		<b>GAS OPERATIONS MANUAL</b> <b>FACILITY DAMAGE REPORTING &amp; INVESTIGATION</b>		<b>GOM 60.40.50</b>
Department:	Operations	Date Approved:	8-2-2022	
Approved by:	Chris Clancy	Date Effective:	10-1-2022	
Revision Number:	5			

## Purpose

The purpose of this procedure is to identify and communicate damage investigation procedures and reporting requirements to all stakeholders.

## Scope

This procedure covers actions to respond, report and investigate damages to UGI and other existing underground facilities.

## Responsibilities

- A. Director Operations is responsible for approving changes to this document.
- B. The Manager Pipeline and Public Safety and the Sr. Manager Material and Standards are jointly responsible for reviewing and updating this procedure.
- C. Pipeline Safety and Operations are responsible for ensuring a thorough investigation to facility damages to determine root causes, and forwarding to Compliance or Claims for follow up as appropriate.
- D. Operations is responsible for make safe actions, inspection, completing repairs and providing pertinent repair information.
- E. Users of this procedure are encouraged to provide feedback on the procedure.

## Equipment

The following tools are recommended for investigating and reporting damages.

- Camera
- Rhino Damage Prevention Kit
- Traffic control if in or near a roadway.

## Operator Qualifications and Training

The following Covered Task(s) are associated with damage investigation activities:

- Task #19 – Inspecting the condition of buried piping or pipe coating exposed by excavation
- Task #30 – Inspection of 3<sup>rd</sup> party excavations for damage prevention
- Task #55 – Inspect pipe at a maintenance job for damage

## References

### Federal Regulations

- 49 CFR § 192.614 Damage prevention program.
- 49 CFR 196.109 What must an excavator do if damage to a pipeline from excavation activity causes a leak where product is released from the pipeline?

### Pennsylvania Regulations



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Underground Utility Line Protection Act 287 as amended (Act 50 of 2017)

**Maryland Regulations**

Maryland Underground Damage Prevention Act – ACM Title XII as amended



## Procedures

### 1.0 Excavator Notification of Facility Damages

- 1.1 As required by 49 CFR § 196.109, excavators are required to immediately call 911 for any excavation damage resulting in the release of any hazardous material.
- 1.2 Excavators shall contact the facility owner, by notifying PA One Call, if they damage any underground facility, pipeline, pipeline coating, or any other appurtenance associated with the facility, even when there is no release.
- 1.3 If the damaged facility is a UGI owned facility, the appropriate inspector or supervisor should be notified immediately.
- 1.4 All non-gas underground facility damages shall be reported by submitting a [Three-Day Internal Damage Form](#) to [DamagePrevention@ugi.com](mailto:DamagePrevention@ugi.com), within 3 business days of the damage.

### 2.0 UGI Response to Facility Damage

- 2.1 All leaks and reports of pipeline damage received by UGI shall be considered an emergency and responded to in accordance with the Emergency Plan.
- 2.2 If upon arrival, a UGI responder determines 911 has not been called, UGI employees are responsible to see that the notification is placed for any damage which may endanger life safety, health, property, or release of product which may be considered hazardous.

### 3.0 Suspected Pipeline Damage

- 3.1 If it is suspected that the pipeline may have been damaged, either by excavation activities or natural causes, the pipeline must be inspected. The following practices should be considered:
  - 3.1.1 External corrosion direct assessment
  - 3.1.2 Visual inspection
  - 3.1.3 Leak survey
  - 3.1.4 Standard excavation and inspection
  - 3.1.5 Internal camera inspection
- 3.2 Any damage that is found shall be repaired or the facility replaced.
- 3.3 If sinkhole damage is suspected, further evaluation must be performed with appropriate action being taken.
  - 3.3.1 A drawing shall be submitted to document the sinkhole location and it shall be placed on the appropriate mapping system.
  - 3.3.2 For further review of sinkhole reporting, please refer to [“Sinkhole Reporting Quick Reference Guide”](#) located on the GIS SharePoint site.

### 4.0 Jobsite Damage Investigation Procedures

- 4.1 After determining that the area is secure and no danger exists, the employee investigating damage to UGI facilities by an outside contractor, should proceed as follows:


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- 4.1.1 Complete a Substructure Damage Report Form (electronically or Form 60.40.50-1) with information available at the scene. See Appendix A for guidance on completing the electronic Substructure Damage Report.
- 4.1.2 Using a “Rhino Kit” or similar measuring device, take photographs of the damage and surrounding location. Photographs should include:
- 4.1.2.1 The damaged area.
  - 4.1.2.2 Measurements from the damage horizontally to the temporary facility locate markings
  - 4.1.2.3 Depth of facility using a Rhino ruler or similar measuring device
  - 4.1.2.4 Temporary facility locate markings / flags
  - 4.1.2.5 Other photographs that may provide pertinent information regarding a potential claim. This may include:
    - Street signs
    - House numbers
    - Mailbox address
    - Vehicles
    - Equipment and serial numbers
    - Company names
    - License plates
    - Close-ups of the damage
    - Insurance information and identification
- 4.1.3 When taking photographs, proceed in the following manner:
- 4.1.3.1 start in the 12 o’clock position approximately 50’ from the damage
  - 4.1.3.2 move in to 25’
  - 4.1.3.3 move in for a close-up
  - 4.1.3.4 do this for each increment on the clock (see Figure 60.40.50 - 1)

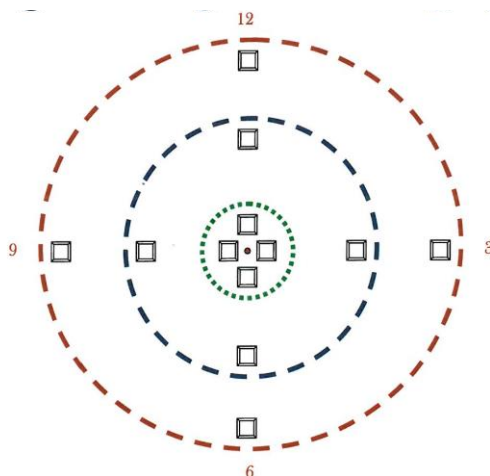


Figure 60.40.50 - 1: Damage Investigation Photography



- 4.1.4 Record any other pertinent information regarding the damage which is not specifically listed on the substructure damage form.

## 5.0 Post Activities Relating to Damage Investigation

- 5.1 **Manager Pipeline Safety shall ensure all damage investigations are reviewed, root cause(s) determined, and responsible party (for Billing) is established.**
- 5.2 If it is determined that a UGI locator's actions contributed to the facility damage, UGI will require another qualified individual to confirm the facility marks for the existing PA One Call ticket that is associated with the facility damage.
- 5.2.1 This work should be tracked through an appropriate work order.
- 5.2.2 Review of the open ticket should be made within **one business day** after the situation has been made safe.
- 5.2.3 If subsequent mismarks are found within the scope of the PA One Call ticket associated with the facility damage, **report the findings to the applicable Manager Operations**
- 5.2.4 **Review of additional active PA One Call ticket(s) completed by the original locator may be required depending on the severity of the mismarks.**  
The review of the original mark-out should be documented in the work order, **including documentation** if any additional mark-outs were inaccurate.
- 5.2.5 **Manager Operations or designee will determine if additional PA One Call Tickets mark outs must be reviewed by another qualified individual.**
- 5.3 **If mapping and/or record errors are discovered during the damage investigation, area operations should consider reviewing other facility records in the area and submit a facility record revision request or update service records as needed.**
- 5.4 When the at-fault party is either 2<sup>nd</sup> or 3<sup>rd</sup> party, all information will be reviewed for adequacy to prepare and deliver an invoice for recovery of damages.
- 5.5 A conference call will be scheduled for all 1<sup>st</sup> & 2<sup>nd</sup> Party gas damages, as soon as possible after the damage. **The purpose of this call is to gather facts, determine the root cause, and identify preventive measures.**
- 5.6 **Pipeline Safety shall review each substructure damage report to determine the root cause and corrective action.**
- 5.6.1 **If a root cause involves a locator error as mentioned in Section 5.2, Operations Supervision and/or UGI's internal Compliance group should promptly perform a review of the event and determination of any subsequent actions required.**
- 5.7 **Pipeline Safety shall track damages and trends to identify training opportunities and prevent future damages.**
- 5.8 **Pipeline Safety shall coordinate safety meetings and follow-up training for excavators with emphasis on repeat offenders, large volume contractors, and UGI crews.**
- 5.9 **Claims shall track and follow-up on payments and refer to legal counsel if necessary.**



## 6.0 Substructure Damage Reporting

- 6.1 The electronic Substructure Damage Report ([CAD Order such as GFHIT and ZHIT](#)) “[The Report](#)”. [The Report](#) will be completed for damages at all UGI Utilities locations and must be used to gather specific data for each damage that occurs.
- 6.1.1 [The Report](#) shall be completed for every substructure damage, including coating damages, caused by a 3rd party (outside excavator), a 2nd party (UGI subcontractor), or by 1st party (UGI crew).
- 6.1.2 [The Report](#) should be completed as soon as practical after the damage occurs. There should be a completed Report for each gas facility hit order, except those orders where it is determined that no gas facility was involved.
- 6.1.3 [The Report](#) should be completed by the first responder.
- 6.1.4 In the event the electronic [Report is](#) not available, Form 60.40.50-1 should be completed to gather the information for inputting once the electronic version is available.
- 6.2 [Pipeline Safety](#) must also submit an Alleged Violation Report (AVR) to Pa One Call in the following circumstances:
- 6.2.1 **Facility Owner** - Submit a report of alleged violation no more than thirty business days after receipt of notice that the facility owner's lines have been damaged by excavation or demolition work or if the facility owner believes a violation of the act has been committed in association with excavation or demolition work. No report may be required where the cost to repair the damage to the facility owner's lines is less than two thousand five hundred dollars (\$2,500), unless the same person damaged the facility owner's lines two or more times within a six-month period.
- 6.2.2 **Designer** - Submit a report of alleged violation no more than thirty business days from the time the designer becomes aware that a violation may have been committed in association with excavation or demolition work.
- 6.2.3 **Excavator** - Submit a report of an alleged violation not more than ten business days after striking or damaging a facility owner's line during excavation or demolition or if the excavator believes a violation has been committed in association with excavation or demolition work.
- 6.2.4 **Project Owner** - Submit a report of alleged violation no more than ten business days after striking or damaging a facility owner's line during excavation or demolition work activities, after a project owner's contracted excavator strikes or damages a facility owner's line during excavation or demolition activities or if the project owner believes a violation has been committed in association with excavation or demolition.
- 6.2.5 An AVR report should be [submitted](#) as soon as possible but within the timeframe listed above.



## **7.0 Record Keeping Requirements**

Substructure Damage Reports or electronic equivalents for Transmission lines should be retained for the life of the transmission line. Pictures and other supporting documentation as a result of the investigation should also be retained with the Substructure Damage Report.

Substructure Damage Reports or electronic equivalents for Distribution Mains & Services should be retained for 10 Years. Pictures and other supporting documentation as a result of the investigation should also be retained with the Substructure Damage Report.

Alleged Violation Reports should be retained for 10 Years.



Appendix A: Electronic Sub Structure Damage Report Instructions

Page 1

# CAD – GFHIT Template / Sub-Structure Damage

Compatible Units  
Emergency Completion  
Substructure Damage Report

\*For resolution codes 48,49,55-59 ONLY  
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Location of Facility: <input type="text"/> <b>Below or above</b>	Company Name: <input type="text"/>
Facility Damaged: <input type="text"/> <b>Main, service, etc...</b>	Street Address: <input type="text"/>
OTHER Facility Damaged: <input type="text"/>	City: <input type="text"/>
Time of Damage: <input type="text"/>	State: <input type="text"/>
Date of Damage: <input type="text"/>	Postal Code: <input type="text"/>
Operator Name: <input type="text"/> <b>Individual inflicting damage</b>	Work Phone: <input type="text"/>
Operator Phone: <input type="text"/>	Fax Number: <input type="text"/>
Contractor Type: <input type="text"/> <b>Independent, homeowner, municipality, developer, farmer, state, UGI, UGI contractor, utility, unknown</b>	E-Mail: <input type="text"/>
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Pipe Size:	<input type="text"/>	<b>Very important</b>
Year Installed:	<input type="text"/>	<b>If possible</b>
Pressure (LBS):	<input type="text"/>	<b>Actual operating pressure</b>
Pipe Material:	<input type="text"/>	
OTHER Pipe Material:	<input type="text"/>	
Joint Trench:	<input type="text"/>	
Type of Excavation:	<input type="text"/>	<b>Sewer, building, curbing, street, demolition, storm sewer, cable, gas, electric, phone, water main, water service, landscape, fence, other</b>
OTHER Type Excavation:	<input type="text"/>	
Type Equip Causing Damage:	<input type="text"/>	
OTHER Type of Equipment:	<input type="text"/>	
Nature of Damage:	<input type="text"/>	<b>Coating, pulled service, pulled main, bent or gouged line, puncture of line, broken line, otherd</b>
OTHER Nature of Damage:	<input type="text"/>	
Depth of Facility in Inches:	<input type="text"/>	<b>Inches</b>
Size of Hole or Tear in Pipe:	<input type="text"/>	<b>Actual opening</b>
Right of Way:	<input type="text"/>	<b>Public, private, private property</b>
Was Fire Dept on Scene?:	<input type="text"/>	
Were Photos Taken?:	<input type="text"/>	<b>Photos are needed &amp; required</b>
Was 911 Called?:	<input type="text"/>	
PA1 Call Made?:	<input type="text"/> <input type="button" value="None"/>	
PA1 Call Ticket Num:	<input type="text"/>	


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Were Marks Visible?:  **Very important**

Distance from Damage to Mark:  **Horizontal distance from location indicated by the marks (not to the nearest paint).**

Correctly Marked?:  **"Yes" or "No"**

OTHER Incorrectly Marked:  **If "No" why?**

Method Marked(Paint,Flags,etc):

Was Size Indicated?:

Was Site Marked in White?:

Made Safe Time:  **Time the gas flow was shut off**

Made Safe By:  **Who shut the gas off – Name/Company**

Method to Make Safe:  **Squeeze off, pressure control fitting, flow limiter, punch it tee, foam, valve (service or main)**

Valve Id:

OTHER Method to Make Safe:  **Details**

Duration of Leak (HHMM):  **From the time of damage to the time it is made safe**

Did Gas Enter Building?:  **"Yes" or "No"**

Num of Buildings Evacuated:  **Quantity**

Num of People Evacuated:  **Quantity-must have if building is evacuated**

Num of Customers Affected:  **Number of gas services being shut down**

Num of Injuries:  **Quantity**

Num of Fatalities:  **Quantity**

## Revision Log

### Revision Number 5: Date Approved: 8-2-2022

Section	Description and Reason for the Change
All	Changed title, scope, and purpose of procedure to Facility Damage Reporting & Investigation
Responsibilities	Updated responsibilities
1.0	Revised excavator notification of facility damages section
3.0	Added internal camera inspection
4.0	Added more detailed requirements for damage investigations using Rhino Kit and documentation
5.0	Revised post damage investigation activities section including requirement for mapping errors discovered in investigation
Appendix A	New appendix with instructions for completing electronic SSD reports

### Revision Number 4: Date Approved: 11-04-2020

Section	Description and Reason for the Change
All	Procedure was converted to new GOM format and restructured.
1.1	Included reference to federal requirement for contacting 911 when blowing gas occurs.


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5.0	Added requirements for when it is determined during a post damage investigation that the locator's actions contributed to the facility damage
6.0	Added language outlining requirements when UGI must submit an AVR to PA One Call