

Summary	This standard establishes requirements to identify abnormal operating conditions (AOC), collect data during operations and maintenance (O&M) tasks, evaluate data, perform corrective maintenance, post-evaluation actions, and ensure continuing surveillance of Pacific Gas and Electric Company (Company) gas transmission and distribution (T&D) systems to facilitate public safety.
Target Audience	Gas operations personnel responsible for asset integrity, risk management, engineering, gas control, and O&M tasks.
Safety	NA

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Requirements

1 General

- 1.1 Gas O&M personnel must report any condition that may affect the safe operation of the gas system when observed during the normal performance of daily activities.
- 1.2 Surveillance of gas systems facilities includes, but is not limited to, awareness of the following items:
 - 1. Right-of-way encroachments, which include the following:
 - a. Construction activities.
 - b. Boring across the right of way.

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- 1.2 (continued)
 - c. Equipment or materials storage.
 - d. New structures including: buildings, swimming pools, etc.
 - e. Indications of heavy vehicle crossings.
 - f. Plowing or cultivating activities.
 - g. Fires.
 - h. Vegetation.
 - 2. Activities near the facility right-of-way, which include the following:
 - a. Construction activities.
 - b. Boring parallel to the right-of-way.
 - c. Building activity, including subdivisions and trail parks.
 - d. Drilling.
 - e. Blasting.
 - f. Fires.
 - 3. Natural conditions, which include the following:
 - a. Earth movement.
 - b. Surface deterioration.
 - c. Erosion.
 - d. Flooding.
 - e. Fires.
 - 4. Condition of facilities, which include the following:
 - a. Indication of leaks.
 - b. Indication of vandalism or sabotage.
 - c. Dig-ins.

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1.2 (continued)

5. Other factors that affect operations of the pipeline system, or result in the possible injury or damage to people or property.

2 Identification

- 2.1 Report AOCs, unsafe conditions, Supervisory Control and Data Acquisition (SCADA) incidents, overpressure events, unusual situations such as blasting, boring operations, heavy equipment crossings, land leveling, construction parallel to and in close proximity to Company facilities, and encroachments.
- 2.2 When an unsafe condition is identified, gas operations personnel must ensure the location is safe until permanent pipeline repairs are complete. In case of an emergency, personnel must proceed per the <u>"Gas Emergency Response Plan."</u>
- 2.3 Condition identification and reporting are performed per the standards and procedures listed in Table 1 Standards & Procedures ensuring continuing surveillance.

3 Operations and Maintenance (O&M)

3.1 Factors that affect operations of the pipeline system, or result in possible injury or damage to people or property are identified and reported throughout O&M tasks as prescribed in the standards and procedures listed in <u>Table 1</u>.

4 Condition Evaluation

- 4.1 Appropriate Company personnel review and analyze facility records periodically. These records include, but are not limited to the following:
 - Patrols (aerial, vehicle, or other)
 - Leak surveys
 - Valve inspections
 - Vault inspections
 - Pressure regulating/relieving,
 - Limiting equipment inspections
 - Corrosion control inspections
 - Facility failure investigations, per the standards and procedures listed in Table 1.
- 4.2 Information gathered throughout continuing surveillance is used to ensure ongoing safe operation of the pipeline system, and to recognize changing conditions on or near a pipeline asset that could affect integrity management decisions on Company assets. Where applicable, the integrity management programs established by the procedures listed in <u>Table 1</u> use relevant data from continuing surveillance as a data source.

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5 Corrective Maintenance

5.1 When a pipeline is determined to be in unsatisfactory condition by inspection or record review, but no immediate hazard exists, action is taken per the standards and procedures listed in <u>Table 1 Standards & Procedures ensuring continuing surveillance</u>.

6 Post Evaluation

6.1 Post evaluation of a condition may require reports to be completed and follow-up actions to assess effectiveness and sustainability of corrective action as prescribed in the standards and procedures listed in <u>Table 1</u> below.

NOTE

Table 1 lists minimum requirements for continuing surveillance. Additional documents are being developed and not included in the table.

Table 1 Standards & Procedures ensuring continuing surveillance

Document	Identification	O&M	Condition Evaluation	Corrective Maintenance	Post Evaluation
EMER-1011M, "Gas Emergency Response Plan."	×			х	
EMER-6010S. "Training and Exercising Gas Emergency Response Plan."				х	
H-70 "Pressure-Relief Devices."		х	х		
O-16, "Corrosion Control of Gas Facilities."		х	х	х	
RMI-04, "Gas Transmission Earthquake Plan and Response Procedure."	×	х	х		
RMI-04A, "Gas Transmission Rainfall Plan and Response Instruction."	х	х	х		
RMI-04B, "Gas Distribution Earthquake Plan and Response Procedure."	х	х	х		
RMP-06, "Gas Transmission Integrity Management Program."			х		
RMP-15, "Gas Distribution Integrity Management Program."			х		
TD-4020S, "Gas Operations Corrective Action Program."	Х	х	х		х



Document	Identification	O&M	Condition Evaluation	Corrective Maintenance	Post Evaluation
TD-4050S, "Security Standard for Gas Operations."					
S4110, "Leak Survey and Repair of Gas Transmission and Distribution Facilities."		х	x	Х	
<u>TD-4110P-06, "Field Inspection of Gas</u> <u>Facilities."</u>	х	Х			
TD-4110P-09, "Leak Grading and Response."	х	х	x		
TD-4125S, "Maximum Allowable Operating Pressure Requirements for Gas Distribution Systems and Transmission and Gathering Lines."				х	
TD-4125P-03, "Revising the MAOP of Pipelines Operating at 60 psig or Less."				х	
TD-4125P-04, "Revising the MOP, MAOP, of Pipelines Operating at Greater than 60 psig."				х	
TD-4127S, "Class Location Determination and Compliance Requirements."	х	х	x	x	
TD-4127P-01, "Observing, Reporting, and Evaluating New Construction and Conducting Class Location Studies."	х	х	x	х	
TD-4127P-02, "Conducting System-wide Class Location Review."			x	х	
S4412, "Prevent Damage to Underground Facilities."	х			х	
TD-4412P-03, "Marking and Locating PG&E Underground Facilities."		х			
WP4412-04, "Field Meets and Standby – Damage Prevention."		х			
TD-4412P-06, "Handling Excavators, Contractors, and the Public Working Unsafely Around Utility Facilities."		Х			
TD-4412P-07, "Patrolling Pipelines and Mains."	х	Х	x	х	
TD-4412P-09, "Gas Pipeline Markers."		х			
TD-4430P-02, "Gas Transmission Station Inspection, Testing, and Maintenance Procedures."		Х			
WP4430-04, "Gas Valve Maintenance Requirements and Procedures."		х	x		
S4446, "Vault Inspection Procedure."		х	x		



Document	Identification	O&M	Condition Evaluation	Corrective Maintenance	Post Evaluation
S4540, "Gas Pressure Regulation Maintenance Requirements."		х			
TD-4551S, "Station Critical Documentation."	x	х			
TD-6436S, "Gas and Electric Field Services and Dispatch and Scheduling Operating Practices."			x		
TD-6436P-12, "Handling Emergency Conditions Reported by Outside Agencies and Company Personnel."	х				
TD-6436P-27, "Gas Service Valve Inspection and Maintenance."			x		
WP4133-02, "Cathodic Protection Area Assessment/Resurvey Procedures for Gas Distribution."		х	x	х	

END of Requirements

Definitions	Abnormal operating condition (AOC): A condition identified by the operator hat may indicate a malfunction of a component or deviation from normal operations that may do either of the following:				
	 Indicate a condition exceeding design limits, or 				
	Result in a hazard to people, property, or the environment.				
Implementation Responsibilities	Document owner must set up a session to tailboard the document to the affected integrity management personnel.				
Guidance Document Tailboard must be emailed to asset integrity, risk management, engineering, O&M, codes and standards, and regulatory compliance managers.					
Governing Document	NA				
Compliance Requirement/ Regulatory Commitment	<u>49 CFR §192.613, "Continuing Surveillance."</u> <u>PG&E Commitment GEO-2012-130668</u>				



Reference Documents	Developmental References:
Documents	NA
	Supplemental References:
	NA
Appendices	NA
-	
Attachments	NA
Document	NA
Recision	
Approved By	Jane Yura Vice President
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Document Owner	Redacted
Document Owner	Engineer
-	
Document	Redacted
Contact	Engineer

Revision Notes

Where?	What Changed?
NA	NA