Guam SOLID WASTE RECEIVER

Overview of the Guam Solid Waste Receivership

Pursuant to Order of the
United States District Court of Guam

March 6, 2019

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Road to Receivership The Ordot Dump

- 1940's - Ordot Dump is established
- 1950's - GovGuam assumes ownership
- 1986 - US EPA issues Administrative Order
- 1990's - Efforts to site a new landfill
- 1994 – Dump Closure Act passed by Guam Legislature requiring closure by 1997
- 1997 – Ordot Dump not **Closed**

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Road to Receivership

- 2004 – Govguam enters into Consent Decree with the United States Environmental Protection Agency
  - Requires Dump to close by 2007
  - Requires the siting and opening of a new compliant landfill
  - Requires a Household Hazardous Waste Program
- 2005 - GovGuam selects Layon site for a new landfill but little other progress occurs

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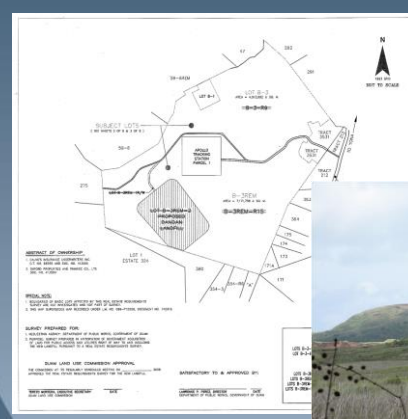
GovGuam Selects New Landfill Site In Layon



GovGuam selected Layon as landfill site in 2005.

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Road to Receivership

- The Court begins monthly status hearings and site visits
- March 17, 2008 - District Court of Guam appoints Receiver citing:
  - Historical lack of commitment by Guam's leaders
  - The actions that had been undertaken by the Government of Guam were only those "spurred by this court's orders"
  - The Court concluded that "problem of a highly dysfunctional, largely mismanaged, overly bureaucratic, and politically charged solid waste system is beyond correction by conventional methods."

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What the Receiver Found

- Demoralized workers with deplorable working conditions
- Ordot Dump rapidly running out of space
  - Poorly managed
  - Fires a common occurrence
  - Odors and swarming insects menacing its neighbors
- Virtually no working equipment
  - The limited amount of equipment that could have been put to work was out of commission due to the need for minor repairs
  - The equipment repair shop had no roof (blown off by a storm a few years earlier)
- Equipment rentals running up to **$11,000 per day**
  - Rental companies would not allow GovGuam employees to operate their equipment forcing Solid Waste to also pay for private sector equipment operators and idling capable GovGuam workers

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Deplorable Working Conditions

Men's Showers:

- **No Walls**
- **No Shower Head**
- **Non-Functional**

Make-Shift Kitchen

- **Cramped**
- **Hard to clean**
- **Fire Hazard**

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Ordot Landfill Fire Nov. 2006 (One of many...)

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Virtually No Working Equipment

Fleet Packer Maintenance Shop

- No Roof
- Limited Parts Availability
- Fleet Made Up Of 1994 & 2002 Trucks with only 2 Vehicles Working
- One Trained Mechanic

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What the Receiver Did About the Conditions Found

(with a lot of help from the Court, GSWA Employees and other Partners)

- Improved working conditions for GSWA workers
- Reduced staffing by almost 40 percent
- Implemented improved management practices at the Ordot Dump
- Implemented a ban of certain recyclable materials at the Ordot Dump to allow the time needed to build the Layon Landfill and incentivize recycling
- Repaired and replaced needed equipment and immediately reduced exorbitant daily rental cost

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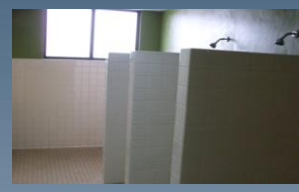
Renovated Showers and Kitchen for Employees



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Fleet Maintenance Shop Repaired
Missing Roof Replaced

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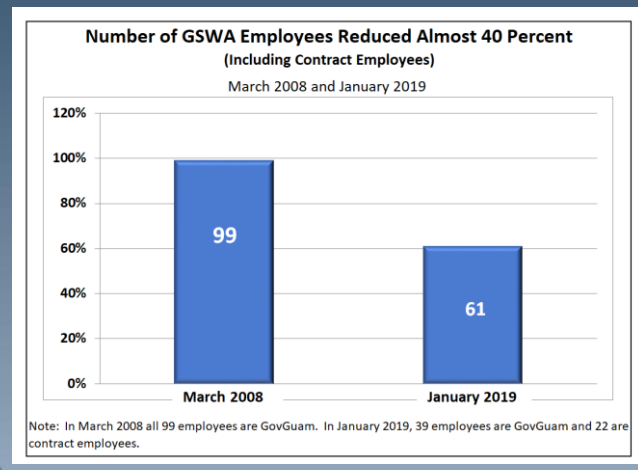

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Ban Saves Space at Ordot Dump & Advances Recycling

- Green waste, construction waste and cardboard (OCC) banned 7/17/08
- 30 percent volume reduction documented at Ordot Dump
- Private recyclers reported increased recyclable material
- Diversion due to the ban permits time necessary to construct Layon Landfill

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New Equipment

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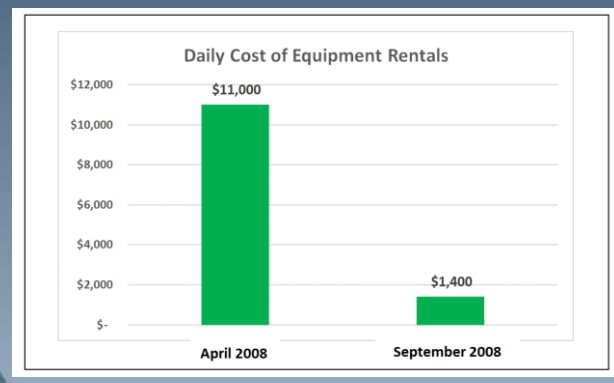
Immediate Reductions in Equipment Rentals with GBB arrival in 2008



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What the Receiver Found

- The Solid Waste Building and the Residential Transfer Stations were surrounded by illegally dumped waste
- Procurement problems and dysfunctional computer systems hampered any effort to address equipment and facility issues
- 4,000 residential customers receiving service without paying
- Most large commercial customers and GovGuam customer accounts were severely delinquent
- No accurate way to tie billing to the address receiving service
- Residential set outs were a mess, creating health and worker safety issues
- No Recycling by Solid Waste
- Major bridge and roadway issues on Route 4 – the primary access to the new landfill site at Layon

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Serious Health Hazards Surround SWMD Building

- Conditions Surrounding GSWA facility:
  - Leaking drums
  - Scrapped cars and school buses
  - Piles of tires
- Conditions hazardous to customers and staff

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Residential Transfer Stations

Agat, Dededo, Harmon, Malojloj

Dededo

Harmon

Agat

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Procurement Problems

Mechanics' Purchase Requests to Fix Equipment Left Unprocessed by DPW.

Lack of Parts Lead to Unsafe Conditions.

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Residential Set Outs Created Health and Safety Issues
No Recycling by Solid Waste

Trash setouts that invite insets and other health problems;

Hand loading trash increases risk of knee and back injuries

Labor intensive and very inefficient

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Major Bridge and Roadway Safety Issues on Route 4

TECHNICAL REPORT
LAYON TRASH HAUL ROUTE EVALUATION
ROUTE 4, FROM YLIG BRIDGE TO DANDAN ROAD

- ✓Route 4 is primary access to Layon Landfill
- ✓Bridges in need of repair/replacement
- ✓Dangerous curves and pavement issues
- ✓DPW and federal authorities made aware of the need

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What the Receiver Did About the Conditions Found

(with a lot of help from the Court, GSWA Employees and other Partners)

- Reported the illegally dumped materials surrounding GSWA facilities and the Court ordered GovGuam to clean the areas and properly dispose of the waste
- Initial procurement problems were addressed by emergency purchases authorized by Governor Camacho
- Implemented new computer systems and customer billing
- Implemented new trash cart system with RFID tags and geo-coding to tie cart location with billing address and resolve health and safety issues
- Implemented Recycling Programs
- Worked with DPW to address bridge and roadway issues but only achieved partial success

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Court- Ordered Cleanup of DPW Compound

- Significant improvement in the area adjacent to SWMD; abandoned vehicles removed
- Drums being removed; tires slowly being removed
- Receivership provided initial funding for the removal of drums
- Funds reimbursed and deposited to Citibank Trust Account per the Court's Order

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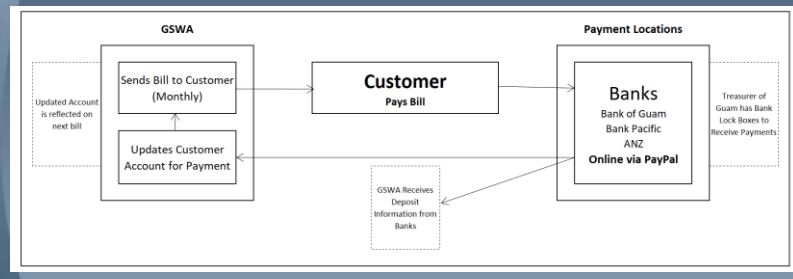
Revised Customer Payment System



Since FY 2010 GSWA has cumulatively collected $156,989,981 in Tipping Fees.

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Trash/Recycle Cart Rollout

- 19,938 delivered to customers as of September 30, 2010
- In January 2019 19,230 customers have trash carts
- In addition, 18,595 customers also have Recycle carts.

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Recycling Opportunities Expanded

Residential Transfer Stations and Curbside

Since December 2013 GSWA has Recycled **11,627** tons.

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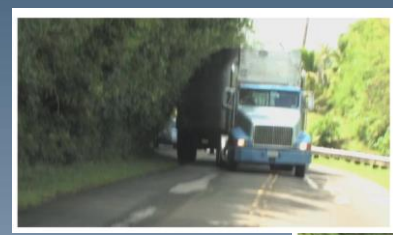
DPW Replaced/Renovated Bridges Roadway Remains a Safety Hazard



Truck veers into on-coming lane in order to correct its course (Deficient: Curve 25).

Truck tracking into other lane due to deficient curve (Deficient: Curve 33).

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Building the Layon Landfill

Layon Landfill Site 2009

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Building the Layon Landfill

- Construction of Layon Landfill included the access road and utilities
- The entrance facilities for the Landfill
- Landfill cells 1 and 2
- Construction must be completed before Ordot Dump runs out of space

Layon Landfill nearing completion

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Building the Layon Landfill

Installation of liner in Cell 1.

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Access Road Completion

Includes roadway, utilities and stormwater management

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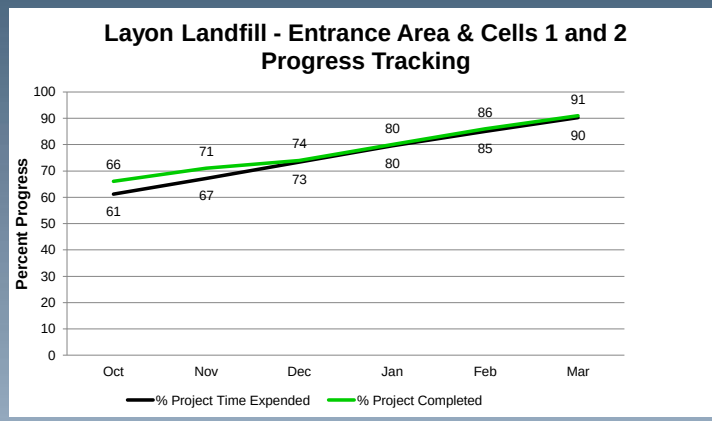
Tracking the Progress



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Cells 1 and 2 Fully Operational

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Milestone

The opening of the Layon Landfill on September 1, 2011 also marked ***the permanent closure of the Ordot Dump to delivery of waste.*** With the new landfill fully operational, the work to mitigate the pollution caused by the Ordot Dump by designing and constructing the necessary systems to assure that the Ordot Dump is not a source of future pollution, began.

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Ordot Dump Environmental Closure

Ordot Dump Pre-Receivership

Ordot Dump at end of Operations August 31, 2011

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The Environmental Closure of the Ordot Dump

- Brown and Caldwell awarded the contract for design
  - Extensive environmental investigation was undertaken
  - Necessary systems were identified
  - The needed systems were designed and bid for construction
- Black Construction was awarded the construction contract

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Ordot Dump Environmental Control Systems

- The following systems were installed:
  - 43.5 -acre closure cover system over waste
  - Four stormwater management ponds, with associated engineered inlet and outlet control structures
  - Leachate collection and removal system consisting of:
    - Perimeter leachate collection and leachate interceptor lines
    - Three steel/glass lined 16,000-gallon leachate storage tanks with pump station and controls
    - Leachate force-main providing discharge from tanks to GWA flow meter
    - Sewer line to connect to GWA WWTP

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Ordot Dump Environmental Control Systems (con't)

- One standby power generation system
- Gas Collection and Control System
  - 26 vertical extraction wells
  - 13 horizontal collectors
  - Flare Station
  - 10 perimeter groundwater monitoring wells
  - 18 perimeter gas monitoring wells
- Security fencing (encompassing 57 of the 96 acres) enclosing all major facility systems with six vehicle and 14 personnel gates for access and maintenance
- In addition:
  - Needed land was acquired
  - Restoration of Dero Road to be accomplished

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Ordot Dump Field Investigations
October 2011 – March 2012

Portable drilling rig for inaccessible locations

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Waste is relocated to shape side slopes

Source: Prestogeo.com

Example of geocell on sideslope before fill placement

Geo-composite and geo-membrane cover is pulled into place

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Finishing the Work to Protect the Environment

View from SE of Ordot Dump – January 2016

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Protecting the Environment
Closing the Ordot Dump

More than **34.4 million gallons of leachate has been diverted from Guam's Groundwater and the Lonfit River**[1]. This amount of leachate could fill about 51 Olympic sized swimming pools.

[1] The leachate is transported for treatment to the Hagatna Waste Water Treatment Plant via the sewer line constructed in Dero Road.

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Protecting the Environment
Closing the Ordot Dump

More than **327 million cubic feet of greenhouse gases have been prevented from escaping into Guam's air, the equivalent of not burning 22.6 million gallons of gasoline**.

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Upgrading the Residential Transfer Stations as Required by the permit for the Layon Landfill

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Residential Transfer Stations Before Upgrades

Dededo

Malojloj

Agat

Operations at Transfer Station

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Agat and Malojloj Residential Transfer Station after Upgrades

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Harmon Residential Transfer Station and HHW Facility

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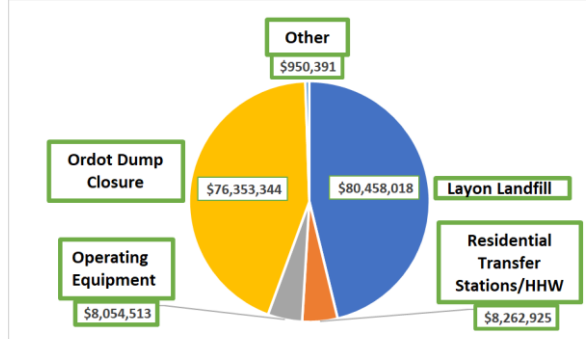
Capital Spending by the Receiver

Total as of January 31, 2019 is $174,079,192



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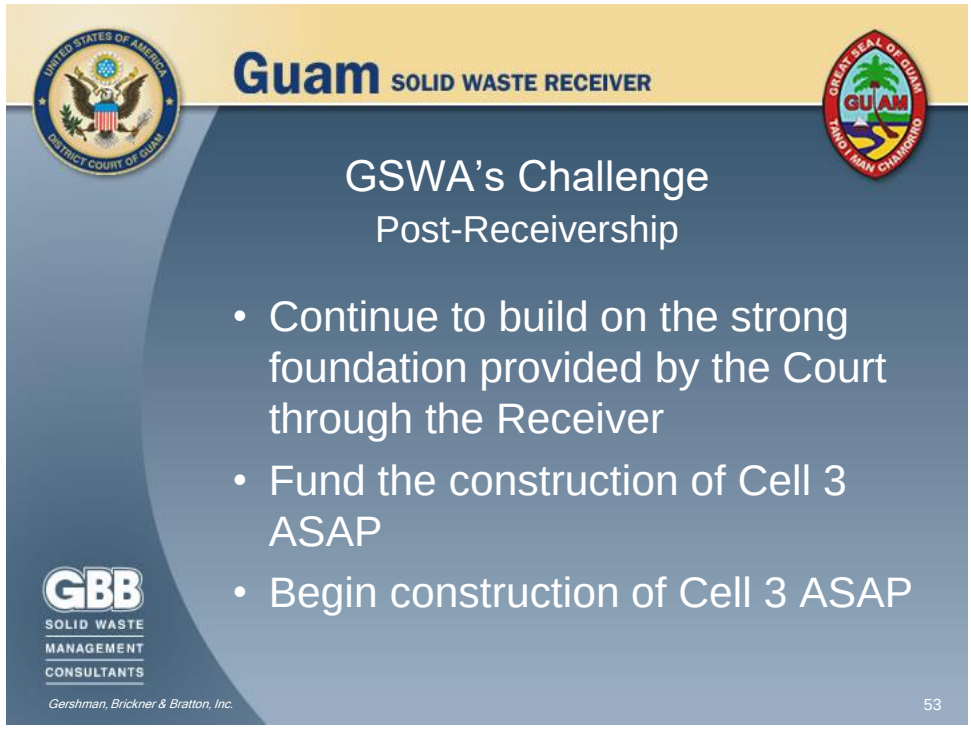
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GSWA's Challenge
Post-Receivership
• Continue to build on the strong foundation provided by the Court through the Receiver
• Fund the construction of Cell 3 ASAP
• Begin construction of Cell 3 ASAP
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The Need for a New Cell Has Been Repeatedly Emphasized
• See Receiver's Reports
– November 20, 2013
– June 25, 2014
– October 21, 2015
– November 8, 2016
– May 17, 2017
– September 27, 2018
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No new Cell and GSWA is out of Business

- Guam's economy takes a hit
- GovGuam is again out of compliance with the Consent Decree
- The new cell requires two dry seasons to build
- "The court has repeatedly emphasized that time is of the essence." {March 17, 2008}

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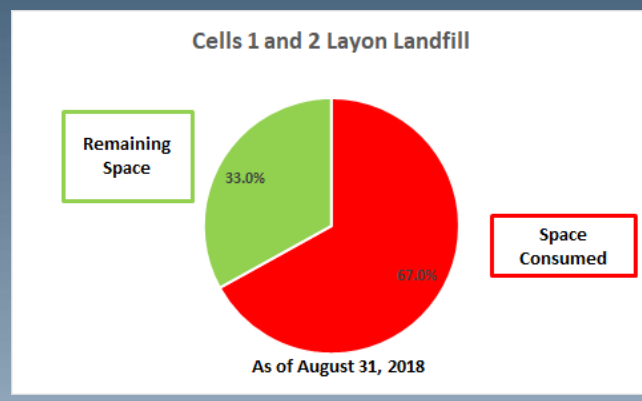
Layon Landfill Capacity



Time is of the Essence

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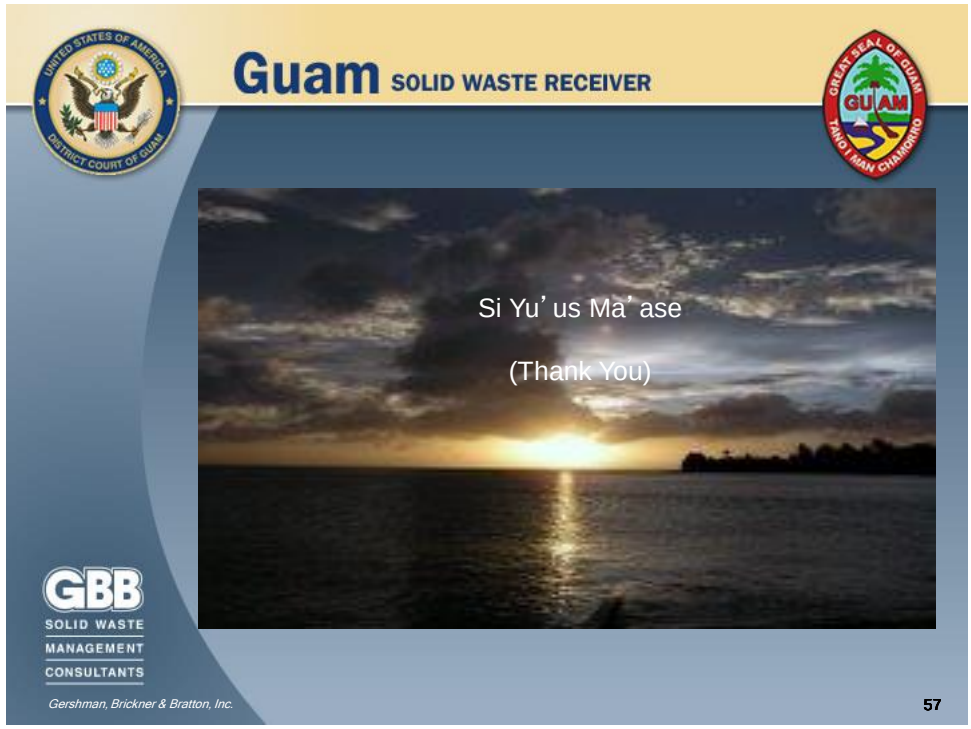
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Si Yu' us Ma' ase
(Thank You)
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