

PACIFIC GAS AND ELECTRIC COMPANY
CUSTOMER ENERGY SERVICES (CES)/GAS SUPPLY (GS)

CES/GS STANDARD

CES STANDARD: C-T&CS-S0353
GS STD. PRACTICE: 460.2-2
PAGE NO.: 1 OF 4
EFFECTIVE DATE: ~~06-95~~ 08-95
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ISSUING DEPARTMENT: T&CS, DISTRIBUTION
CES OFFICER: V. P. T&CS
GS OFFICER: V. P. Gas Services Operations

TITLE: Physical Inspection of Pipelines, Mains and Services

Purpose:

To provide a complete record of the physical condition of pipelines, mains, and services.

Policy:

Pipe condition information shall be obtained and recorded whenever a line is exposed by company action or, when practical, exposed by others. Pipe condition information shall also be obtained and recorded for lines installed above ground. This includes above ground piping at all stations, and piping installed on bridges or spans.

Responsibility

Responsibility for inspection of pipelines, mains, and services shall rest with the line organization manager/superintendent who directs the maintenance and operation of the facilities. Responsibility includes determining scope, issuing special instructions, training in points to observe, scheduling inspections, initiating special inspections, reviewing and maintaining inspection records, and initiating action to correct conditions requiring attention.

Responsibility for inspection of these gas facilities and the preparation of necessary records of inspection shall be shared by Distribution 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 responsible line organization.

Information to be Obtained: (where practical)

1. Type of protective coating
2. General condition of coating
3. External condition of pipe
4. Soil type
5. Cover depth
6. Internal condition of pipe, in cases where line has been cut or an ultrasonic survey is made
7. Abnormal physical movement of pipe or structural supports (where practical)
8. Ground movement, including land subsidence and earthquake fault displacement (where practical)
9. Abnormal external loading (where practical)
10. Any other useful information (where practical)

TITLE: Physical Inspection of Pipelines, Mains and Services**Frequency of Inspections:**

1. 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 intervals not exceeding three years. Atmospheric corrosion areas are designated in Electric Construction Document 032911.
2. Inspections shall cover all supports, expansion devices, and hangers which directly affect the location or security of the gas piping.
3. This standard does not establish frequency for inspection of buried piping. Inspections shall be performed when pipe is exposed in the course of routine work; when special surveys are performed due to extensive corrosion, leakage history, or record of failure; or when the pipe is exposed by an outside party.

Records:

1. Any conditions found during the inspection which require immediate attention shall be reported to the responsible supervisor as soon as possible.
2. A written report shall be made detailing the results of each inspection. These reports shall be distributed as required for proper surveillance and follow-up.
 - A. The Leak Survey, Inspection and Repair Report - Form 62-4060A (Form A) may be used for all lines. Other forms may be used as long as they include all the information required.
 - B. It is not necessary to report the condition of plastic stub services on the report form when they are uncovered for the purpose of installing stub completions. The exposed plastic stub, however, must be inspected. No report or notation is necessary if the plastic pipe is found to be in good condition. If a problem caused by other than damage due to a third party is observed, it should be corrected and reported ~~on a~~ ^{through the} Material Problem Report. This exception is applicable to plastic pipe only. The report must be prepared when a steel stub service is exposed.
 - C. 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 include sketches, measurements, photographs, and other information required to accurately represent the problem and proposed solution.
 - D. Other scheduled inspections of exposed piping where conditions are found satisfactory and no action is required shall be recorded by filing a report indicating the date the inspection was made and what facilities were covered.
 - E. Internal inspections shall be documented in a format compatible with the method of inspection.
- ~~3. The record of each inspection made in conjunction with a leak repair shall be entered into the computerized leak history program.~~
- 3 4. The record of each inspection, repair or reconditioning of any section of pipe shall be filed in an easily retrievable manner for the life of the facility.

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Facility Design Confirmation:

Where practicable, when 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 is uncovered, and the original design data has been assumed because of incomplete records, the Gas System Maintenance Department shall be informed so that arrangements can be made to determine unknown data.

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Effective: ^{August} ~~June~~ 1, 1995

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Signed,

Signed,

James H. Pope
Vice President T&CS

W. R. Mazotti
Vice President GS&O

TITLE: Physical Inspection of Pipelines, Mains and Services**Distribution:**

CES Vice Presidents
Gas Services and Operations Managers
Gas Services and Operations Superintendents
Technical and Construction Services Managers
Division Managers
Division Capital Investment Directors
Division Construction, Maintenance and Operations Directors
Technical and Ecological Services Manager

Reference Documents:

Letter, Material Problem Report Program, February 24, 1994.
CES Standard C-T&CS-S0350/GS S.P. 460.21-4, "Periodic Leakage Surveys of Gas Transmission and Distribution Facilities"
Gas Construction Document 089819 (O-16), "Corrosion Control of Gas Facilities"
Electric Construction Document 032911, "Corrosion Areas Overhead Lines"

For Further Information:

For additional information or copies of this standard please contact the Distribution Department.