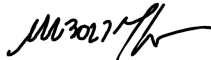
 <b>GUAM WATERWORKS AUTHORITY</b>	<b>STANDARD OPERATING PROCEDURE</b>	No.	SOP-1500-WWC-005
	<b>Sewer Force Main Break</b>	Effective Date	6/6/2025
		Final Approver	 Miguel C. Bordallo, P.E. General Manager
		Revision Letter	A

## 1.0 Purpose

This Standard Operating Procedure (SOP) establishes guidelines for evaluating, mitigating and correcting conditions causing or contributing to an unpermitted discharge of untreated wastewater. This SOP should be used in conjunction with the *Sanitary Sewer Overflow Response Plan* SOP, which provides detailed steps on E1 reporting, preparing and submitting the *Incident Report (IR) (Attachment 1)*, and regulatory reporting requirements.

## 2.0 Scope

This SOP applies to all Guam Waterworks Authority (GWA) personnel involved in detecting, assessing, responding to, and resolving sewer force main (FM) breaks.

## 3.0 Policy

To establish standard protocols to prioritize and address sewer FM spills promptly and effectively, minimize risk, and protect public health and the environment. These procedures reflect best management practices while adhering to regulatory reporting requirements.

## 4.0 Definitions

- 4.1. **Combination Pumper Truck (Pumper Truck):** A sewer cleaning machine, often referred to as a pumper or pumper truck, capable of flushing and vacuuming debris.
- 4.2. **Court Order Unit (COU):** Personnel in GWA's Wastewater Collections Division who monitor, maintain, inspect (via CCTV), and clean sewer lines to ensure regulatory compliance and efficient operation.
- 4.3. **Executive Management:** For the purposes of this SOP, Executive Management refers to the Assistant General Manager for Operations, the Assistant General Manager for Compliance and Safety, and the General Manager.
- 4.4. **Force Main (FM):** Any pipe that receives and conveys, under pressure, wastewater from the discharge side of a pump. A Force Main is intended to convey wastewater under pressure.
- 4.5. **Geographic Information Systems (GIS):** A system used to create, manage, analyze, and map all types of spatial data.
- 4.6. **Global Positioning System (GPS):** A satellite navigation system used by GWA personnel to collect spatial data in the field, such as points, lines, and polygons.
- 4.7. **Inflow and Infiltration (I/I):** Inflow of rainwater entering the sewer system through improper connections (e.g., downspouts or drainage system). Infiltration is groundwater entering the sewer system through holes in the sewers or unsealed manholes.
- 4.8. **Pumping Station Operator (Operator):** Employees under the Wastewater Collections Division that are responsible for operating and maintaining GWA's sewer pump stations as well as responding to and mitigating emergency call-outs such as SSOs.

## Sewer Force Main Break

- 4.9. **Sanitary Sewer Overflow (SSO)**: Any overflow, spill, release, or diversion of wastewater from a sanitary sewer collection system that occurs before a treatment plant. Sanitary sewer overflows include a) overflows or releases of wastewater that reach waters of the US, b) overflows or releases of wastewater that do not reach waters of the US, and c) wastewater backups into buildings or private property that are caused by blockages or flow conditions in a sanitary sewer system or building sewer lateral. SSOs are generally caused by high volumes of I/I, pipe blockages, pipe breaks, power failure, and insufficient system capacity.
- 4.10. **Sanitary Sewers**: A sewer that carries sewage and to which storm, surface, and ground waters are not intentionally admitted.
- 4.11. **Sewer Manhole (SMH)**: The surface-level access point for a below-ground sewer piping system. Designed for the entry of cleaning equipment and personnel to conduct sewer maintenance on underground sewer piping.
- 4.12. **Tankering**: Removing or transporting wastewater from the spill site using tanker trucks to a treatment facility or temporary storage location<sup>1</sup>.
- 4.13. **Trouble Dispatch Center (Dispatch)**: The GWA 24/7 customer complaint response center. The Trouble Dispatch Center is responsible for receiving customer complaints and generating and assigning Work Order (WO) requests.
- 4.14. **Vendor**: An external service provider who provides specialized equipment or performs specialized services.
- 4.15. **Wastewater Maintenance Mechanics**: Employees under the Wastewater Collections Division that are responsible for maintaining and repairing equipment at GWA's wastewater facilities, including sewer lines, sewer laterals, force mains, cleanouts, and sewer manholes. They ensure the efficient operation of the wastewater system.
- 4.16. **Water Wastewater System Control Center (SCC)**: GWA's primary control/communications hub connecting field personnel and system operators with Operations and Supervisors or Managers and executive management. SCC Dispatchers send and receive data to and from field personnel/operators providing critical asset information, additional support, or equipment needed. SCC is also responsible for documenting all transactions between SCC, the relevant Operations Supervisor or Manager, and the responding personnel/operators.

## 5.0 Roles and Responsibilities

5.1.	General Manager	Approves this SOP and all its subsequent changes.
5.2.	Assistant General Manager for Operations (AGM-O)	Oversees the development, revision, and implementation of this SOP as the Policy Owner.
5.3.	Operations & Maintenance (O&M) Manager, Wastewater Collections (Spill Response Coordinator)	<p>Serves as the Spill Response Coordinator.</p> <p>Oversees the FM break response to ensure personnel, equipment, supplies, and contracts are in place to respond.</p> <p>Provides guidance on repairs and containment measures when needed.</p>

<sup>1</sup> This method is useful when the force main is damaged and cannot convey wastewater as usual.

## Sewer Force Main Break

		<p>Reviews and approves the <i>Incident Report</i>.</p> <p>Submits the <i>Incident Report</i> to Compliance and Safety within seventy-two (72) hours from the time the incident occurred.</p> <p>Reviews this SOP annually and makes necessary changes to be presented to the AGM-O for consideration.</p> <p>Ensures proper training is provided to the affected employees to ensure proper compliance with this SOP.</p>
5.4.	Pumping Station Supervisor, Operation & Maintenance (O&M)	<p>Monitors personnel to ensure compliance with this SOP and provides guidance if needed.</p> <p>Reviews and assigns WOs to the Pump Station Operator(s) for initial site assessment.</p>
5.5.	Wastewater Maintenance Supervisor, Operation & Maintenance (O&M)	<p>Monitors personnel to ensure compliance with this SOP and provides guidance if needed.</p> <p>Reviews the WO to determine response measures and assigns it to the Wastewater Maintenance (WWM) Mechanics to perform the repairs.</p> <p>Notifies the Dispatch to coordinate utility clearance and issue road closures.</p> <p>Notifies the Department of Public Works (DPW) before the start of excavation.</p> <p>Notifies SCC if additional resources or staff are needed.</p> <p>Notifies the O&amp;M Manager, AGM-O, GM and Compliance and Safety of the incident.</p> <p>Provides field support when needed.</p> <p>Reviews and submits filed data via WO or IR to the GIS Section for any GIS data corrections.</p> <p>Closes the WO in E1.</p>
5.6.	Compliance and Safety (C&S)	<p>Oversees environmental compliance monitoring and reporting.</p> <p>Immediately notifies the Guam Environmental Protection Agency (GEPA) if the spill impacts water bodies.</p>

## Sewer Force Main Break

		Submits the final <i>Incident Report</i> to United States Environmental Protection Agency (USEPA) within five (5) business days.
5.7.	Trouble Dispatcher	<p>Receive reports, complaints, or inquiries from GWA customers or the public.</p> <p>Generate and assign WOs to the PS and WWM Supervisors.</p> <p>Prepare and send out water outage/road closure notices to the public.</p> <p>Coordinate utility clearances for excavations when needed.</p> <p>Create permanent road repair WOs ensuring the original FM break WO is referenced.</p>
5.8.	Water Wastewater System Control Center (SCC)	<p>Coordinates communication between field personnel and the relevant Operations Supervisor or Manager.</p> <p>Relays the report or information received and ensures all communications are updated and in the SCC records for its reference.</p>
5.9.	Permits Inspector	<p>Oversees road repairs.</p> <p>Conducts on-site inspection for proper backfilling and compaction.</p>
5.10.	Pumping Station (PS) Operators, Wastewater Maintenance (WWM) Operators	Strictly abide by the contents of this SOP and conduct activities accordingly. When confronted by a situation not covered by this SOP or requiring clarification, seek the Manager's or Supervisor's assistance.

## 6.0 Procedure Description

6.1. **Detection:** Force Main breaks are generally identified and reported to GWA's Trouble Dispatch Center by the Pumping Station (PS) Operators during daily routine activities or by the public.

6.1.1. When the Trouble Dispatcher receives a report of a break, the following information must be collected as best as possible: 1) the name and telephone number of the reporting party, 2) the exact location of the break, and 3) a brief description of the incident.

6.2. **Assignment:**

6.2.1. The Trouble Dispatcher will:

6.2.1.1. Generate a WO request in the Capital Asset Management (CAM) system.

6.2.1.2. Assign it to the district PS Supervisor, based on the reported geographic location (see *Contact List*, **Attachment 2**).

## Sewer Force Main Break

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6.2.1.3. Notify the PS Supervisor of the assignment.

6.2.2. The PS Supervisor will review the WO and immediately notify and assign it to the designated PS Operator, who will conduct the initial assessment.

6.3. **Spill Response Coordinator (SRC):** The O&M Manager for Wastewater Collections will serve as the SRC to ensure all necessary response actions and reporting requirements are met, including deploying required resources. The SRC will provide regular updates to Executive Management.

6.4. **Communication Protocol:** All responding personnel must maintain communication with the SRC via email, telephone, or text message (unless otherwise specified) to provide the status of their progress and any potential delays. This method of communication shall be used for all internal notifications, coordination, updates, and required reports referenced throughout this SOP.

6.5. **Documentation and GIS Data Reporting:** Details of the response must be documented in the Work Order and the *Incident Report*. Details include, but are not limited to:

6.5.1. Condition of the FM before repairs, including before and after photos.

6.5.2. Details of the repair process, including any changes to the pipe material or size.

6.5.3. **GIS Data Reporting:** Discrepancies observed between the actual field data and the GIS records must be documented and submitted to the GIS section for correction. If discrepancies are found:

6.5.3.1. The WWM Mechanic must document the discrepancies after returning from the field and notify the WWM Supervisor.

6.5.3.2. The WWM Supervisor will review the WO and/or the IR to verify the reported discrepancies.

6.5.3.3. If discrepancies are confirmed, the WWM Supervisor must submit the updated data, including a copy of the WO and/or the IR, to the GIS section via email at the end of each shift<sup>2</sup>.

6.6. **Initial Site Assessment:**

6.6.1. Upon receiving the WO notification and assignment, the PS Operator must report to the site within thirty (30) minutes. He/she will carry out the following actions:

6.6.1.1. Assess the extent of the break and document the findings in the WO.

6.6.1.2. Contact SCC to request assistance from the Wastewater Maintenance (WWM) team.

6.6.1.3. Notify Compliance and Safety (C&S) about the incident to monitor and ensure environmental compliance. C&S will then notify the Guam Environmental Protection Agency (GEPA) via email or telephone.

6.7. **Work Order Re-assignment:**

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<sup>2</sup> See SOP on *GIS Data Integration Post Field Repair Activities* (draft).

## Sewer Force Main Break

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- 6.7.1. SCC will reassign the WO to the WWM Supervisor and notify him/her of the re-assignment.
- 6.7.2. The WWM Supervisor will review the findings to determine the appropriate response actions, including personnel and equipment (**Attachment 3**). One or more of the following actions may be taken:
  - 6.7.2.1. Gather sewer system and mapping information using the GIS to locate sewers and determine the pump station associated with the FM, as well as any critical facilities that are in the area.
  - 6.7.2.2. If a road closure is required, notify Dispatch to issue a service interruption and/or road closure using the Water Outage & Road Closure Notice Request<sup>3</sup>.
  - 6.7.2.3. If excavation is necessary:
    - 6.7.2.3.1. Notify Dispatch to 1) request a service interruption and/or water outage closure notice and 2) coordinate utility clearance requests to mark underground utility lines prior to excavation.
    - 6.7.2.3.2. Notify SCC to 1) coordinate the heavy equipment request through Facilities and Maintenance Equipment Services (FMES) and 2) coordinate additional personnel with the Court Order Unit.
    - 6.7.2.3.3. Notify the Department of Public Works (DPW) of the excavation<sup>4</sup>.
- 6.7.3. Once the appropriate actions have been taken, the WWM Supervisor will reassign the WO to the WWM Mechanic(s) to initiate the repair.

## 6.8. Response Procedures:

- 6.8.1. Upon arrival, the WWM Mechanic(s) shall:
  - 6.8.1.1. Ensure appropriate Personal Protective Equipment (PPE) is worn.
  - 6.8.1.2. Note arrival time.
  - 6.8.1.3. Establish traffic control measures around the area, setting up barricades (if necessary) and visible caution signs to prevent the public from entering the area and to maintain a safe working environment.
  - 6.8.1.4. Confirm the affected area and extent of the break.
  - 6.8.1.5. Contact SCC for additional support or resources required to address the spill, such as bypass pumping equipment, etc.
    - 6.8.1.5.1. Additional staff support may be necessary to determine if the spill will impact residential zones, vegetation, or environmentally sensitive areas, including wetlands, waterways, and shorelines.

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<sup>3</sup> See SOP-1500-WP-001, *Water Outage & Road Closure Notifications to the Media/Public*.

<sup>4</sup> 21 GCA §71104, *Notice of Intent to Excavate or Demolish*.

## Sewer Force Main Break

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6.8.2. **Containment Measures:** Initiate necessary steps to contain the spill wherever feasible, minimizing spills into residential or commercial property or the environment.

6.8.2.1. Deploy absorbent barriers or sandbags around storm drains, and if necessary, flotation booms to prevent wastewater from entering receiving waters such as coastal wetlands, rivers and the ocean.

6.8.2.1.1. If the spill enters any water body, the Assistant General Manager of Compliance and Safety (AGM-C&S) must immediately be notified. The AGM-C&S will notify the Guam Environmental Protection Agency.

6.8.2.2. Close off the area if ponding occurs.

6.8.2.3. Once the spill is contained, gather and remove sewage-related debris and organic matter from the affected area to the nearest designated disposal sites.

6.8.3. **Bypass Procedures:**

6.8.3.1. Isolate the FM section by closing the upstream and downstream valves, or pumps.

6.8.3.2. Determine if it will be possible to pump around the break, from the pump station wet well to the FM discharge manhole or other accessible manhole. Prepare to pump around the break as follows:

6.8.3.2.1. Mobilize bypass pumping equipment, such as a combination pumper truck or tanker truck through GWA's Court Order Unit or a contracted vendor to transport wastewater to a treatment facility or temporary storage location.

6.8.3.2.2. Set up the pump-out equipment, hoses, piping and/or bypass ramps to divert sewage or redirect wastewater from the wet well to the nearest sewer discharge point.

6.8.3.2.3. Draw down the wet well as much as possible to maintain the low level.

6.8.3.2.4. Lock-out and tag-out (LOTO) the pumps in the pumping station<sup>5</sup>.

6.8.4. If the FM requires draining, begin backwashing into the wet well by first closing down the gate valve on the upstream side of the discharge check valve in the pumping station.

6.8.5. Open the check valve by hand and secure it in place.

6.8.6. Slowly bleed the FM break into the wet well by slowly opening the gate valve on the discharge side of the pump, but only to the point where the FM stops leaking and there is enough room to make the repair.

6.8.6.1. Constant communication must occur between the crew at the break and the crew at the pump station.

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<sup>5</sup> Refer to SOP L.104 Lock-out / Tag-out (Energy Hazard Control).



## Sewer Force Main Break

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- 6.8.7. Close the gate valve and return the check valve to its normal operating position.
- 6.8.8. Record the estimated volume of the spill using the methods outlined in the *Method for Sanitary Sewer Overflow Spill Calculation SOP*.
- 6.8.9. **Repair Procedures:**
  - 6.8.9.1. Carefully excavate around the damaged area using appropriate equipment to avoid further pipe damage.
  - 6.8.9.2. Use pumps to remove excess sewage from the excavation site.
  - 6.8.9.3. Assess the damage to the FM to determine the extent of the break (e.g., cracks, ruptures, joint failure, etc.) and type of repair required.
  - 6.8.9.4. Verify the type of pipe material (e.g., PVC, ductile iron, cast, asbestos, clay, etc.) for appropriate repair methods.
  - 6.8.9.5. Cut out the damaged section of the pipe using appropriate tools (e.g., saw, chainsaw cutter, etc.).
  - 6.8.9.6. **Repair Method:**
    - 6.8.9.6.1. **Minor cracks or leaks:** If the break is along the pipe length, then a repair can be made with a wrap-around sleeve. If the break is at the bell, then a joint-clamp can be used. Install a repair clamp size for the pipe material and diameter. Ensure a tight seal by torquing bolts as per manufacturer specifications.
    - 6.8.9.6.2. **Major breaks:** Replace the pipe by measuring and cutting a replacement section of the pipe. Use couplings or flanges compatible with the existing pipe material and size to connect the new section, ensuring all connections are sealed and watertight.
  - 6.8.9.7. After the repair, conduct a leak test on the repaired section to ensure its integrity and that no leaks occur.
    - 6.8.9.7.1. The PS Operator will remove the LOTO and activate the pumps while communicating with the maintenance repair teams via radio or telephone.
    - 6.8.9.7.2. The WWM team will check for any leaks. If leaks are present, they will notify the PS Operator to secure the pumps and repeat the repair methods.
  - 6.8.9.8. When the repair is complete, use a handheld GPS device to record the exact location and coordinates of the repaired pipe in the WO.
  - 6.8.9.9. If excavation was done, begin temporary road repairs<sup>6</sup>.
    - 6.8.9.9.1. Notify the Permits office to request a Permits Inspector on-site to oversee the road repairs.

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<sup>6</sup> See SOP on *Roadway Restoration Post-Leak Repairs* (draft).



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- 6.8.9.9.2. The Inspector will inspect the repairs to verify proper backfilling and compaction before laying cold mix/asphalt.
- 6.8.9.9.3. If permanent road repairs are necessary, initiate steps for permanent road repairs.
- 6.8.9.10. The WWM Supervisor will communicate with the O&M Manager and the PS Supervisor on the status of the repair.
- 6.9. **Recovery and Clean Up:** Once the spill has been contained and flow has been restored, the recovery and clean-up process shall follow the procedures outlined in Section 6.9 of the *SSO Response Plan SOP*.
- 6.10. **Work Order Closure:** The WWM Supervisor must close the WO in E1 following the procedures outlined in Section 6.12 of the *SSO Response Plan SOP*.
- 6.11. **Incident Report Submission:** Incident Reports must be completed and submitted following the procedures outlined in Section 6.13 of the *SSO Response Plan SOP*.
- 6.12. **Regulatory Reporting Requirements:** All force main breaks resulting in spills must be reported following the procedures outlined in Section 6.14 of the *SSO Response Plan SOP*.
- 6.13. **Training:** The O&M Manager should conduct training on Sewer Force Main Breaks when needed. All new or applicable employees must receive training and sign the *Employee's Acknowledgment Receipt (Attachment 4)* to confirm their understanding and compliance with the procedures outlined in this SOP.
- 6.14. **Non-Compliance with this SOP:**
- 6.14.1. **Employee:** Failure of the employee to adhere and comply with any of the guidelines, policies, and procedures stated herein may result in progressive or adverse disciplinary action, including but not limited to suspension, demotion or termination of employment as provided by GWA Personnel Rules and Regulations (PR&R).
- 6.14.2. **Supervisors and Managers:** Failure of the Manager or Supervisor to report and enforce all the guidelines, policies, and procedures stated herein may result in progressive or adverse disciplinary action, including but not limited to suspension, demotion, or termination of employment as provided by GWA PR&R.

## 7.0 Document Approvals

Role	Position	Name of Approver	Approval Signature	Date Approved
Authors	O&M Manager, Wastewater Collections Legal Secretary III	Jason Tudela Antonette Dione Gutierrez	Approval on File	On File
Policy Owner	Assistant General Manager for Operations (AGM-O)	Thomas A. Cruz, P.E.	Approval on File	On File
Final Approver	General Manager	Miguel C. Bordallo, P.E.	Page 1	Page 1

By existing Guam and Federal laws, the contents of this SOP were reviewed thoroughly by its Policy Owner and was found to be:

- ☒ appropriate for publication on the GWA website without compromising the security of GWA's system or the public's health and safety.

## Sewer Force Main Break

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☐ not appropriate for publication on the GWA website because it might jeopardize the security of GWA's system or the public's health and safety.

### 8.0 Records of Revisions

All suggestions for improvement shall be directed to the Policy Owner indicated below. The Policy Owner will consider input received, develop recommendations on how to address the suggestions and obtain authorization to make the recommended changes. Updates, revisions, corrections and waivers to this SOP shall be made in writing and be approved by the GM.

8.1. Policy Owner: Assistant General Manager for Operations

8.2. Authorization: General Manager

Effective Date	Revision Letter	Document Authors	Description of Change
Page 1	A	Jason Tudela Antonette Dione Gutierrez	Initial Release of SOP

### 9.0 References

- 9.1. SOP on *Sanitary Sewer Overflow Response Plan* (Draft).
- 9.2. Guam Code Annotated, Title 21, § 71104, *Notice of Intent to Excavate or Demolish*.
- 9.3. SOP-1500-WP-001, *Water Outage & Road Closure Notifications to the Media/Public*.
- 9.4. SOP L.104, *Lock-out / Tag-out (Energy Hazard Control)*.
- 9.5. SOP on *Roadway Restoration Post-Leak Repairs* (Draft).
- 9.6. SOP on *GIS Data Integration Post Field Repair Activities* (Draft).

## Sewer Force Main Break

**Attachment 1: Incident Report**

Basic Incident Information			
SSO#: _____ Activity: _____ Section: _____ District: _____  Lead Rover: _____ Facility Type: _____ Structure Detail: _____ Last date area was viewed with CCTV *: _____ Last date area was cleaned *: _____	Customer Name: _____ Street #: _____ Name: _____ Village: _____  Detailed Location: _____	Weather: _____ Consequences Primary: _____ Consequences Secondary: _____  Responsible: _____ Severity: _____ Frequency: _____	
Reporting and Notification Information			
Reported By: _____ Date Reported: _____  Arrival Response Date: _____ Spill End Date: _____ Duration of Spill _____ Estimated Rain Fall (Inches): _____ Description and estimation of flooding area or run _____	Call Received By: _____ Time Reported: _____ Arrival Response _____ Spill End Date: _____ Estimated Spill Based on Site Assmt: _____ Spill Not Observed by GWA: _____	Date Dispatched: _____ Job End Date: _____  Report Type: _____ Time Dispatched: _____ Job End Time: _____  Impact to Public Health: _____ Were signs posted? _____ Locations of sign(s)? _____  Supervisor: _____ Ops Division/Section: * _____	
<b>Equipment Used</b>	<b>Root Cause</b>	<b>Spill Origin</b>	<b>Impact Location</b>
Equipment 1*: _____ Equipment 2*: _____  Others/Vendor Info: _____ Invoice No.: _____	Select Root Cause 1*: _____ Select Root Cause 2*: _____  Others Info: _____	Spill Origin 1*: _____ Spill Origin 2*: _____  Others Info: _____	Impact 1*: _____ Impact 2*: _____  Others/Shoreline/River: _____
Description of Incident			
JDE WORK ORDER NO*: _____ Description of Incident: _____			
Network Details			
Pipe Size (In)***: _____ Pipe Material **: _____ Pipe Length (Ft) *: _____ Nearest Water Well: _____	SMH #: _____ SMH La: _____ SMH Long: _____ Sewer Pump Station: _____	By-pass Discharge SMH#: _____ Vol. By-passed* (Gallons)*: _____ Equip Hrs - GWA Vector*: _____ Equip Hrs - Vendor*: _____ GIS Map Available?: _____	
Spill Details			
Method List* (Primary-Spill Details) Method List* (Secondary-Spill Details)	Est GPM Spill Field* _____ Total Est Volume Spilled _____ Volume Recovered* _____ Net Spill Volume _____	Others Volume Extracted: _____ Source Of Other Volume Extracted* _____	
<b>Spill Response</b>		<b>Corrective Action</b>	
Spill Response 1* _____ Spill Response 2* _____ Spill Response 3* _____  Vendor1 Name _____ POC Name1 _____ Vendor2 Name _____ POC Name2 _____ Add'l Equipment Used Info: _____  Other Info: _____		Corrective Action 1* _____ Corrective Action 2 _____ Other Info / Details _____	
Additional Comments			
Was the area cleaned and disinfected? * _____  Remarks: _____		Operators _____	
SSO Report Entered By	Reviewed & Approved	Level of Certification	Report Date

## Sewer Force Main Break

**Attachment 2: Contact List**


Gloria B. Nelson Public Service Building  
 688 Route 15  
 Mangilao, Guam 96913  
[jtudela@guamwaterworks.org](mailto:jtudela@guamwaterworks.org)

**SEWER FORCE MAIN BREAK  
 CONTACT LIST**

TITLE	TELEPHONE NUMBER
General Manager	(671) 300-6845
Assistant General Manager of Operations	(671) 300-6036
Assistant General Manager of Compliance & Safety	(671) 300-6885
Operations & Maintenance Manager; Wastewater Collections	(671) 300-6342
Pump Station Supervisor; Southern Rovers	(671) 828-8867
Pump Station Supervisor; Central Rovers	(671) 472-3247
Pump Station Supervisor; Northern Rovers	(671) 647-7832
Pump Station Supervisor; Court Order Unit	(671) 647-7832
Wastewater Maintenance Supervisor	(671) 647-5787
Safety Inspector Supervisor	(671) 300-6349
C&S Senior Regulatory Analyst	(671) 300-6887
Trouble Dispatch Center	(671) 300-6892 or (671) 300-6894/58
Water Wastewater System Control Center	(671) 646-4211 or (671) 646-7319
General Counsel	(671) 300-6848
Small Claims and Contracts Administrator	(671) 300-6038

## Sewer Force Main Break

### Attachment 3: Emergency Equipment, Materials and Supplies



Gloria B. Nelson Public Service Building  
688 Route 15  
Mangilao, Guam 96913  
[jtudela@guamwaterworks.org](mailto:jtudela@guamwaterworks.org)

**SEWER FORCE MAIN BREAK  
EMERGENCY EQUIPMENT,  
MATERIALS AND SUPPLIES**


EMERGENCY EQUIPMENT	MATERIALS AND SUPPLIES
<ul style="list-style-type: none"> <li>• Rodding machine and associated cleaning/cutting attachments (sand trap) – 1 (HWWTP)</li> <li>• Portable chop saws – 2 (HWWTP)</li> <li>• Skill saw – 1 (HWWTP)</li> <li>• Reciprocating saw – 1 (HWWTP)</li> <li>• Portable Generator (11 kW) – 1 (HWWTP)</li> <li>• Portable Sump Pumps – 10 (HWWTP)</li> <li>• 16" Bypass Pipes HDPE – 125 pcs 25ft to 40ft (Northern District (ND) WWTP)</li> <li>• 12" Bypass Pipes HDPE – 129 pcs 30ft to 40ft (NDWWTP)</li> <li>• 21'9x4'11" Flow Through Ramps – 2 (NDWWTP)</li> <li>• Bucket Machine – 1 (NDWWTP)</li> <li>• Magnetic Manhole Opener/Lifter – 1 (Agat-Santa Rita (ASR) WWTP), 1 (Hagatna (H) WWTP), 3 (NDWWTP)</li> <li>• Line Locators – 6 (COU NDWWTP)</li> <li>• Air Blowers with Hose – 3 (HWWTP)</li> <li>• High Velocity Jetter – 1 (COU NDWWTP)</li> <li>• Combination Pumper Truck – 3 (COU NDWWTP)</li> <li>• CCTV Camera Trailer – 2 (COU NDWWTP)</li> <li>• CCTV Camera Van – 1 (COU NDWWTP)</li> <li>• Boom Truck – 1 (HWWTP)</li> <li>• Sandbags – 25 (HWWTP)</li> <li>• Flotation Booms – 3 (HWWTP)</li> <li>• 4" Trash Pumps – 1 (NDWWTP)</li> <li>• 8" Trash Pumps – 1 (NDWWTP)</li> <li>• Gas Meter for Oxygen Deficient, Explosive or Toxic Gas – 2 (HWWTP)</li> <li>• Confined space entry tri-pod and associated equipment – 1 (HWWTP)</li> <li>• Shoring Equipment – 24 pieces (HWWTP)</li> <li>• Pneumatic Pipe Plugs - Various sizes: 4"-6" (3 pcs); 8", 10", 12", 24", 6"-10", 12"-18 (3 pcs); 15"-18", 18"-24" (2 pcs) (HWWTP)</li> </ul>	<ul style="list-style-type: none"> <li>• Caution tape</li> <li>• Traffic/Safety Cones/Barricades</li> <li>• Traffic Signs</li> <li>• Shovels</li> <li>• Rakes</li> <li>• Cleaning Agents (e.g., Dawn dishwashing liquid, simple green, etc.)</li> <li>• Deodorizer</li> <li>• Pump Sprayer</li> <li>• 5 Gallon Buckets</li> <li>• Broom and Dust Pan</li> <li>• 35-Gallon Trash Container with Lids</li> <li>• Rags</li> <li>• Shop Towels</li> <li>• Clorox Wipes</li> <li>• Trash Bags</li> <li>• Mop</li> <li>• Replacement Parts (Pipes, Valves, Wrap-Around Sleeves, Bell-Joint Clamps or other appropriate Clamps and Repair Kits)</li> </ul>

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Sewer Force Main Break

Attachment 4: Employee’s Acknowledgement Receipt



Gloria B. Nelson Public Service Building  
688 Route 15  
Mangilao, Guam 96913  
[jtudela@guamwaterworks.org](mailto:jtudela@guamwaterworks.org)

**SEWER FORCE MAIN BREAK  
EMPLOYEE’S  
ACKNOWLEDGMENT RECEIPT**

I, the undersigned, an employee of the Guam Waterworks Authority, hereby acknowledge receipt of SOP-1500-WWC-005 entitled “*Sewer Force Main Break*” this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Employee’s Name/Badge No.:	Employee’s Signature:	Date:

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