



## STANDARD PRACTICE

STANDARD PRACTICE NO. 460.21-7ISSUING DEPARTMENT GAS OPERATIONSPAGE NO 1 (of) 2 EFFECTIVE 11/1/85CORPORATE OFFICER VICE PRESIDENT - GAS OPERATIONSREPLACING  
PAGE NO 1 (of) 2 EFFECTIVE 11/1/82SUBJECT: INVESTIGATION AND REPORTING OF ACCIDENTS AND MATERIAL PROBLEMS OR FAILURES INVOLVING GAS EQUIPMENTPOLICY

- \*1. Problems, accidents or failures involving materials or equipment handling natural gas shall be reported and shall be investigated to determine the cause. Based on the results of the reports and investigations, appropriate steps shall be taken to minimize the possibility of a recurrence.

REFERENCE

- \*2. a) Instructions from the Safety, Health, and Claims Department concerning responsibility for investigation of accidents and handling of failed materials and equipment involving death, injury, or property damage, including but not limited to:

S.P. 250-2 Reporting of 3rd Party Personnel Injury or Property Damage

S.P. 270-2 Evidence - Acquisition and Storage

- b) G.O. 112-D § 192.617 Investigation of Failures.

RESCISSIONS

3. All previous instructions that do not conform to this standard.

RESPONSIBILITY

- \*4. The Manager, Safety, Health, and Claims Department is responsible for investigating accidents or failures involving death, injury, or third party property damage, or which appear likely to result in a claim against the company or collections by the Company. Where equipment or material failure is involved, the Manager, Gas System Design Department shall provide the technical assistance necessary to determine the cause of the failure and to develop corrective action which may be required.
- \*5. Regional Gas Operations Managers, Manager, Pipe Line Operations and Manager, Gas-Mechanical Services have the responsibility for the initial investigation and the reporting of material and equipment problems or failures not encompassed within paragraph 4.

\*Paragraph Revised (Portions Underlined)  
\*\*Paragraph Added



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PAGE NO. 2 (of) 2 EFFECTIVE 11/1/82

SUBJECT: **INVESTIGATION AND REPORTING OF ACCIDENTS AND MATERIAL PROBLEMS OR FAILURES INVOLVING GAS EQUIPMENT**

6. The Manager, Gas System Design Department, has the responsibility for analyzing and evaluating material and equipment problems or failures which do not result in death, injury, or third party property damage. The analysis and investigation shall be coordinated with other Gas Operations Departments as appropriate, the Department of Engineering Research, the Materials Department and equipment suppliers or manufacturers, to determine the cause of the problem or failure and the corrective action required.
- \*7. The Manager, Gas System Design Department, has the responsibility for investigating hydrostatic test failures.
8. Based on the result of accident or failure investigations, appropriate action shall be taken to minimize the possibility of a recurrence.
9. Detailed procedures for implementing this standard practice are presented in the attached supplement.

APPROVED BY: Howard M. McKinley  
Vice President -  
Gas Operations

DISTRIBUTION: Regional Managers  
Regional Gas Operations Managers  
Division Managers  
Division Gas Superintendents  
Manager, Gas System Design Department  
Manager, Gas Distribution Department  
Manager, Gas Measurement and Regulation  
Manager, Gas Production and Storage Department  
Manager, Pipe Line Operations Department  
Manager, Gas-Mechanical Services  
Superintendent, Gas Meter Repair Facility  
Regional Gas Engineers  
Division Gas Engineers  
District Gas Superintendents  
District Gas Service Supervisors  
Service Unit Managers  
Gas and Electric Operations Managers  
Gas and Electric Distribution and Planning Supervisors  
Manager, Safety, Health, and Claims Department  
Director, Procedures Analysis  
Manager, Land Department

ADDITIONAL COPIES of this Standard Practice may be obtained from Gas Operations, 77 Beale Street, San Francisco (PGandE Extension 22-1604).

\*Paragraph Revised (Portions Underlined)  
\*\*Paragraph Added

PROCEDURAL DETAILS  
INVESTIGATION AND REPORTING OF  
ACCIDENTS AND MATERIAL PROBLEMS OR FAILURES  
INVOLVING GAS EQUIPMENT

PROCEDURES

- \*10. Problems or failures other than those covered in paragraph 4, involving materials and/or equipment handling natural gas, either in service or while being tested or installed, shall be investigated and reported to the Manager, Gas System Design Department, on Form 75-229, as outlined in paragraph 14.

The investigation shall be made in sufficient detail so that the person preparing the report can accurately describe the nature of the problems or failures and the apparent cause.

- \*11. Reportable problems or failures should include, but not be limited to:

- a. Equipment or piping where physical failure has occurred,
- b. Material or equipment which is not performing as intended, including a substantial reduction in expected service life.
- c. New material which does not meet standards or specifications, or which is otherwise unsatisfactory.
- d. Flaws or damage which could cause a failure.
- e. Any leak or failure during a hydrostatic test.
- f. Any other problem, failure, malfunction or incident, which in the judgment of the person responsible for the investigation, is significant.

- \*\*12. Problems or failures which should not be reported on Form 75-229 include:

- a. Material or equipment replaced due to normal wear or obsolescence.
- b. Corrosion leaks in steel pipe.

- \*13. Appropriate steps shall be taken by the Regional Gas Operations Managers, Manager, Pipe Line Operations and Manager, Gas-Mechanical Services, to ensure that the failed equipment or material is preserved in its "as found" condition so that evidence which could indicate the cause of the failure will not be destroyed. Foreign material which might have caused or contributed to the failure should also be preserved for analysis. These should be retained in the Region until instructions are received from the Manager, Gas

System Design Department or his designated representative. Faulty or failed gas pipeline equipment or material, including segments of leaking pipe which have been removed, shall not be discarded or otherwise disposed of without the approval of the Gas System Design Department and/or Safety, Health, and Claims Department, whichever has responsibility under this standard practice.

Material and/or equipment involved in an accident or failure which results in death, injury, third party property damage or which appear likely to result in a claim against the company or collections by the Company, shall be preserved and analyzed in accordance with Standard Practice 270-2, Evidence-Acquisition and storage, issued by Safety, Health, and Claims Department.

For failed material or equipment not covered by Standard Practice 270-2, the Manager, Gas System Design Department, or his designated representative, shall provide instructions within 30 days of the date the report is submitted on the disposition of the material. If no instructions are provided within 30 days, the material or equipment may be discarded or otherwise disposed of.

Gas System Design Department shall maintain a record of material and equipment being held by the Regions and Pipe Line Operations. This list shall be reviewed monthly, and instructions shall be issued for the disposal of material and equipment which is no longer required for evaluation.

- \*14. Accidents or failures of equipment handling natural gas which result in death, injury, or third party property damage, or which appear likely to result in a claim against the Company or collections by the Company, shall be reported in accordance with Standard Practice 250-2, Reporting of Personal Injury and Property Damage or Loss, issued by the Safety, Health, and Claims Department. The Manager, Safety, Health, and Claims, shall advise the Manager, Gas System Design Department of material or equipment failures so that technical assistance can be provided to determine the cause of the failure.

All other equipment and material problems or failures involving natural gas facilities shall be reported to the Gas System Design Department, even though the problem or failure did not result in an accident. A "Material and/or Equipment Problem or Failure Report" (Form 75-229, Attachment 1), should be prepared. Instructions for preparing and distributing Form 75-229 are contained in Attachment 2.

- \*15. The Manager, Gas System Design Department, will investigate each report to the extent necessary to determine the cause of the failure or problem and to determine what action may be necessary to prevent a recurrence. Where action is necessary, the Manager, Gas System Design Department, will work with other Departments in Gas Operations, the Materials Department, equipment suppliers, and other departments within the Company as appropriate, to correct the problem as expeditiously as possible.

- \*16. The Manager, Gas System Design Department, will maintain a record of Material Problem or Failure Reports submitted and shall review them periodically to determine if patterns of problems or failures are developing. Where appropriate, statistical information on problems or failures shall be distributed.
- \*17. The Manager, Gas System Design Department will provide feedback on the results of the investigation and the action taken on all Material Problem or Failure Reports submitted. A letter, or a copy of the completed report will be sent to the Regional Gas Operations Managers or Manager, Pipe Line Operations, with a copy to the person preparing the report. Other distribution will be made as appropriate, as outlined in Attachment 2.

MATERIAL AND/OR EQUIPMENT - PROBLEM OR FAILURE REPORT

NOTE: Do not use this form for reporting failures or accidents which result in death, injury, and/or property damage. Also, this form should not be used for reporting corrosion leaks in pipe, or replacement due to normal wear.

TO BE COMPLETED BY FOREMAN AND/OR LOCAL ENGINEERING STAFF  
See Attachment 2 of S.P.460.21-7 for Instructions

1. Failed material or equipment \_\_\_\_\_
  2. Location (address) where failure occurred \_\_\_\_\_ City, Co. \_\_\_\_\_
  3. Material or equipment details and description of problem or failure \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  4. Service information: Date installed \_\_\_\_\_ Other information \_\_\_\_\_  
\_\_\_\_\_
  5. Disposition of failed material \_\_\_\_\_
  6. Person to contact for information \_\_\_\_\_ Telephone \_\_\_\_\_
  7. Reported by: \_\_\_\_\_ Location \_\_\_\_\_ Region \_\_\_\_\_ Date \_\_\_\_\_
  8. Noted by Regional office: By \_\_\_\_\_ Date \_\_\_\_\_
- SEND ORIGINAL TO MANAGER GAS SYSTEM DESIGN DEPARTMENT - ROOM 2657, 77 BEALE STREET
- | FOR USE BY GAS SYSTEM DESIGN DEPARTMENT                                     | DATE RECEIVED |
|---|---------------|
| 9. Review assigned to: _____  |               |
| 10. Copies distributed to: (Gas Dist.) _____                                |               |
| 11. Evaluation, comments and action by Gas System Design:<br>_____<br>_____ |               |
| 12. Evaluation completed by: _____ Telephone _____ Date _____               |               |
| 13. Approved by: _____ Date _____   |               |

FEEDBACK\*

14. By: \_\_\_\_\_ Date \_\_\_\_\_ Method \_\_\_\_\_  
To: \_\_\_\_\_

\* IMPORTANT: Feedback must be provided on all Material Problem or Failure Reports, either by letter or copy of completed report. Distribution should be made as outlined in the Guidelines (Supplement to S.P. 460.21-7).

Guidelines for Preparation of the  
MATERIAL AND/OR EQUIPMENT - PROBLEM OR FAILURE REPORT

1. Failed Material or Equipment: Provide a brief generic description of item, i.e., meter, plug valve, iron pipe fittings, 2" plastic pipe, etc.
2. Location of Failure: Provide sufficient information to permit identification of location where failed equipment was installed or where failure occurred, i.e., station name, street intersection or address, etc.
3. Material or Equipment Details and Description of Problem or Failure: Provide complete description of item or material, including as appropriate manufacturer, model number, size, pressure rating, date manufactured, type of material, material specification, etc. Describe in detail how the failure occurred or what the problem was. Indicate conditions which could have caused or contributed to failure, i.e., pinhole leaks in castings, no threads in screwed fitting, service riser leaks at connection, crack in plastic pipe at point where it rested on a rock, crack at plastic fusion joint, crack in cast iron pipe at service tee, graphitization of cast iron pipe, etc. Also include information on any condition which could have caused or contributed to the problem, i.e., improper backfill, ground settlement, earthquake, construction activity, etc. If space is inadequate, use back of form.
4. Service Information: Enter date of original installation. Also include as appropriate other information on the installation or service history which could assist in evaluating the problem, such as operating pressure, installed in vault which flooded, dust or liquid in pipe, subjected to excessive temperature, service pipe too close to electric cable, etc.
5. Disposition of Failed Material: If material removed and retained, give location. If repaired and left in service, so state.
6. Person to Contact for Information: Provide name of person who could be contacted to obtain additional information on the material or the problem, or who could have material forwarded to appropriate location for evaluation or testing. Provide telephone number where person can be contacted.
7. Reported By: Show name of person preparing report, the persons location, region and date report prepared. Report should be forwarded to the office of the Regional Gas Operations Manager.
8. Noted by Regional Office: Report should be noted by appropriate person in Regional office, and original report should be forwarded to the Manager, Gas System Design Department, Room 2857, 77 Beale, San Francisco.

Gas System Design Department: The report will be logged in, assigned to a member of the Gas System Design Department staff for review, and copies distributed to other managers in Gas Operations as appropriate.

9. Review Assigned to: Enter name of person in the Gas System Design Department who has the primary responsibility for determining the cause of the problem, and/or taking other action as appropriate.
10. Copies Distributed to: Show names or initials of persons receiving copies of report from the Gas System Design Department. Gas Distribution is to receive a copy of all reports.
11. Evaluation, Comments and Action by General Office: Show evaluation and/or determination of cause of problem or failure, and action which was taken. Where material is referred to the Department of Engineering Research or the manufacturer for evaluation, so indicate. If problem was quality control, indicate that vendor and/or Materials Department was advised, and that appropriate statistical information was recorded. If problem was typical plastic pipe longitudinal crack, so indicate. If a follow up report is to be provided on an item referred to DER or a manufacturer, so indicate.
12. Evaluation Completed by: Indicate name of person completing evaluation. Provide telephone number where person can be contacted if additional information is desired.
13. Approved by: Provide name of person in Gas System Design Department approving the report, and the date.

Feedback: A response is to be provided outlining the action taken on every Material Problem or Failure Report submitted. This can be accomplished either by letter, or a copy of the completed report.

14. Feedback by: Name of person providing feedback, and date and method used.  
Distribution: Copies of the completed report or letter are to be sent to the Regional Gas Operations Manager and the person preparing the report. Copies will also be sent to the appropriate managers in Gas Operations. The Regional Staff will be responsible for making the appropriate distribution within the Region. The completed report should show the distribution of the report.