
 <b>GUAM WATERWORKS AUTHORITY</b>	<b>STANDARD OPERATING PROCEDURE</b>	No.	SOP-1500-WWC-004
	<b>Sanitary Sewer Overflow Response</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) outlines the procedures for responding to confirmed Sanitary Sewer Overflows (SSOs) discharged from the Guam Waterworks Authority's (GWA) wastewater collection systems (e.g., manhole, clean out, wet pit, etc.) and treatment plants. This SOP ensures that any verified SSO—whether referred to as an overflow, backup, spill, or discharge—is promptly addressed.

## 2.0 Scope

This SOP applies to all GWA employees under the Wastewater Collection and Wastewater Treatment divisions who respond to SSOs.

## 3.0 Policy

GWA's goal is to minimize the impact of SSOs through timely response, effective mitigation, and compliance with local and federal regulatory reporting requirements. This includes adherence to the conditions set forth in the National Pollutant Discharge Elimination System (NPDES) permit.

## 4.0 Definitions

- 4.1. **Blockage**: An object that may partially or fully block the flow of wastewater through a sewer pipeline. The blockage can be caused by debris in the sewer, Fats, Oil, and Grease (FOG), root intrusion, or partial or full collapse in the pipeline. If not caught in time, the blockage may cause an overflow. This is also called a stoppage.
- 4.2. **Closed Circuit Television (CCTV)**: The use of a video camera to inspect sewer lines for structural integrity and pipe conditions such as damage or obstruction.
- 4.3. **Combination Sewer Cleaning Truck (Combination Truck)**: A sewer cleaning machine capable of flushing and vacuuming debris.
- 4.4. **First Responder**: The Wastewater Collection Pumping Station Operator(s) and Wastewater Treatment Sewer Plant Operator(s).
- 4.5. **Force Main**: Piping that conveys wastewater under pressure from the discharge side of a pump to a discharge point (terminating manhole).
- 4.6. **Geographic Information Systems (GIS)**: A system used to create, manage, analyze, and map all types of spatial data.
- 4.7. **Government Line Clean-Out**: Identified as clean-outs installed after the private property on government easements and are used for access points into government lateral lines for any type of maintenance.
- 4.8. **Government Main Service Line**: A series of wastewater piping used to collect wastewater from homes, businesses, and commercial and industrial buildings and safely transport it to a wastewater treatment plant facility.

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- 4.9. **Headworks:** Refers to the initial stage of a wastewater treatment plant where raw sewage first enters the system. It may consist of mechanical bar-screens, shredders or grinders, a wet well, and pumps.
- 4.10. **High Velocity Jetter (Jetter):** A machine designed to remove grease, roots, and debris from wastewater collection sewer lines and clean them with high-velocity jets of water. Also referred to as a jetter, hydraulic cleaner, hydro jet, flusher, and jet truck.<sup>1</sup>
- 4.11. **Incident Report (IR):** Refers to a written document required following an SSO event. Although the Wastewater Collections and Wastewater Treatment divisions use different forms, both are collectively referred to as “Incident Reports.”
- 4.12. **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.
- 4.13. **Influent:** Water—raw (untreated) or partially treated—flowing into a reservoir, basin, treatment process, or treatment plant.
- 4.14. **Private Clean-Out:** Cleanouts are installed on private property to easily access their private sewer lines for removal of any type of blockages.
- 4.15. **Pumping Station Operator (PS Operator):** Employees under the Wastewater Collections Section are responsible for operating and maintaining GWA’s sewer pump stations as well as responding to and mitigating emergency call-outs such as SSOs.
- 4.16. **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 failures, and insufficient system capacity.
- 4.17. **Sanitary Sewers:** A sewer that carries sewage and to which storm, surface, and ground waters are not intentionally admitted.
- 4.18. **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.
- 4.19. **Sewer Plant Operator (SP Operator):** Employees under the Wastewater Treatment section who are responsible for operating and maintaining GWA’s wastewater treatment facilities as well as responding to and mitigating emergency call-outs such as SSOs.
- 4.20. **SSO Major Spill:** The sewage spill that contaminates the homeowner’s property inside the home that cannot be effectively and satisfactorily cleaned up by GWA personnel and requires regulatory notification. A major spill meets at least one of the following:
  - a. Spreads beyond the immediate drain area and into other living areas of a residence.

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<sup>1</sup> [high-velocity cleaner \(HVC\) \(csus.edu\).](https://www.csus.edu/ehs/ehsweb/high-velocity-cleaner/hvc/)

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- b. Contaminates wall-to-wall carpets, furniture, or other homeowner belongings that require specialized cleaning or disinfection.
  - c. Poses a threat to public health.
  - d. Occurs within 50 feet of human habitation.
  - e. Contaminates public water system.
  - f. Poses a threat to public health and/or the environment.
  - g. Reaches surface water such as a river or stream.
  - h. Reaches shoreline and/or the ocean.
  - i. Reaches recreational waters or stormwater systems.
  - j. Reaches any sensitive habitat such as wetlands, estuaries, mangroves, coral reefs, and aquifer areas.
  - k. Reaches agricultural lands.
- 4.21. **SSO Minor Spill:** Sewage spill that is contained, may be effectively and satisfactorily cleaned up by GWA personnel, and does not affect the environment or pose any health hazard. A minor spill meets the following:
- a. Is confined to the affected drained area and does not enter the other rooms in the residence.
  - b. Does not contaminate carpet, furniture, or other homeowner belongings that require specialized cleaning and disinfection.
  - c. Does not pose a threat to public health hazard.
  - d. Does not pose any environmental threat.
  - e. Does not occur within 50 feet of human habitation.
  - f. Does not contaminate the public waters.
- 4.22. **Trash Pump:** A pump designed to transport sewage liquids containing hard and soft solids from one location to another.
- 4.23. **Trouble Dispatch Center:** The GWA 24/7 customer complaint response center. The Trouble Dispatch Center is responsible for receiving customer complaints and generating and assigning Work Order requests.
- 4.24. **Vendor:** An external company or contractor that offers specialized services, equipment, or support.
- 4.25. **Water Wastewater System Control Center (SCC):** GWA's primary control/communications hub connecting field personnel and system operators with Operations 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 field personnel/operators.

## 5.0 Roles and Responsibilities

5.1.	General Manager (GM)	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.

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5.3.	Assistant General Manager for Compliance and Safety (AGM-C&S) or Designee	<p>Oversees environmental compliance monitoring and reporting.</p> <p>Immediately notifies the Guam Environmental Protection Agency (GEPA) if the spill impacts water bodies.</p> <p>Provides a verbal notification to United States Environmental Protection Agency (USEPA) within twenty-four (24) hours of becoming aware of the SSO event. Submits the final <i>Incident Report</i> to USEPA within five (5) business days.</p>
5.4.	Operations & Maintenance (O&M) Managers, Wastewater Collection (WWC) & Wastewater Treatment (WWT)	<p>Review this SOP annually and make necessary changes to be presented to the AGM-O for consideration.</p> <p>Ensure that proper training and/or training guidelines are provided to the affected employees to ensure proper compliance with this SOP.</p> <p>Serve as the Spill Response Coordinator.</p>
5.5.	Supervisors, Operations & Maintenance (O&M)	Monitor personnel to ensure compliance with this SOP and provide guidance if needed.
5.6.	Trouble Dispatch	<p>Receives reports, complaints, or inquiries from GWA customers or the public.</p> <p>Generates and assigns Work Orders to field personnel.</p>
5.7.	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>
5.8.	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:** SSOs are generally identified and reported to GWA's Trouble Dispatch Center by PS Operators during daily routine activities or by the public.

6.1.1. When the Trouble Dispatch Center receives a report of an SSO, the Trouble Dispatcher (Dispatcher) must collect the following information as best as possible:

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1) the name and telephone number of the reporting party, 2) the exact location of the suspected SSO, and 3) a brief description of the incident.

### 6.2. **Assignment:**

#### 6.2.1. The Trouble Dispatcher will:

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

6.2.1.2. Assign it to the district PS Supervisor (Supervisor), based on the reported geographic location (see *Contact List* in **Attachment 1**).

6.2.1.3. Notify the Supervisor of the assignment.

6.2.1.4. Contact and inform the WWC O&M Manager of the reported SSO and WO assignment.

#### 6.2.2. The PS Supervisor will review the WO to determine the appropriate response actions, including personnel and equipment (see *Equipment, Materials and Supplies* in **Attachment 2**). One or more of the following actions may be taken:

6.2.2.1. Gather sewer system and mapping information using the GIS to identify the SSO location and details such as the SMH asset ID, nearby sewer lines, their sizes, and the distance between manholes.

6.2.2.2. If a road closure is necessary, notify Dispatch via email or text to issue a road closure notice.<sup>2</sup>

6.2.2.3. Notify SCC to coordinate assistance from the Court Order Unit (COU) to flush and inspect the sewer line. If the COU is unavailable, the PS Supervisor shall arrange for an external vendor to perform the necessary work.

#### 6.2.3. Once the appropriate actions have been taken, the PS Supervisor will reassign the WO to the responding PS Operator and notify him/her of the assignment.

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

### 6.4. **Communication Protocol:** All responding personnel must maintain communication with the SRC and their executive management 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 status reports referenced throughout this SOP.

#### 6.4.1. SCC must be notified of any emerging situations. Schools, hospitals, and clinics are of special importance, especially where an SSO or spill may impact public areas or high tourist areas.

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<sup>2</sup> See SOP-1500-WP-001, *Water Outage & Road Closure Notifications to the Media/Public*.

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- 6.5. **Documentation and GIS Data Reporting:** Details of the response must be documented in the Work Order and the *Incident Report (Attachment 3)*. Details include, but are not limited to:
  - 6.5.1. Condition of the affected area prior to any response action, including initial field assessments.
  - 6.5.2. All response efforts, including all required information outlined in **Attachment 3** (e.g., exact location of the SSO, equipment used, identified root cause, spill origin, impact location, etc.).
  - 6.5.3. **Work Order and Incident Report Correlation:** To ensure consistent tracking and documentation, each IR must include the corresponding WO number. Similarly, the WO notes section must reference the IR by including the report date, location, and a brief description of the incident.
  - 6.5.4. **GIS Data Reporting:** Discrepancies observed between the field data and the GIS records must be documented and submitted to the GIS section for correction. If discrepancies are found:
    - 6.5.4.1. The PS Operator must document the discrepancies after returning from the field and notify the PS Supervisor.
    - 6.5.4.2. The PS Supervisor will review the WO and/or IR to verify the reported discrepancies.
    - 6.5.4.3. If discrepancies are confirmed, the PS Supervisor must submit the updated data (e.g., correct location of gravity mains, force mains, air relief valves, and sewer manholes, government cleanouts, underground utility locations, etc.), including a copy of the WO and/or Incident Report to the GIS section via email at the end of each shift.<sup>3</sup>
- 6.6. **Initial Response Action:**
  - 6.6.1. Upon arrival at the site, the PS Operator shall:
    - 6.6.1.1. Ensure appropriate Personal Protective Equipment (PPE) is worn.
    - 6.6.1.2. Note arrival time.
    - 6.6.1.3. 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 maintain a safe working environment.
    - 6.6.1.4. Conduct a preliminary investigation to confirm the SSO.
    - 6.6.1.5. Identify and assess the affected area and extent of the SSO.
    - 6.6.1.6. Notify the Assistant General Manager of Compliance and Safety (AGM-C&S) of the incident.<sup>4</sup>

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<sup>3</sup> See SOP on *GIS Data Integration Post Field Repair Activities* (draft).

<sup>4</sup> If the AGM-C&S is not available, contact the Senior Regulatory Analyst.



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- 6.6.1.7. If an SSO occurs in or at a government building or public area, immediately notify the WWC Manager, AGM-O, AGM-C&S, and the GM within ONE (1) hour.
- 6.6.1.8. Contact SCC if additional support or resources are needed as warranted by the situation (e.g., WWC Maintenance personnel and/or Small Claims and Contracts Administrator), especially in cases of a “**major inside or outside spill**”.
- 6.7. **Containment Measures:** Initiate necessary steps to contain the SSO or spill wherever feasible, minimizing overflows into residential or commercial property or the environment.
  - 6.7.1. Deploy absorbent barriers or sandbags around storm drains, and if necessary, flotation booms to control and contain the spilled wastewater to prevent or block it from entering receiving waters such as coastal wetlands, rivers, and the ocean.
  - 6.7.2. If the spill enters any water body, immediately notify the AGM-C&S. The AGM-C&S will then notify the GEPA via email or telephone.
- 6.8. **Flow Restoration:** Once the SSO is contained, restore the flow using a Combination or Jetter truck<sup>5</sup>.
- 6.9. **Recovery and Cleanup:** After restoring the flow and the spilled sewage has been contained to the extent possible, initiate the recovery and clean-up phase.
  - 6.9.1. **Estimate the volume of the SSO:** Use the method most appropriate to the SSO. Refer to the *Method for SSO Spill Calculation* SOP, which outlines four (4) methods: 1) Eyeball Estimation Method, 2) Bucket Method, Duration and Flow Rate Method, and 4) Measured Volume.
  - 6.9.2. **Recovery of Spilled Sewage:** The recovery phase shall be conducted by the COU or Vendor using the Combination truck.<sup>5</sup>
    - 6.9.2.1. Pump the spilled sewage from the affected area(s).
    - 6.9.2.2. Ensure that all sewage and debris are removed and disposed of properly.
    - 6.9.2.3. Flush the affected area(s) with the water pressure hose using potable water to enhance the cleaning process. While flushing, you will also need to pump at the same time to remove sewage and debris that are flushed.
  - 6.9.3. **CCTV Inspection:** SSOs that exceed 1,000 gallons or occur repeatedly must undergo a CCTV inspection to determine the cause of the overflow and ensure that the pipe is thoroughly cleared and cleaned. Repeated flushing may be required if initial flushing does not clear the lines.<sup>6</sup>
  - 6.9.4. **Cleanup and Disinfection:** Disinfect and sanitize the affected area(s) using a non-chlorine-based, biodegradable disinfection, such as Simple Green.

<sup>5</sup> For further guidance, refer to SOP-1500-WWC-001(A), *Hydro Flushing*.

<sup>6</sup> For further guidance, refer to SOP-1500-WWC-002(A), *CCTV Sewer Line Inspection*.

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6.9.5. Notify Trouble Dispatch when the work is complete.

### 6.10. SSOs on Private Property

6.10.1. When sewage spills or backups occur on private property, swift and appropriate action must be taken to minimize damage to the homeowner's property and health and safety concerns.

6.10.2. The PS Operator shall confirm whether the SSO on private property is a result of a problem/blockage on the private side piping, or on the government sewer lateral or main line and note specific details on required incident reporting.

6.10.3. The PS Operator shall offer the homeowner cleaning and disinfection by GWA personnel or a vendor.

6.10.3.1. If professional service is requested, notify the WWC Manager, who will coordinate it with the vendor to perform the required work.

6.11. **SSOs at the Wastewater Treatment Plant (WWTP).** SSOs at the WWTP occur following a power outage. They are reported and assigned according to Sections 6.1 and 6.2. All details of the response process, including before and after photos must be documented in the WO and *Incident Notification Form (Attachment 4)*.

6.11.1. When a power outage occurs, the SP Operator must immediately notify SCC, who will then contact the Guam Power Authority (GPA) to report the outage and/or receive information regarding the status of power restoration.

6.11.2. The PS Operator shall notify the SP Supervisor, WWT Manager, and the AGM-C&S<sup>4</sup> of the incident. The SP Supervisor shall coordinate with the O&M Manager for Wastewater Treatment (WWT Manager) to lead the response.<sup>7</sup>

6.11.3. The backup generator should activate and switch over within 10 to 15 seconds following the power outage.

6.11.4. If the generator fails to switch over, the PS Operator(s) will have a 15 to 30-minute window to gather necessary resources, including trash pumps, combination trucks, and absorbent materials, before the SSO occurs.

6.11.5. The incident should then be reported to Trouble Dispatch by SP Operators according to Section 6.1. A WO will be generated and assigned following the guidelines outlined in Section 6.2.

6.11.6. Contain the SSO using the trash pump(s) or combination truck(s) to reduce influent by pumping out sewage from the tank(s) and diverting flow to the Headworks.

6.11.6.1. If the trash pump or combination truck is unavailable, notify SCC to request the combination truck from COU. If the COU combination truck is also unavailable, notify the WWT Manager to coordinate assistance from a vendor.

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<sup>7</sup> The WWT Manager will serve as the SRC for SSOs occurring at the WWTPs.



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- 6.11.7. Continue monitoring pump operation and refuel equipment as needed until power is restored.
- 6.11.8. Once the power is restored, discontinue use of the trash pump or combination truck.
- 6.11.9. PS Operators will inspect the WWTP system and equipment to ensure they are functioning properly.
  - 6.11.9.1. If any equipment or system is not operating correctly, notify SCC to request additional support from either the Electrician or Plant Instrument Technician (PIT) to address repairs through corrective maintenance (CM) WO. If the issue cannot be resolved within 30 minutes, SCC should be updated every hour during long call-out procedures
- 6.11.10. If no further CM is required, resume normal operations.
- 6.11.11. Notify Trouble Dispatch when the work is complete.
- 6.12. **Work Order Closure:**
  - 6.12.1. All Operators must ensure the following is documented in the WO:
    - 6.12.1.1. Type of work and the scope of work performed in the notes section.
    - 6.12.1.2. Type of complaint (e.g., manhole overflow, sewer line backup, damaged force main, offset/missing manhole cover, government line clean-out, government main service line, private clean-out, sewer line main break, pumping facility overflow or force main).
  - 6.12.2. After the information is entered and saved, notify the respective Supervisor that the WO is complete and ready for review.
  - 6.12.3. The Supervisor will review the WO to ensure it is complete and all relevant photos are attached. Once the WO has been reviewed and deemed complete, he/she will close the WO.
- 6.13. **Incident Report Submission:** The O&M Managers are responsible for ensuring their respective division IRs are accurately completed and submitted to the AGM-C&S and Senior Regulatory Analyst within seventy-two (72) hours of the incident.
  - 6.13.1. Operators must complete and submit the written IR via email to their respective Supervisor within twenty-four (24) hours of the SSO event.
  - 6.13.2. The Supervisor has twenty-four (24) hours from the time the IR is received to review it for accuracy and completeness. Once reviewed, it is submitted via email to the respective O&M Manager for approval.
  - 6.13.3. The O&M Manager has twenty-four (24) hours from the time the IR is received to review and approve it. Once approved, he/she will submit the IR via email to the AGM-C&S and C&S Senior Regulatory Analyst for final review and submission to USEPA.

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- 6.14. **Regulatory Reporting Requirements:** GWA is required to provide a verbal notification within twenty-four (24) hours, followed by a written report within five (5) business days to USEPA's Enforcement Section for all SSOs resulting from spills, backups, or overflows from GWA's collection system and wastewater treatment plants.

6.14.1. The AGM-C&S or Designee shall provide the following reports to USEPA:

6.14.1.1. **24-Hour Verbal Report:** Notify USEPA within twenty-four (24) hours of becoming aware of the SSO event, either by speaking directly with a representative or by sending a text message to (415) 972-3208.

6.14.1.2. **Written Report:** Submit the Incident Report along with the *Certification Statement (Attachment 5)* within five (5) business days from the time GWA became aware of the incident.

Susanne Perkins  
EPA Clean Water Enforcement Section  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne Street  
San Francisco, CA 94105  
Email: [perkins.susanne@epa.gov](mailto:perkins.susanne@epa.gov)

- 6.15. **Training:** The O&M Managers should conduct training on Sanitary Sewer Overflow Response when needed. All new or applicable employees must receive training and sign the *Employee's Acknowledgment Receipt (Attachment 6)* to confirm their understanding and compliance with the procedures outlined in this SOP.

6.16. **Non-Compliance with this SOP:**

6.16.1. **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).

6.16.2. **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 A. Gutierrez	Approval on File	On File
Policy Owner	Assistant General Manager – 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 were 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.

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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 the 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 approved by the GM.

8.1. Policy Owner: Assistant General Manager – Operations (AGM-O)

8.2. Authorization: General Manager

Effective Date	Revision Letter	Document Author	Description of Change
Page 1	A	Jason Tudela Antonette A. Gutierrez	Initial Release of Policy/Procedure

### 9.0 References

- 9.1. Combination Pumper Truck Manual.
- 9.2. Combination Pumper Truck H&S Manual.
- 9.3. SOP-1500-WP-001, *Water Outage & Road Closure Notifications to the Media/Public*.
- 9.4. SOP on *GIS Data Integration Post Field Repair Activities* (draft).
- 9.5. SOP-1500-WWC-001 (A), *Hydro Flushing SOP*.
- 9.6. SOP-1500-WWC-002 (A), *CCTV Sewer Line Inspection SOP*.
- 9.7. USEPA National Pollutant Discharge Elimination System (NPDES) Permit Nos. GU0020141, GU0020087, GU0020222, GU0020273. [NPDES Permit Nos. GU0020141, GU0020087, GU0020222, GU0020273: Guam Waterworks Authority Wastewater Treatment Plants](#).
- 9.8. SOP on *Method for Sanitary Sewer Overflow Spill Calculation* (draft).
- 9.9. GWA Draft Sanitary Sewer Overflow Response Plan.

## Sanitary Sewer Overflow Response

**Attachment 1: Contact List**

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

## SANITARY SEWER OVERFLOW RESPONSE 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
Operations & Maintenance Manager; Wastewater Treatment	(671) 647-7832
Sewer Plant Supervisor; South	(671) 565-2277
Sewer Plant Supervisor; Central	(671) 472-3247
Sewer Plant Supervisor; North	(671) 647-7832
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

## Sanitary Sewer Overflow Response

**Attachment 2: Equipment, Materials and Supplies**

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

## SANITARY SEWER OVERFLOW RESPONSE EQUIPMENT, MATERIALS AND SUPPLIES

EQUIPMENT	MATERIAL AND SUPPLIES
<ul style="list-style-type: none"> <li>• 3 – Combination Sewer Cleaning Truck</li> <li>• 1 – High Velocity Jetter Truck</li> <li>• 2 – CCTV Trailer</li> <li>• 1 – CCTV Van</li> <li>• CCTV Equipment/Parts (e.g., transporters and camera tubes)</li> <li>• Boom Truck</li> <li>• Bypass Pumps</li> <li>• Bucket Machines</li> <li>• Manhole Repair Machines</li> <li>• Jetter Nozzles (assorted sizes)</li> <li>• Root Cutters (Sizes 6, 8, 8 ½, 14)</li> <li>• Milling Cutters (Sizes 6, 8, 8 ½, 14)</li> <li>• Sewer Rat</li> <li>• Magnetic Manhole Opener/Lifter</li> <li>• Line Locators</li> <li>• Power Tools</li> <li>• Hand Tools</li> <li>• Sandbags</li> <li>• Flotation Booms (if necessary)</li> <li>• 4" and 8" Trash Pumps (located at Northern Wastewater Treatment Plant)</li> <li>• PPE (e.g., hard hat, vest, gloves, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Caution Tape</li> <li>• Traffic/Safety Cones</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>• Manhole Hook</li> <li>• Manhole Guardrail</li> <li>• Buckets</li> <li>• Brooms And Dust Pans</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> </ul>



## Sanitary Sewer Overflow Response


**Attachment 3: Incident Report**

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



## Sanitary Sewer Overflow Response

**Attachment 4: Incident Notification Form**

INCIDENT NOTIFICATION FORM				 GUAM WATERWORKS AUTHORITY	
<b>Basic Incident Information</b>					
Activity	Corrective	Customer		Weather	
Section	Treatment Plant	Street Name & #		Consequences	
District	Northern	Village			
		Detail Location			
Assigned To		Facility type		Responsible	
Assigned To		Structure Detail			
Last time this area was Cleaned and viewed with CCTV				Severity	
Response Start Date/Time		Notification Date and time		Frequency	
Response End Date/Time		Task Carried Out By:		Public Impact?	<input type="checkbox"/>
Est Rainfall Past 24 hrs		Description and estimation of flooding area or runoff			
<b>EQUIPMENT</b>		<b>OBSTRUCTION</b>		<b>OVERFLOW</b>	
<input type="checkbox"/> Vactor <input type="checkbox"/> Others <input type="checkbox"/> CCTV <input type="checkbox"/> Dump Truck <input type="checkbox"/> Backhoe <input type="checkbox"/> Vendor Vendor Name Invoice No.		<input type="checkbox"/> Fats/Oil/Grease <input type="checkbox"/> Rocks/Gravel <input type="checkbox"/> Wood/Lumber/Rags <input type="checkbox"/> Others Nearest Water Well		<input type="checkbox"/> To Customer's Property <input type="checkbox"/> To Storm Drain <input type="checkbox"/> From Wet Pit <input type="checkbox"/> To Wet Land <input type="checkbox"/> From Manhole <input type="checkbox"/> To River <input type="checkbox"/> From Clean Out <input type="checkbox"/> To Shoreline <input type="checkbox"/> Others <input type="checkbox"/> Others	
<b>Description of Incident</b>					
Control No		Root Cause:	Forlift forks broke off		
<b>Network Details</b>					
Pipe Size (in)	Pipe Length (FT)	Vol. Bypassed	Manholes	Equip Hrs - Vactor	
Total Vol. Spilled (gallons)		Vol. Recovered	Net Spill	Equip Hrs - Vendor	
Volume Extracted from:		Volume (gal)	Pipe Type		
<b>Steps / Action Taken To remedy the Situation and to Prevent Future occurrences</b>					
<b>Additional Comments</b>					
Certified By _____ Report Date _____					

Sanitary Sewer Overflow Response

**Attachment 5: Certification Statement**



**GUAM WATERWORKS AUTHORITY**  
**Office of Compliance and Safety**  
Suite 200, Gloria B. Nelson Public Service Building  
688 Route 15, Mangilao, GU 96913-6203  
Phone: (671) 300 6887

**August 23, 2023**

Susanne Perkins  
EPA Clean Water Enforcement Section  
U. S. Environmental Protection Agency, Region 9  
75 Hawthorne Street  
San Francisco, CA 94105

Dear Susanne,

**Re:** *WWTP by-pass or SSO Information reported under Section 308(a) of the Clean Water Act.*

Attached is the Incident Report for the August 12, 2023 spill at Tun Teodoro Dungca Street, Tamuning due to Fats, Oils and Grease (FOG) and debris. The spill was called in on day of the spill.

**CERTIFICATION STATEMENT**

I certify under penalty of law that this submission was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of those who manage the system or are directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations under the Clean Water Act and 18 U. S. C. §1001.



Evangeline D. Lujan  
SRA, Compliance and Safety


08/23/2023  
Date

CC: Miguel C. Bordallo, P. E. General Manager  
Thomas R. Cruz, P.E. AGM for Operations  
Jeanet Babuata, P.E. AGM Engineer  
Paul Kemp, AGM Compliance and Safety

Attachment:  
"08-22-2023 Tun Teodoro Dungca St, Tamuning manhole overflow.pdf"

## Sanitary Sewer Overflow Response

### Attachment 6: Employee's Acknowledgment Receipt

 <p><b>GUAM WATERWORKS AUTHORITY</b></p>	<p>Gloria B. Nelson Public Service Building 688 Route 15 Mangilao, Guam 96913 <a href="mailto:itudela@guamwaterworks.org">itudela@guamwaterworks.org</a></p>	<p><b>SANITARY SEWER OVERFLOW RESPONSE EMPLOYEE'S ACKNOWLEDGMENT RECEIPT</b></p>
<p>I, the undersigned, an employee of the Guam Waterworks Authority, hereby acknowledge receipt of SOP-1500-WWC-004 entitled "<i>Sanitary Sewer Overflow Response</i>" this _____ day of _____, 20____.</p>		
Employee's Name/Badge No.:	Employee's Signature:	Date:
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