



REFERENCES:

Title 49 CFR 192.617, Investigation of Failures

I. POLICY

- A. It is the policy of this gas system to conduct its construction, operations, and maintenance activities in a responsible and safe manner.
- B. Questions regarding application of this procedure should be directed to the Deputy Director of Gas and Lights.
- C. It is the policy of the City of Richmond, Department of Public Utilities, to analyze material, equipment and operation failures to determine the causes of the failures and to minimize the possibility of a recurrence.
- D. This procedure does not apply to construction defects (i.e. a defect due to improper construction methods and discovered during the construction or pressure testing process, before being placed into service).

II. RESPONSIBILITIES

- A. All Gas employees are responsible for notifying their supervision and the General Supervisor – Leak Survey of material, equipment or operations failures.
- B. The Construction Service Technician is responsible for forwarding any Leak Report Forms that list a cause of Material, Equipment or Operations to the General Supervisor – Leak Survey
- C. The General Supervisor – Leak Survey is responsible for investigating and documenting failures on the Material / Failure Report Form
- D. The Operations Manager – Gas Maintenance is responsible for reviewing and approving Material /Failure Report Forms

III. PROCEDURE

- A. Complete a Material / Failure Report Form (Exhibit A) for any gas distribution material, equipment or operation which
 - 1. Has failed, or
 - 2. Has not performed in accordance with expectations, or
 - 3. Is considered unsuitable for its intended use.
- B. Forward the completed form to the General Supervisor – Leak Survey .
 - 1. Document details of the original location of the specimen including, if possible, photographs showing original, as found, condition.
- C. Where possible, the failed item or sample of the failed material should be forwarded to the General Supervisor – Leak Survey .
- D. If appropriate, failed items or samples of failed material may be sent to a vendor laboratory for analysis.
 - 1. Use care when handling the specimens to be sent to a laboratory.
 - a. Avoid any process that may change the granular structure of the item such as excessive heating or excessive outside force from tools and equipment.



- E. Determine if further corrective actions or surveillance activities are required to minimize the possibility of a recurrence.
- F. Completed forms and recommendations are reviewed and approved by the Operations Manager – Gas Maintenance
- G. Results of sample analysis and data on failures are reviewed annually for trends. The need for corrective action or additional continuing surveillance, to minimize the possibility of recurrence, will be determined.
- H. Material / Failure Report Forms, Copies of Laboratory Reports and Material Failure Reviews are maintained in the DPU Gas Operations office DOT file.

IV. EXHIBITS

- A. Material / Failure Report Form



Exhibit A



Material / Failure Report Form

<input type="checkbox"/> Material	<input type="checkbox"/> Above Ground
<input type="checkbox"/> Equipment	<input type="checkbox"/> Below Ground
<input type="checkbox"/> Operation	<input type="checkbox"/> Indoors
	<input type="checkbox"/> Outdoors

Description of Material or Equipment
(Leave this section blank for Operation Failure)

Manufacturer _____ Serial No. _____ Catalog No. _____

Size (ID, OD, Wall Thk) _____ New Used Meter or Regulator Type _____
(If applicable)

Installation Date _____ Age _____ years

Application _____

Cathodically Protected: Yes No N/A How Protected _____

Last Inspection Date, if applicable _____

Date and Time of Failure: _____ Location: _____

Operating Pressure _____ System MAOP _____

Nature of the failure _____

Effect on the System (outage, leak, etc.): _____

Describe Injuries to Personnel, if any: _____

How cause of failure was eliminated _____

Disposition of Failed Material or Equipment:
 Sent to Operations Manager – Gas Maintenance Returned to Warehouse
 Retained by: _____ Not Available

Further Corrective Action Required? Yes No
 If Yes, Detail Action Plan: _____

Report Date: _____ Prepared By: _____

Approved By: _____

Attach Additional information, comments, photographs, and/or sketches as necessary