Perimeter monitoring
Network of monitoring wells detect landfill gas, if any, along the perimeter of the cover system





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Ordot Dump Regular Operations & Maintenance Activities

- Leachate Collection Operations / Quarterly Monitoring & Compliance
- Gas Collection & Control Operations / Daily Monitoring & Compliance
- Stormwater Systems - Periodic Inspections Maintenance & Reporting
- Groundwater Monitoring – Quarterly & Semi-Annual
- Cover System Monitoring / Inspection & Compliance reporting
- Perimeter Gas Monitoring
- Settlement Survey Monitoring
- Perimeter Security Fencing / Fire Break Maintenance / Secondary Power





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Certifications Required to End the Consent Decree

1. The Ordot Dump no longer receives municipal solid waste for disposal
 - *MSW stopped September 1, 2011*
2. Discharges to waters of the U.S. from the Ordot Dump have ceased
 - *There is a difference of opinion as to the requirements of certification*
3. The Household Hazardous Waste Facility Supplemental Environmental Project (SEP)
 - *Completed January 2015 within the Harmon Residential Transfer Station*





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Supplemental Environmental Project (SEP)

- Household hazardous waste facility (HHWF)
- \$1M+ (2004\$) in spending for the facility was required
- Receiver included the HHWF into the design of the new Harmon Transfer Station
 - Operating since its opening in January 2015
- The SEP report is being prepared
 - Will be submitted in September 2022



Gershman, Brickner & Bratton, Inc.





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Financial Review

- During the time Receiver was responsible for GSWA, Ordot Dump Post-Closure account built up approx. \$6.275 million
- First Trust Fund established April 2019 with that balance
- Finance Plan agreed upon by the Parties was for GSWA to contribute \$2 million per year
 - \$166,667 monthly installments for 8 years to build up the Ordot Dump Post-Closure Account to \$28 million
 - Payments to come out of commercial hauler tipping fees





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Financial Review

- As of June 30, 2022: Trust Fund balance is \$4.237 million
- During April 2019 through June 30, 2022
 - Revenue into the Trust Fund: \$6.612 million
 - Expenditures: \$8.550 million
 - Expenses exceed revenue +/- \$2 million over 39-month period
- At current rate of expenditures, this Trust Fund will last:
 - Another 80 months
 - Or a little less than 7 years





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Financial Review

- Requirements for transferring responsibility of the Ordot Dump Post Closure Operations to GSWA:
 - New Trust Agreement
 - New Trustee
 - Updated cost estimate for Ordot Dump Post Closure Operations
- Currently:
 - The Bank of Guam has been selected as the Trustee
 - The Bank of Guam is prepared to sign the new Trust Agreement





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Financial Review

- Updated draft cost estimate prepared by Receiver tallies costs to \$56M for the remaining 24 years of operating the Ordot Dump Post Closure facility
 - Estimate uses derived from actual costs as the basis for the projections
 - Leachate volume/rate for treatment are major contributors to cost estimate
 - Costs Escalation:
 - 1% per year for GWA charges
 - 3% per year for other costs
 - Cost estimate model being reviewed by PFM





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Financial Review

- The Receiver proposed:
 - Continued monthly payments be increased to \$175,000 over remaining 24-year period of Ordot Dump Post Closure operations
- Amount & approach selected by Receiver an affordable monthly payment
- US EPA has stated that:
 - This approach is not acceptable
 - Financial assurance needs to be addressed





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Financial Review

- The Receiver:
 - Asked GSWA to develop alternatives
 - Tasked PFM to evaluate financial assurance structures that GovGuam/GSWA can use to assure funds for Ordot Dump Post Closure are available
- PFM's work is expected to be completed in September
 - Will be presented and reviewed by the Parties
 - Discussions will take place to develop an acceptable solution





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Next Steps

- ☐ The Receiver issue the Supplemental Environmental Project report for review and acceptance
- ☐ Continue scoping the work plan for identifying the cause for increased leachate at Ordot Dump
- ☐ GSWA pursue asking GWA to lower rate for leachate treatment to Government rate rather than highest commercial rate
- ☐ Refine the Ordot Dump Post-Closure Cost estimate with input from PFM and the Parties





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Next Steps

- ☐ Share PFM findings on financial assurance approach(es) for funding the Ordot Dump Post-Closure operations
- ☐ The Parties work together to develop an acceptable funding method for the remaining 24-year period of Ordot Dump Post Closure operations
- ☐ Revise the certification regarding cessation of discharge of uncontrolled leachate to the waters of the U.S.





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