

**BEFORE THE GUAM PUBLIC UTILITIES COMMISSION**

IN THE MATTER OF: ) GSWA Docket 19-01  
 )  
PUC Management Audit of GSWA (Scope )  
of Work for Management Audit prepared ) **ALJ REPORT**  
by MSW Consultants) )  
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**INTRODUCTION**

1. This matter comes before the Guam Public Utilities Commission [“PUC”] upon the mandate of the Guam Legislature that the PUC perform a management audit of the existing operations of the Guam Solid Waste Authority [“GSWA”].
2. In Public Law 34-058: 3, enacted on November 1, 2017, the Guam Legislature added 10 GCA § 51A119, which provides as follows:

**“Management Audit by Public Utilities Commission.** The Public Utilities Commission (PUC) shall perform a management audit of the existing operations of the Guam Solid Waste Authority. Said audit shall be initiated within sixty (60) days from the date of enactment of this Act and, to the maximum extent possible, completed by December 30, 2017. The PUC *shall* have the full authority and powers conferred upon it by its enabling legislation in Chapter 12 of Title 12 GCA.”

**BACKGROUND**

3. In September of 2018, MSW Consultants was selected by the Commission to advise it on matters involving the Guam Solid Waste Authority. Starting in October of 2018, the ALJ began discussions with MSW Consultants concerning whether it could undertake the Management Audit of GSWA.
4. The ALJ met with Steve Lynch in Boston, Massachusetts in November of 2018 to discuss the possibility of retaining MSW Consultants to perform the audit.
5. In the opinion of the ALJ, MSW Consultants is uniquely qualified to conduct the audit. It maintains an extensive data base of municipal solid waste operations in the United States; it also would be assisted in this undertaking by an engineering firm, Golder Associates, that has extensive experience in municipal solid waste operations. MSW Consultants maintains a proprietary municipal solid waste and

- recycling collection model for use in validating productivity and efficiency metrics of operating systems.
6. After numerous discussions between the ALJ and MSW Consultants, the specific requirements for the management audit were thoroughly vetted and discussed. There have been numerous drafts of the Audit Scope, and numerous revisions, over the past 8-month period.
  7. The ALJ suggested some deletions from the scope, such as MSW proposed role as an advisor for GSWA in the bond issuance process (such being the responsibility of the Guam Economic Development Authority); the ALJ also negotiated reductions in the cost of the Audit.
  8. Once the ALJ was satisfied that the Audit Scope was complete, as well as cost effective, he forwarded the same to the Chairman of the GSWA Board, Andrew Gayle, and the General Manager Larry Gast. The ALJ met with Mr. Gayle and Mr. Gast on numerous occasions to discuss the contents of the Audit and to explain that GSWA would be paying the cost for the audit.
  9. On May 23, 2019, the ALJ met with the GSWA Board at the GSWA offices. He presented the proposed elements of the Audit to the Board and explained the cost factors. At all stages of the process, he has worked together with the Chairman, the GM, and the Board, to ensure that there is a "buy-in" by GSWA for the elements of the audit and the work that MSW will be undertaking.
  10. As a result of suggestions made by GSWA, further revisions were made to the Scope of the Management Audit.
  11. Mr. Gast recently indicated to the ALJ that the GSWA Board will consider the Management Audit, and determine whether to approve the same, at its meeting of July 24, 2019.

### ANALYSIS


12. If the GSWA Board approves the Scope for the Management Audit at its July 24, 2019, Meeting, the matter will be ready for a review by the PUC at its July 25<sup>th</sup> meeting. If for any reason the GSWA Board does not address or approve the Scope for the Management Audit at its July 24 meeting, the PUC can defer consideration of this matter until its next meeting.

13. The PUC must perform the Management Audit of GSWA because the Legislature has mandated the Audit. 10 GCA § 51A119 also mandates that Public Utilities Commission perform the management audit of the existing operations of GSWA.
14. The Legislature had requested that the Audit be completed, to the maximum extent possible, by December 30, 2017. However, GSWA was still under a receivership until June of 2019; GSWA felt that it was appropriate to delay the audit until the receivership had ended.
15. The PUC may undertake the audit through the auspices of its consultant, MSW Consultants.
16. Attached hereto as Exhibit "1" is the "FINAL PROPOSAL" of MSW for the Management Audit.
17. The proposed Management Audit Scope contains five major tasks: (1) Project Initiation and System Due Diligence; this task involves an examination of the GSWA facilities and baseline assessments of the Collection System, the Transfer Stations, and the Landfill; (2) Evaluation of Current Rate Structure; a cost of service analysis will be conducted, and a determination made if the current rate structure is sufficient to meet the needs of GSWA; (3) Comparative Analysis of Manpower and Staffing; this analysis is designed to meet the requirement of the Ratepayer Bill of Rights, 12 GCA §§ 12102.1 through 12102.2, which require the PUC to annually conduct a study comparing the staffing pattern and manpower levels of GSWA to the staffing patterns and manpower levels of at least (4) utilities in the United States Mainland which provide similar services to a comparable number of customers; such analysis is also required if GSWA decides to institute a rate case; (4) Evaluation of Current Management Practices and Capabilities; MSW will determine if GSWA's current management practices are in accord with industry best management practices; and (5) Reporting; MSW will prepare a management audit report and deliver a final presentation to all of the stakeholders.
18. The tentative Management Audit Schedule is expected to commence in August 2019 and continue through March of 2020.
19. GSWA Management Audit Budget total will be \$278,400.

**RECOMMENDATION**

15. The ALJ requests that the PUC approve the FINAL PROPOSAL of MSW Consultants for the Management Audit of GSWA, subject to prior approval of such Audit by GSWA.
16. A Proposed Order is submitted herewith for the consideration of the Commissioners.

Dated this 20th day of July, 2019.

  
Frederick J. Horecky  
Chief Administrative Law Judge

# FINAL PROPOSAL

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## OVERVIEW

The Guam Public Utilities Commission (PUC) is obligated by statute to, among other duties, perform a management audit of the Guam Solid Waste Authority (GSWA).

MSW Consultants, a management consulting firm specializing in the municipal waste and recycling industry, has been retained by the PUC to prepare an approach and subsequently conduct the management audit of the GSWA. MSW Consultants has in turn teamed with Golder Associates (Golder), a solid waste engineering firm, to support engineering-related components of the management audit. The remainder of this document provides additional regulatory background and proposes an approach and budget for the management audit.

## REGULATORY BACKGROUND

The following is an overview of the regulatory language which guides the management audit and identifies specific duties to be performed by the PUC and the GSWA.

- ◆ **Bolded:** sections that assign obligations to the PUC (numbered as “PUCx”).
- ◆ **Bolded and Underlined:** sections that assign obligations to the GSWA (numbered as GSWAx”).

The full statutes as provided to MSW Consultants by the PUC are included in Appendix A.

12 GCA Sections 12102.1 through 12102.2, aka the “Ratepayers Bill of Rights”, in addition to laying out the procedure by which a utility must propose a rate increase also requires the PUC to “...**annually conduct a study comparing the staffing pattern and man power levels of Public Utilities under their purview to the staffing patterns and manpower levels of at least (4) other utilities in the United States Mainland which provide similar services to a comparable number of customers.**” PUC1

The Ratepayer Bill of Rights also requires that such “**studies be made available to residents attending the public hearings on the proposed rate increase.**” Further, the “**PUC must, in determining approval an any rate increase, take into account the results of such studies and order reductions or other adjustments in the operations of the Public Utility requesting a rate adjustment, as recommended or suggested by such studies, prior to granting approval for a rate increase.**” PUC2

Section 51A119 of 10GCA Health and Safety provides that “**The...PUC...shall perform a management audit of the existing operations of the Guam Solid Waste Authority ...**” PUC3

Section 51A104 assigns the following “Powers and Duties” to the GSWA.

(A) “The Authority shall have and exercise each and all of the following powers:

(1) **administer those powers listed under Chapter 51a, Title 10 of the Guam Code Annotated...**”

(2) **“acquire by grant, purchase, gift, devise, or lease or by the exercise of the right of eminent domain in accordance with the provisions and subject to limitations of Title 21 GCA Chapter 15, and hold and use any real or personal**

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**property necessary or convenient or useful for the carrying on of any of the powers pursuant to the provisions of this chapter** “ GSWA1

(3) **“establish its internal organization and management, and adopt regulations for the administration of its operations** “ GSWA2

(4) **“(A) establish and modify from time to time with approval of the PUC, reasonable rates and charges for the collection, transportation, disposal, storage, recycling and processing of solid waste to recover the full cost of providing solid waste management services, and collect money from customers using such services** “ PUC4 and GSWA3

(B) **“similarly, the authority shall establish and modify from time to time, with approval of the PUC reasonable rates and charges for servicing of debt obtained to undertake capital improvements to solid waste management”** PUC5 and GSWA4

(5) **“enter into contracts and execute all instruments necessary or convenient in the exercise of its powers, adopt a seal, and sue or be sued in its own corporate name”** GSWA5

(6) **“at any time or from time to time, incur indebtedness pursuant to Article 2 of this Chapter.”** GSWA6

Section 51A 301(b) requires that "...All commercial and residential tipping fees charged by the Authority shall be subject to the review and approval of the PUC"

(c) **"A tipping fee per cubic yard, uncompacted, shall be established for business and government generators, subject to approval by the PUC, and shall be published in a rate order developed by the PUC."** PUC6

(d) **"A residential tipping fee, which may include collection charges and a Self-Drop Fee, may be established subject to the approval of the PUC".** PUC7

(e) **"The PUC is hereby authorized to establish, amend and approve, in accordance with chapter 12 of Title 12, Guam Code Annotated, all commercial, government and residential tipping fee and user fees (including without limitation a self-drop fee, a variable residential tipping fee and, collectively referred to as "Tipping Fees" which, when established, shall replace those previously created by law."** PUC8

(1) **"Tipping fees authorized and establish by PUC shall be based on volume and on an analysis of operations costs, including those cost components specifically listed under Title 10 GCA Section 51a 114".** PUC9

(2) **"PUC is empowered to undertake a focused management audit of the existing operations of the Guam Solid Waste Authority."** PUC3

The table below summarizes the key tasks from our management audit approach and indicates which regulatory requirements will be addressed within each task. Citations in the table relate to the enumerated excerpts above.

**Table 1 Correlation of Management Audit Tasks to Relevant Regulatory Language**

Task	Regulatory Citation Addressed
Evaluation of Current Rate Structure (Task 2)	PUC4, PUC5, PUC6, PUC7, PUC8, and PUC9
Comparative Analysis of Manpower and Staffing (Task 3)	PUC1 and PUC2
Evaluation of Current Management Practices and Capabilities (Task 4)	PUC3, GSWA1, GSWA2, GSWA3, GSWA4, and GSWA5

Additional guidance on the scope of this engagement was provided at a meeting in Boston on October 31, 2018 between Mr. R. Stephen Lynch, MSW Consultants Project Manager, and Mr. Fred Horecky, Chief Administrative Law Judge, Guam Public Utilities Commission and by email from Mr. Horecky on January 5, 2019.

Further, a conference call was held on June 10, 2019 among Mr. Lynch, Mr. Horecky, Mr. Culbertson and GSWA Executive Director Larry Gast to refine the Task 3 approach to reflect the fact that both landfills and the transfer station are operated through a contract for services with 3<sup>rd</sup> party providers and not through GSWA staff.

## APPROACH

### TASK 1 – PROJECT INITIATION AND SYSTEM DUE DILIGENCE

Task 1 will include the first of three trips to Guam for the purposes of a kick-off meeting, facilities tour, collection operations evaluation, fleet and equipment condition assessment, and management interviews. This trip is expected to take approximately five business days, excluding travel time to and from Guam. MSW Consultants will send two management-level staff members and Golder one.

**Subtask 1.1: Internal Plan Establishment and Kick-off Conference Call:** MSW Consultants and Golder will establish their internal plans ahead of a kick-off conference call and propose the expected project timeline and deliverables.

**Subtask 1.2: Initial Request for Information (RFI):** MSW Consultants and Golder will submit a written request for information to be provided within 7-10 business days or as otherwise discussed. The RFI will enumerate readily available information to support our team’s due diligence and preparation for the audit.

**Subtask 1.3: Kick-off Meeting, Facilities Tour, and Management Interviews:** MSW Consultants and Golder will attend a kick-off meeting to establish project expectations and schedules and review data needs. MSW Consultants will provide two management-level personnel and Golder one engineer to attend the initial meetings, operations observations, and tours. The kick-off meeting will take place in Guam and both firms will be there for approximately one week. MSW Consultants and Golder will tour Guam Solid Waste Authority facilities to assess current operations, configurations, and appropriateness of the facility equipment for supporting the current system and future needs. We will assess the condition of the solid waste fleet and facility mobile equipment, and make limited observations of collection services, including pre- and post-trip inspections. The consultant team will take detailed notes and facility photographs. Interviews with key personnel will be performed as well to assess operations and management philosophy, capability and workload. No project deliverable is

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directly associated with the site visit, but information obtained may be incorporated into the Manpower Study Report discussed in Task 5.

**Subtask 1.4: Collection System Baseline Assessment:** MSW Consultants maintains a proprietary municipal solid waste and recycling collection model for use in validating productivity and efficiency metrics of the current system including manpower and staffing. The information collected will be used for baselining the current state of operations and an analysis of current collection system productivity will be included as an appendix in the final report.

**Subtask 1.5: Transfer Station Baseline Assessment:** MSW Consultants will compile basic operating parameters at the transfer station for the purpose of understanding facility performance. We will compile permitted and actual throughput, operating hours, materials accepted, and equipment and vehicle lists. The information collected will be used for baselining the current state of operations and an analysis will be included as an appendix in the final report.

**Subtask 1.6: Landfill Baseline Assessment:** Golder will compile operating parameters at the active landfill as well as the closed landfill. We will compile tonnage throughput, operational hours, remaining capacity, compaction density, and leachate generation. The information collected will be used for baselining the current state of operations and an analysis will be included as an appendix in the final report.

## TASK 2 – EVALUATION OF CURRENT RATE STRUCTURE

MSW Consultants has written this task with the assumption that a formal analysis of the rate structure is needed. In practice, this task may be modified to reviewing an existing rate model already in use by the PUC or GSWA. If the task is modified to the latter, the budget may be decreased.

**Subtask 2.1: Supplemental RFI:** MSW Consultants will submit a written request for additional information, primarily related to financial data, customer counts, and any existing cost or rate models in use by GSWA, to be provided within 7-10 business days or as otherwise discussed. Operational data is essential to determine the most accurate cost of services from which to assess current and future operations financial health.

**Subtask 2.2: Cost of Service Analysis:** It is the responsibility of GSWA to develop its rate structure and basis for rates. As part of this management audit, MSW Consultants will perform a cost-of-service analysis to validate the appropriateness of the GSWA rate structure. The cost-of-service analysis will compile full costs – including direct operating expense, vehicle replacement plans, capital improvement plans, landfill cell development, and debt service – and allocate these costs to collection, facility operations, and management/administrative functions. Allocated full costs and current customer counts will be used to test current rates for revenue sufficiency.

**Subtask 2.3: CIP and Landfill Cell Development/Closure Review:** A critical aspect of every solid waste management system is the maintenance of facilities, fleet replacement, and landfill cell development and closure. MSW Consultants will review the Authority's capital replacement program and policies and factor these into the revenue sufficiency analysis.

**Subtask 2.4: Financial Projections and Rate Sufficiency Analysis:** MSW Consultants will project full costs for a 10-year time period. We will then compare the rates implied by the allocated full cost of service analysis to the current rates to determine whether there is a deficiency or surplus. The 10-year projection will identify when/if current rates are likely to need increasing to keep pace with cost escalation and/or future capital financing needs.



## TASK 3 – COMPARATIVE ANALYSIS OF MANPOWER AND STAFFING AND CONTRACT REVIEW

This task covers the benchmarking of GSWA collection operations with those of comparable operations on the U.S. mainland. It also allows for a review of the transfer station and landfill (active and closed) operating contracts to assess their application of sound contracting principles.

**Subtask 3.1: Identification of Benchmarking Partners:** Many U.S. cities, counties, and solid waste authorities operate vertically integrated solid waste management systems that have similar components to the GSWA's system. MSW Consultants maintains the nation's most extensive database of municipal solid waste program data to serve as a starting point for identifying prospective partners. Further, Golder serves numerous landfill clients in both the public and private sector.

The MSW project team will identify prospective collection system benchmark partners through the following steps:

- ◆ Develop screening criteria related to scale (customer base, tonnage), technology in use, local climate, geographic characteristics, and other system attributes.
- ◆ Filter available database (e.g., U.S. Census) to identify potential participants, and
- ◆ Consult MSW Consultants and Golder client lists to determine if either firm has an existing relationship with any prospective partners.

We will apply this process to identify four residential collection systems.

Once representative entities have been identified, the MSW team will submit requests for the identified municipalities to participate in a manpower study of their collection system.

Included in this task is the identification of the collection systems, as well as coordination to obtain their approval to participate in the study. One incentive for local governments to participate in the study is that the project team may offer to share the data obtained (with each participating entity) for their own use. If this is done, the project team may "sanitize" the data and remove specific site owner information if deemed necessary by all parties involved. The list of identified and agreeable MSW collection systems will be the deliverable product for this task.

**Subtask 3.2: Preparation of RFI for Participating Local Governments and GSWA:** MSW will prepare a request for information (RFI) for each identified local government collection system as well as the GSWA collection system. A Preliminary data set to be requested is shown below.

- ◆ Demographic information,
- ◆ Employee roster,
- ◆ Customer base,
- ◆ List of routes per service and day,
- ◆ List of services and rates,
- ◆ List of facilities used and/or operated,
- ◆ Annual waste receipts,
- ◆ Annual operating days,
- ◆ Vehicle and equipment list,
- ◆ 3rd party service contracts.

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**Subtask 3.3: RFI Data Acquisition and Analysis:** The project team will compile the data, prepare visual communication tools (dashboards), as well as provide analyses comparing the data. The project team will prepare dashboards for each collection system (up to a total of 5, including GSWA), as well as a summary dashboard illustrating the data collected. MSW Consultants will attempt to standardize the data in an effort to compare collection systems on an agreed upon standard (e.g. number of households served per day). The dashboard will be the deliverable in this task and will be utilized in the Manpower Study Report discussed in Task 5.

**Subtask 3.4: Transfer Station Contract Review:** MSW Consultants will review and evaluate the in-place operating contract for the transfer station and provide comments from the point of view of industry best practices. This will include a summary and opinion on the allocation of risks imbedded in the contract but will not include a review or opinion on the cost structure at this time.

**Subtask 3.5: Landfill Contract:** Golder will review and evaluate the in-place landfill operating contract, as well as any contracts for oversight of the closed landfills, and provide comments from the point of view of industry best practices. This will include a summary and opinion on the allocation of risks imbedded in the contract but will not include a review or opinion on the cost structure at this time.

**Subtask 3.6: Manpower Study Comparative Analysis and Operating Contract Review:** A final written report will be drafted for incorporation into the final project report summarizing the collection system manpower study and the results of the review of transfer station and landfill operating contracts. Elements of the report may include: system identification process, data acquisition, data analysis (data gaps may be addressed as well), summary dashboards collection system comparison and contrast, and recommended modifications for future operating contracts.

## TASK 4 – EVALUATION OF CURRENT MANAGEMENT PRACTICES AND CAPABILITIES

Task 4 will include the second of three trips to Guam for the purposes of working meetings and project progress overviews. This trip is expected to take approximately five business days, excluding travel time to and from Guam. MSW Consultants will send two management-level staff members.

**Subtask 4.1: Current Management Practices Gap Analysis:** MSW Consultants will conduct a gap analysis centered on the GSWA's current management practices and industry best management practices. Key performance factors and managerial best practices will be identified and compared to Guam's current operations. Special attention will be placed on meeting current Guam statute and laws.

**Subtask 4.2: Working Meeting:** The MSW Consultants team will present the findings of the management practices gap analysis as an executive summary presentation to the PUC and GSWA. The meeting will discuss and frame the implications of the findings and be used in directing remaining project objectives.

## TASK 5: REPORTING

Task 5 will include development of a management audit report and conclude with the last of three trips to Guam for the purpose of delivering the final presentation discussing the results and findings with all stakeholders. This trip is expected to take approximately three business days, excluding travel time to and from Guam. MSW Consultants will send two management-level staff members.

**Subtask 5.1: Draft Report:** MSW Consultants will prepare a confidential draft report of our findings and recommendations to be provided to the PUC, GSWA, and other PUC designees. Comments and questions related to this draft will be received in writing by us from the PUC and its designees.

**Subtask 5.2: Final Report:** Upon finalization of the report in a mutually agreeable manner, an electronic copy of the final report will be transmitted to the PUC.

**Subtask 5.3: Presentations and Final Meetings:** A two-person team from MSW Consultants will attend meetings and hearings for the purpose of presenting our report and answering questions as directed by the PUC.

**PRICING AND SCHEDULE**

The project budget is shown in the table below. Labor and expenses are based on the contractually specified labor rates and expense billing policies.

**GSWA Management Audit Budget**

#	Task Name	Labor	Expenses	Grand Total
1	Project Initiation and System Operations Review	\$82,200	\$22,300	\$104,500
2	Evaluation of Current Rate Structure	\$25,000	\$800	\$25,800
3	Comparative Analysis of Manpower and Staffing and Contract Review	\$18,100	\$1,300	\$19,400
4	Evaluation of Current Management Practices and Capabilities	\$49,400	\$13,300	\$62,700
5	Reporting and Presentations	\$54,300	\$11,700	\$66,000
	<b>Total</b>	<b>\$229,000</b>	<b>\$49,400</b>	<b>\$278,400</b>

It is envisioned that this project should be completed by the first quarter of 2020. Estimated meeting dates are shown below. The actual schedule shall be mutually adjusted with input from the PUC at the start of the engagement.

**GSWA Management Audit Schedule (Tentative)**

Expected Date	Project Event
August 1, 2019	Notice to Proceed
October 6, 2019	Kick-off Meeting
January 15, 2020	Second Working Meeting
March 31, 2020	Final Meeting and Presentation