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From Division or Department VICE PRESIDENT - GAS OPERATIONS
FILE NO. 460.2
RE LETTER OF SUBJECT Revised Standard Practice 460.2-2,
Physical Inspection: Pipelines, Mains, and Services
To Division or Department

October 1, 1982

DIVISION MANAGERS:
MANAGER, PIPE LINE OPERATIONS

Attached is the most recent revision of page 1 to the Supplement to Standard Practice 460.2-2.

Paragraph 9 has been rewritten to provide for more flexibility in the scheduling of inspections of exposed piping. While the inspection frequency requirements have been relaxed, they still remain more stringent than the requirements of CPUC General Order 112.

If additional copies of this revision are needed, they may be obtained from Gas Operations, 77 Beale, telephone extension 1604.

Howard M. McKinley
HOWARD M. MCKINLEY



cc: All Standard Practice Books

Attachment

PACIFIC GAS AND ELECTRIC COMPANY
STANDARD PRACTICESTANDARD PRACTICE NO. 460.2-2EXECUTIVE OFFICE OR DIVISION GAS OPERATIONSPAGE NO. 1 EFFECTIVE 4-1-68ISSUING DEPARTMENT GAS DISTRIBUTIONREPLACING
PAGE NO. 1 EFFECTIVE 4-16-79**SUBJECT:**

PHYSICAL INSPECTION: PIPELINES, MAINS, AND SERVICES

PURPOSE AND POLICY:

- *1. In order to provide a complete record of the physical condition of pipelines, mains, and services, certain information shall be obtained and recorded each time a line has been exposed by Company action, and when practical, exposed by others, and at locations where the lines are installed above ground at compressor stations, major gas control stations or on bridges or spans.

REVISIONS:

2. Previously issued instruction, oral or written, which may be contrary to this standard practice.

REFERENCES:

- *3. S.P. 460.21-4, "Periodic Leakage Surveys of Gas Transmission and Distribution Facilities"

RESPONSIBILITY:

4. The responsibility for performance of inspections of pipelines, mains, and services shall rest with the supervisors in the Divisions and Pipe Line Operations Department, who direct the maintenance and operation of these facilities. Performance includes assignment of scope, issuance of special instructions, training in points to observe, scheduling special surveys, reviewing and maintaining inspection records, and initiating action to correct conditions requiring immediate attention.
5. Responsibility for inspection of these gas facilities and the preparation of necessary records of inspection shall also be shared by General Construction Department Supervisors in the performance of assigned work within the Company gas system. All records of inspections so generated shall be turned over to the Divisions or Pipe Line Operations Department.

SUPPLEMENT:

6. Procedural details for pipeline and main inspections appear in the supplement to this standard practice.

APPROVED: HOWARD M. MCKINLEY
Vice President - Gas Operations

DISTRIBUTION: Division Managers
Pipe Line Operations Department
Gas Construction Department Manager
District Managers
Division Gas Superintendents
Div. Admin. Analysts or Equivalent
District Gas Superintendent or Equivalent
Director, Procedures Analysis

Additional copies may be obtained from Gas Operations, 77 Beale Street, San Francisco (PG&E extension 9-1604).

* Paragraph Revised

(SEE OVER)

PROCEDURAL DETAILS

DEFINITION:

7. This standard practice is intended to cover all gas transmission pipelines, all mains in distribution capital, all gas service lines, and station gas piping in compressor plants, terminal stations, and meter and regulation stations.
 - a. A gas pipeline or transmission line is a pipe installed for the purpose of transmitting gas from a source or sources of supply to one or more large volume customers or a pipe installed to interconnect sources of supply. This term shall include gas field gathering lines and gas underground storage field injection and withdrawal lines.
 - b. A gas main or distribution main is a pipe installed in a community to convey gas to individual services or other gas distribution mains.
 - c. A gas service line is a pipe that runs between a main or pipeline and a customer's meter set.

INFORMATION TO BE OBTAINED:

8. If practical, all of the following information shall be obtained:
 - a. Type of protective coating.
 - b. General condition of coating.
 - c. External condition of pipe.
 - d. Type of soil.
 - e. Cover depth.
 - f. Internal condition of pipe, in cases where line has been cut or an ultrasonic survey is made.
 - g. Abnormal physical movement of pipe or structural supports.
 - h. Land subsidence.
 - i. Abnormal external loading.
 - j. Any other useful information.

FREQUENCY OF INSPECTION:

- *9. Exposed piping in compressor plants, terminal stations, other major control stations, and at bridges, wharves, and spans shall be periodically inspected for evidence of atmospheric corrosion. Inspections shall be scheduled as frequently as needed to effectively monitor conditions. Where corrosive conditions exist, inspections shall be at least once each calendar year but with intervals not exceeding 15 months. The inspection intervals shall not exceed three years in areas not considered as corrosive.

*Paragraph revised

- a. This inspection shall cover all supports, expansion devices and hangars which directly affect the location or security of the gas piping.
 - b. The purpose of this inspection is to determine physical deterioration due to corrosion or other causes.
10. No set periodic frequency for inspection of buried piping is set forth by this standard practice. Records shall be obtained by examining exposed pipe in excavations made in the course of routine work, by a special survey where there has been extensive corrosion, leakage history, or record of failure, or where the pipe has been exposed by an outside party.

REPORTS:

11. Any conditions found during the inspection which require immediate attention shall be reported to the supervisor responsible as soon as possible.
12. A written report shall be made listing the results of each inspection. These reports shall be distributed within the Division or Pipe Line Operations Department, as required for proper surveillance and follow-up.
 - *a. Form 62-3117 "Leak Survey, Inspection and Repair Report - Form A" shall be used for service lines, distribution mains, and transmission lines. Note: It is not necessary to report the condition of plastic stub services on Form "A" when they are uncovered for the purpose of installing stub completions. The exposed plastic stub must be inspected. No report or notation is necessary if the plastic pipe is found to be in good condition. If a problem is observed, it should be corrected and reported on a material failure report (Form 75-229). This exception is applicable to plastic pipe only. Form A must be prepared when a steel stub service is exposed.
 - b. Inspection of exposed piping in compressor plants, terminal stations, other major control stations, and at bridges, wharves, and spans shall be covered by a special report when conditions are found to be unsatisfactory or a specific problem is under observation. This report shall be complete with sketches, measurements, photographs, or other information required to present the problem and proposed solution completely.
 - c. Other scheduled inspections of exposed piping where conditions are found satisfactory and no action is required shall be recorded by filing a memorandum report indication where the inspection was made and what facilities were covered.

RECORDS:

13. A record of each inspection, repair or reconditioning of any section of pipe shall be filed in the Division or Pipe Line Operations Department for the life of the facility.

* Paragraph Revised

FACILITY DESIGN CONFIRMATION:

- *14. Where practicable, when it is necessary to uncover a pipeline or main operating at or designed to operate at a stress level at or above 20% of specified minimum yield strength of the pipe material, and the original design data has been assumed because of incomplete records, Gas System Design Department shall be informed so that arrangements can be made to determine unknown data; for example:
- a. If the wall thickness only is unknown, and the line is not cut, it can be determined by ultra-sonic methods.
 - b. If the line is cut, the strength of the pipe material, wall thickness, and joint factor can be determined by laboratory methods.

* Paragraph Re-numbered
** Paragraph Added