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| NOTICE: This report is required by 49 CFR Part 191. Failure to report can result in a civil penalty not to exceed 100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed \$1,000,000 as provided in 49 USC 60122. | OMB NO: 2137-0522<br>EXPIRATION DATE: 8/31/2020 |
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U.S. Department of Transportation  
Pipeline and Hazardous Materials Safety Administration

**Original Report Date:**

08/16/2016

**No.**

20160065 - 17164

(DOT Use Only)

### INCIDENT REPORT - GAS TRANSMISSION AND GATHERING PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0522. All responses to this collection of information are mandatory. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

**INSTRUCTIONS**

*Important: Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at <http://www.phmsa.dot.gov/pipeline/library/forms>.*

**PART A - KEY REPORT INFORMATION**

|   |   |                      |               |
|---|---|----------------------|---------------|
| Report Type: <i>(select all that apply)</i>   | <b>Original:</b>  | <b>Supplemental:</b> | <b>Final:</b> |
|   | <b>Yes</b>  |                      | <b>Yes</b>    |
| Last Revision Date:   |   |                      |               |
| 1. Operator's OPS-issued Operator Identification Number (OPID):   | 15007   |                      |               |
| 2. Name of Operator   | PACIFIC GAS & ELECTRIC CO   |                      |               |
| 3. Address of Operator:   |   |                      |               |
| 3a. Street Address  | PG&E - GAS OPERATIONS, REGULATORY COMPLIANCE 6111 BOLLINGER CANYON RD., |                      |               |
| 3b. City  | SAN RAMON   |                      |               |
| 3c. State   | California  |                      |               |
| 3d. Zip Code:   | 94583   |                      |               |
| 4. Local time <i>(24-hr clock)</i> and date of the Incident:  | 07/16/2016 06:59  |                      |               |
| 5. Location of Incident:  |   |                      |               |
| Latitude:   | 38.31859  |                      |               |
| Longitude:  | -121.79638  |                      |               |
| 6. National Response Center Report Number (if applicable):  | 1153551   |                      |               |
| 7. Local time <i>(24-hr clock)</i> and date of initial telephonic report to the National Response Center (if applicable): | 07/16/2016 08:35  |                      |               |
| 8. Incident resulted from:  | Unintentional release of gas  |                      |               |
| 9. Gas released: (select only one, based on predominant volume released)  | Natural Gas   |                      |               |
| - Other Gas Released Name:  |   |                      |               |
| 10. Estimated volume of commodity released unintentionally - Thousand Cubic Feet (MCF):                                   | 12,398.00   |                      |               |
| 11. Estimated volume of intentional and controlled release/blowdown - Thousand Cubic Feet (MCF)                           |   |                      |               |
| 12. Estimated volume of accompanying liquid release (Barrels):  |   |                      |               |
| 13. Were there fatalities?  | No  |                      |               |
| - If Yes, specify the number in each category:  |   |                      |               |
| 13a. Operator employees   |   |                      |               |
| 13b. Contractor employees working for the Operator  |   |                      |               |
| 13c. Non-Operator emergency responders  |   |                      |               |
| 13d. Workers working on the right-of-way, but NOT associated with this Operator   |   |                      |               |
| 13e. General public   |   |                      |               |
| 13f. Total fatalities (sum of above)  |   |                      |               |
| 14. Were there injuries requiring inpatient hospitalization?  | No  |                      |               |
| - If Yes, specify the number in each category:  |   |                      |               |
| 14a. Operator employees   |   |                      |               |
| 14b. Contractor employees working for the Operator  |   |                      |               |
| 14c. Non-Operator emergency responders  |   |                      |               |
| 14d. Workers working on the right-of-way, but NOT associated with this Operator   |   |                      |               |
| 14e. General public   |   |                      |               |
| 14f. Total injuries (sum of above)  |   |                      |               |
| 15. Was the pipeline/facility shut down due to the incident?  | Yes   |                      |               |

|   |   |
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| - If No, Explain:   |   |
| - If Yes, complete Questions 15a and 15b: (use local time, 24-hr clock)                               |   |
| 15a. Local time and date of shutdown  | 07/16/2016 08:22                        |
| 15b. Local time pipeline/facility restarted   | 07/18/2016 21:30                        |
| - Still shut down? (* Supplemental Report Required)   |   |
| 16. Did the gas ignite?   | No                                      |
| 17. Did the gas explode?  | No                                      |
| 18. Number of general public evacuated:   | 0                                       |
| 19. Time sequence (use local time, 24-hour clock):  |   |
| 19a. Local time operator identified Incident– effective 10-2014, changed from "Incident" to "failure" | 07/16/2016 06:59                        |
| 19b. Local time operator resources arrived on site  | 07/16/2016 07:31                        |
| <b>PART B - ADDITIONAL LOCATION INFORMATION</b>   |   |
| 1. Was the origin of the Incident onshore?  | Yes                                     |
| - Yes (Complete Questions 2-12)   |   |
| - No (Complete Questions 13-15)   |   |
| <b>If Onshore:</b>  |   |
| 2. State:   | California                              |
| 3. Zip Code:  | 95620                                   |
| 4. City   | Dixon                                   |
| 5. County or Parish   | Solano                                  |
| 6. Operator designated location   | Milepost/Valve Station                  |
| Specify:  | MP 5.15                                 |
| 7. Pipeline/Facility name:  | L-220                                   |
| 8. Segment name/ID:   | 107                                     |
| 9. Was Incident on Federal land, other than the Outer Continental Shelf (OCS)?                        | No                                      |
| 10. Location of Incident :  | Pipeline Right-of-way                   |
| 11. Area of Incident (as found) :   | Underground                             |
| Specify:  | Under soil                              |
| Other – Describe:   |   |
| Depth-of-Cover (in):  | 48                                      |
| 12. Did Incident occur in a crossing?   | No                                      |
| - If Yes, specify type below:   |   |
| - If Bridge crossing –  |   |
| Cased/ Uncased:   |   |
| - If Railroad crossing –  |   |
| Cased/ Uncased/ Bored/drilled   |   |
| - If Road crossing –  |   |
| Cased/ Uncased/ Bored/drilled   |   |
| - If Water crossing –   |   |
| Cased/ Uncased  |   |
| Name of body of water (If commonly known):  |   |
| Approx. water depth (ft) at the point of the Incident:  |   |
| Select:   |   |
| <b>If Offshore:</b>   |   |
| 13. Approx. water depth (ft) at the point of the Incident:  |   |
| 14. Origin of Incident:   |   |
| - If "In State waters":   |   |
| - State:  |   |
| - Area:   |   |
| - Block/Tract #:  |   |
| - Nearest County/Parish:  |   |
| - If "On the Outer Continental Shelf (OCS)":  |   |
| - Area:   |   |
| - Block #:  |   |
| 15. Area of Incident:   |   |
| <b>PART C - ADDITIONAL FACILITY INFORMATION</b>   |   |
| 1. Is the pipeline or facility: - Interstate - Intrastate   | Intrastate                              |
| 2. Part of system involved in Incident:   | Onshore Pipeline, Including Valve Sites |
| 3. Item involved in Incident:   | Pipe                                    |
| - If Pipe – Specify:  | Pipe Body                               |
| 3a. Nominal diameter of pipe (in):  | 10.75                                   |
| 3b. Wall thickness (in):  | .259                                    |

|   |                  |
|---|------------------|
| 3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):  | Unknown          |
| 3d. Pipe specification:   | unknown          |
| 3e. Pipe Seam – Specify:  | Seamless         |
| - If Other, Describe:   |                  |
| 3f. Pipe manufacturer:  | unknown          |
| 3g. Year of manufacture:  | Unknown          |
| 3h. Pipeline coating type at point of Incident – Specify:   | Asphalt          |
| - If Other, Describe:   |                  |
| - If Weld, including heat-affected zone – Specify:  |                  |
| - If Other, Describe:   |                  |
| - If Valve – Specify:   |                  |
| - If Mainline – Specify:  |                  |
| - If Other, Describe:   |                  |
| 3i. Mainline valve manufacturer:  |                  |
| 3j. Year of manufacture:  |                  |
| - If Other, Describe:   |                  |
| 4. Year item involved in Incident was installed:  | 1937             |
| 5. Material involved in Incident:   | Carbon Steel     |
| - If Material other than Carbon Steel or Plastic – Specify:   |                  |
| 6. Type of Incident involved:   | Rupture          |
| - If Mechanical Puncture – Specify Approx. size:  |                  |
| in. (axial) by  |                  |
| in. (circumferential)   |                  |
| - If Leak - Select Type:  |                  |
| - If Other – Describe:  |                  |
| - If Rupture - Select Orientation:  | Circumferential  |
| - If Other – Describe:  |                  |
| Approx. size: in. (widest opening):   | 24               |
| by in. (length circumferentially or axially):   | 10               |
| - If Other – Describe:  |                  |
|   |                  |
| <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b>  |                  |
| 1. Class Location of Incident:  | Class 1 Location |
| 2. Did this Incident occur in a High Consequence Area (HCA)?  | No               |
| - If Yes:   |                  |
| 2a. Specify the Method used to identify the HCA:  |                  |
| 3. What is the PIR (Potential Impact Radius) for the location of this Incident?<br>Feet:  | 209              |
| 4. Were any structures outside the PIR impacted or otherwise damaged due to heat/fire resulting from the Incident?  | No               |
| 5. Were any structures outside the PIR impacted or otherwise damaged NOT by heat/fire resulting from the Incident?  | No               |
| 6. Were any of the fatalities or injuries reported for persons located outside the PIR?   | No               |
| 7. Estimated Property Damage :  |                  |
| 7a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 6-2011, "paid/reimbursed by the Operator" removed | \$ 0             |
| Estimated cost of gas released unintentionally – effective 6-2011, moved to item 7f   |                  |
| Estimated cost of gas released during intentional and controlled blowdown – effective 6-2011, moved to item 7g  |                  |
| 7b. Estimated cost of Operator's property damage & repairs  | \$ 188,587       |
| 7c. Estimated cost of Operator's emergency response   | \$ 0             |
| 7d. Estimated other costs   | \$ 0             |
| Describe:   |                  |
| 7e. Property damage subtotal (sum of above)   | \$ 188,587       |
| <b>Cost of Gas Released</b>   |                  |
| 7f. Estimated cost of gas released unintentionally  | \$ 33,000        |
| 7g. Estimated cost of gas released during intentional and controlled blowdown   | \$ 0             |
| 7h. Total estimated cost of gas released (sum of 7.f & 7.g above)   | \$ 33,000        |
| Total of all costs  | \$ 221,587       |

| <b>PART E - ADDITIONAL OPERATING INFORMATION</b>   |   |
|--|---|
| 1. Estimated pressure at the point and time of the Incident (psig):  | 650.00  |
| 2. Maximum Allowable Operating Pressure (MAOP) at the point and time of the Incident (psig):   | 796.00  |
| Added 10-2014 2a. MAOP established by 49 CFR section:  | 192.619(a)(1)   |
| - If Other, specify:   |   |
| 3. Describe the pressure on the system or facility relating to the Incident:   | Pressure did not exceed MAOP  |
| 4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Incident operating under an established pressure restriction with pressure limits below those normally allowed by the MAOP? | No  |
| - If Yes - (Complete 4a and 4b below)  |   |
| 4a. Did the pressure exceed this established pressure restriction?   |   |
| 4b. Was this pressure restriction mandated by PHMSA or the State?  |   |
| 5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?  | Yes   |
| - If Yes - (Complete 5a. – 5e. below):   |   |
| 5a. Type of upstream valve used to initially isolate release source:   | Manual  |
| 5b. Type of downstream valve used to initially isolate release source:   | Manual  |
| 5c. Length of segment isolated between valves (ft):  | 25,000  |
| 5d. Is the pipeline configured to accommodate internal inspection tools?   | No  |
| - If No – Which physical features limit tool accommodation? (select all that apply)  |   |
| - Changes in line pipe diameter  | Yes   |
| - Presence of unsuitable mainline valves   |   |
| - Tight or mitered pipe bends  | Yes   |
| - Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)   |   |
| - Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)  |   |
| - Other  | Yes   |
| - If Other, Describe:  |   |
|  | wrinkle bends, bell and spigot joints, plug valves  |
| 5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?  | No  |
| - If Yes, which operational factors complicate execution? (select all that apply)  |   |
| - Excessive debris or scale, wax, or other wall build-up   |   |
| - Low operating pressure(s)  |   |
| - Low flow or absence of flow  |   |
| - Incompatible commodity   |   |
| - Other  |   |
| - If Other, Describe:  |   |
| 5f. Function of pipeline system:   | Transmission System   |
| 6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Incident?  | Yes   |
| - If Yes:  |   |
| 6a. Was it operating at the time of the Incident?  | Yes   |
| 6b. Was it fully functional at the time of the Incident?   | Yes   |
| 6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume or pack calculations) assist with the detection of the Incident?  | No  |
| 6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Incident?   | No  |
| 7. How was the Incident initially identified for the Operator?   | Notification from Emergency Responder   |
| - If Other – Describe:   |   |
| 7a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 7, specify:  |   |
| 8. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Incident?   | No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate) |

|  |                             |
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| - If No, the operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to:<br>(provide an explanation for why the operator did not investigate)  | third party dig-in incident |
| - If Yes, Describe investigation result(s) (select all that apply):  |                             |
| - Investigation reviewed work schedule rotations, continuous hours of service (while working for the operator), and other factors associated with fatigue  |                             |
| - Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator) and other factors associated with fatigue   |                             |
| - Provide an explanation for why not:  |                             |
| - Investigation identified no control room issues  |                             |
| - Investigation identified no controller issues  |                             |
| - Investigation identified incorrect controller action or controller error   |                             |
| - Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response   |                             |
| - Investigation identified incorrect procedures  |                             |
| - Investigation identified incorrect control room equipment operation  |                             |
| - Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response  |                             |
| - Investigation identified areas other than those above –  |                             |
| Describe:  |                             |
| <b>PART F - DRUG &amp; ALCOHOL TESTING INFORMATION</b>   |                             |
| 1. As a result of this Incident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?   | No                          |
| - If Yes:  |                             |
| 1a. How many were tested:  |                             |
| 1b. How many failed:   |                             |
| 2. As a result of this Incident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?  | No                          |
| - If Yes:  |                             |
| 2a. How many were tested:  |                             |
| 2b. How many failed:   |                             |
| <b>PART G - APPARENT CAUSE</b>   |                             |
| Select only one box from PART G in the shaded column on the left representing the APPARENT Cause of the Incident, and answer the questions on the right. Describe secondary, contributing, or root causes of the Incident in the narrative (PART H). |                             |
| <b>Apparent Cause:</b>   | G3 - Excavation Damage      |
| <b>G1 - Corrosion Failure</b> - only one <b>sub-cause</b> can be picked from shaded left-hand column   |                             |
| <b>Corrosion Failure – Sub-cause:</b>  |                             |
| <b>- If External Corrosion:</b>  |                             |
| 1. Results of visual examination:  |                             |
| - If Other, Describe:  |                             |
| 2. Type of corrosion: (select all that apply)  |                             |
| - Galvanic   |                             |
| - Atmospheric  |                             |
| - Stray Current  |                             |
| - Microbiological  |                             |
| - Selective Seam   |                             |
| - Other  |                             |
| - If Other – Describe:   |                             |
| 3. The type(s) of corrosion selected in Question 2 is based on the following: (select all that apply)  |                             |
| - Field examination  |                             |
| - Determined by metallurgical analysis   |                             |
| - Other  |                             |
| - If Other – Describe:   |                             |
| 4. Was the failed item buried under the ground?  |                             |

|   |                       |
|---|-----------------------|
| - If Yes:   |                       |
| 4a. Was failed item considered to be under cathodic protection at the time of the incident?   |                       |
| - If Yes, Year protection started:  |                       |
| 4b. Was shielding, tenting, or disbonding of coating evident at the point of the incident?  |                       |
| 4c. Has one or more Cathodic Protection Survey been conducted at the point of the incident?   |                       |
| If "Yes, CP Annual Survey" – Most recent year conducted:  |                       |
| If "Yes, Close Interval Survey" – Most recent year conducted:   |                       |
| If "Yes, Other CP Survey" – Most recent year conducted:   |                       |
| - If No:  |                       |
| 4d. Was the failed item externally coated or painted?   |                       |
| 5. Was there observable damage to the coating or paint in the vicinity of the corrosion?  |                       |
| <b>- If Internal Corrosion:</b>   |                       |
| 6. Results of visual examination:   |                       |
| - If Other, Describe:   |                       |
| 7. Cause of corrosion <i>(select all that apply)</i> :  |                       |
| - Corrosive Commodity   |                       |
| - Water drop-out/Acid   |                       |
| - Microbiological   |                       |
| - Erosion   |                       |
| - Other   |                       |
| - If Other, Describe:   |                       |
| 8. The cause(s) of corrosion selected in Question 7 is based on the following <i>(select all that apply)</i> :  |                       |
| - Field examination   |                       |
| - Determined by metallurgical analysis  |                       |
| - Other   |                       |
| - If Other, Describe:   |                       |
| 9. Location of corrosion <i>(select all that apply)</i> :   |                       |
| - Low point in pipe   |                       |
| - Elbow   |                       |
| - Drop-out  |                       |
| - Other   |                       |
| - If Other, Describe:   |                       |
| 10. Was the gas/fluid treated with corrosion inhibitors or biocides?  |                       |
| 11. Was the interior coated or lined with protective coating?   |                       |
| 12. Were cleaning/dewatering pigs (or other operations) routinely utilized?   |                       |
| 13. Were corrosion coupons routinely utilized?  |                       |
| <b>Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Incident" (from PART C, Question 3) is Pipe or Weld.</b> |                       |
| 14. Has one or more internal inspection tool collected data at the point of the Incident?   |                       |
| 14a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:   |                       |
| - Magnetic Flux Leakage Tool  | Most recent year run: |
| - Ultrasonic  | Most recent year run: |
| - Geometry  | Most recent year run: |
| - Caliper   | Most recent year run: |
| - Crack   | Most recent year run: |
| - Hard Spot   | Most recent year run: |
| - Combination Tool  | Most recent year run: |
| - Transverse Field/Triaxial   | Most recent year run: |
| - Other   | Most recent year run: |
| If Other, Describe:   |                       |
| 15. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Incident?                               |                       |
| - If Yes,   |                       |

|  |                                  |
|--|----------------------------------|
| Most recent year tested:   |                                  |
| Test pressure (psig):  |                                  |
| 16. Has one or more Direct Assessment been conducted on this segment?  |                                  |
| - If Yes, and an investigative dig was conducted at the point of the Incident:   |                                  |
| Most recent year conducted:  |                                  |
| - If Yes, but the point of the Incident was not identified as a dig site:  |                                  |
| Most recent year conducted:  |                                  |
| 17. Has one or more non-destructive examination been conducted at the point of the Incident since January 1, 2002?   |                                  |
| 17a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: |                                  |
| - Radiography  | Most recent year examined:       |
| - Guided Wave Ultrasonic   | Most recent year examined:       |
| - Handheld Ultrasonic Tool   | Most recent year examined:       |
| - Wet Magnetic Particle Test   | Most recent year examined:       |
| - Dry Magnetic Particle Test   | Most recent year examined:       |
| - Other  | Most recent year examined:       |
| If Other, Describe:  |                                  |
| <b>G2 - Natural Force Damage</b> - only one <b>sub-cause</b> can be picked from shaded left-handed column  |                                  |
| <b>Natural Force Damage – Sub-Cause:</b>   |                                  |
| - <b>If Earth Movement, NOT due to Heavy Rains/Floods:</b>   |                                  |
| 1. Specify:  |                                  |
| - If Other, Describe:  |                                  |
| - <b>If Heavy Rains/Floods:</b>  |                                  |
| 2. Specify:  |                                  |
| - If Other, Describe:  |                                  |
| - <b>If Lightning:</b>   |                                  |
| 3. Specify:  |                                  |
| - <b>If Temperature:</b>   |                                  |
| 4. Specify:  |                                  |
| - If Other, Describe:  |                                  |
| - <b>If Other Natural Force Damage:</b>  |                                  |
| 5. Describe:   |                                  |
| <b>Complete the following if any Natural Force Damage sub-cause is selected.</b>   |                                  |
| 6. Were the natural forces causing the Incident generated in conjunction with an extreme weather event?  |                                  |
| 6a. If yes, specify: (select all that apply):  |                                  |
| - Hurricane  |                                  |
| - Tropical Storm   |                                  |
| - Tornado  |                                  |
| - Other  |                                  |
| - If Other, Describe:  |                                  |
| <b>G3 - Excavation Damage</b> only one <b>sub-cause</b> can be picked from shaded left-hand column   |                                  |
| <b>Excavation Damage – Sub-Cause:</b>  | Excavation Damage by Third Party |
| <b>- If Previous Damage Due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Incident" (From Part C, Question 3) is Pipe or Weld.</b>          |                                  |
| 1. Has one or more internal inspection tool collected data at the point of the Incident?   |                                  |
| 1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:   |                                  |
| - Magnetic Flux Leakage  | Year:                            |
| - Ultrasonic   | Year:                            |
| - Geometry   | Year:                            |
| - Caliper  |                                  |

|   |                             |                   |
|---|-----------------------------|-------------------|
|   | Year:                       |                   |
| - Crack   |                             |                   |
|   | Year:                       |                   |
| - Hard Spot   |                             |                   |
|   | Year:                       |                   |
| - Combination Tool  |                             |                   |
|   | Year:                       |                   |
| - Transverse Field/Triaxial   |                             |                   |
|   | Year:                       |                   |
| - Other:  |                             |                   |
|   | Year:                       |                   |
|   | Describe:                   |                   |
| 2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?  |                             |                   |
| 3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Incident?  |                             |                   |
| - If Yes:   |                             |                   |
|   | Most recent year tested:    |                   |
|   | Test pressure (psig):       |                   |
| 4. Has one or more Direct Assessment been conducted on the pipeline segment?  |                             |                   |
| - If Yes, and an investigative dig was conducted at the point of the Incident:  |                             |                   |
|   | Most recent year conducted: |                   |
| - If Yes, but the point of the Incident was not identified as a dig site:   |                             |                   |
|   | Most recent year conducted: |                   |
| 5. Has one or more non-destructive examination been conducted at the point of the Incident since January 1, 2002?   |                             |                   |
| 5a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: |                             |                   |
| - Radiography   |                             |                   |
|   | Year:                       |                   |
| - Guided Wave Ultrasonic  |                             |                   |
|   | Year:                       |                   |
| - Handheld Ultrasonic Tool  |                             |                   |
|   | Year:                       |                   |
| - Wet Magnetic Particle Test  |                             |                   |
|   | Year:                       |                   |
| - Dry Magnetic Particle Test  |                             |                   |
|   | Year:                       |                   |
| - Other   |                             |                   |
|   | Year:                       |                   |
|   | Describe:                   |                   |
| <b>Complete the following if Excavation Damage by Third Party is selected as the sub-cause.</b>   |                             |                   |
| 6. Did the operator get prior notification of the excavation activity?  |                             | Yes               |
| 6a. If Yes, Notification received from (select all that apply):   |                             |                   |
| - One-Call System   |                             | Yes               |
| - Excavator   |                             |                   |
| - Contractor  |                             |                   |
| - Landowner   |                             |                   |
| <b>Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.</b>  |                             |                   |
| 7. Do you want PHMSA to upload the following information to CGA-DIRT ( <a href="http://www.cga-dirt.com">www.cga-dirt.com</a> )?  |                             | Yes               |
| 8. Right-of-Way where event occurred (select all that apply):   |                             |                   |
| - Public  |                             |                   |
|   | - If Public, Specify:       |                   |
| - Private   |                             | Yes               |
|   | - If Private, Specify:      | Private Landowner |
| - Pipeline Property/Easement  |                             | Yes               |
| - Power/Transmission Line   |                             |                   |
| - Railroad  |                             |                   |
| - Dedicated Public Utility Easement   |                             |                   |
| - Federal Land  |                             |                   |
| - Data not collected  |                             |                   |
| - Unknown/Other   |                             |                   |
| 9. Type of excavator :  |                             | Farmer            |
| 10. Type of excavation equipment :  |                             | Farm Equipment    |
| 11. Type of work performed :  |                             | Agriculture       |
| 12. Was the One-Call Center notified? - Yes - No  |                             | Yes               |



|   |                                     |
|---|-------------------------------------|
| 12a. If Yes, specify ticket number:   | 616600507                           |
| 12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:   | n/a                                 |
| 13. Type of Locator:  | Utility Owner                       |
| 14. Were facility locate marks visible in the area of excavation?   | Yes                                 |
| 15. Were facilities marked correctly?   | Yes                                 |
| 16. Did the damage cause an interruption in service?  | No                                  |
| 16a. If Yes, specify duration of the interruption: (hours)  |                                     |
| 17. Description of the <b>CGA-DIRT Root Cause</b> (select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, then one predominant second level CGA-DIRT Root Cause as well): |                                     |
| - Predominant first level CGA-DIRT Root Cause:  | Excavation Practices Not Sufficient |
| - If One-Call Notification Practices Not Sufficient, Specify:   |                                     |
| - If Locating Practices Not Sufficient, Specify:  |                                     |
| - If Excavation Practices Not Sufficient, Specify:  | Failure to maintain the marks       |
| - If Other/None of the Above, Explain:  |                                     |
| <b>G4 - Other Outside Force Damage - only one sub-cause can be selected from the shaded left-hand column</b>  |                                     |
| <b>Other Outside Force Damage – Sub-Cause:</b>  |                                     |
| <b>- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:</b>   |                                     |
| 1. Vehicle/Equipment operated by:   |                                     |
| <b>- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:</b>   |                                     |
| 2. Select one or more of the following IF an extreme weather event was a factor:  |                                     |
| - Hurricane   |                                     |
| - Tropical Storm  |                                     |
| - Tornado   |                                     |
| - Heavy Rains/Flood   |                                     |
| - Other   |                                     |
| - If Other, Describe:   |                                     |
| <b>- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Incident" (from PART C, Question 3) is Pipe or Weld.</b>   |                                     |
| 3. Has one or more internal inspection tool collected data at the point of the Incident?  |                                     |
| 3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:  |                                     |
| - Magnetic Flux Leakage   | Most recent year run:               |
| - Ultrasonic  | Most recent year run:               |
| - Geometry  | Most recent year run:               |
| - Caliper   | Most recent year run:               |
| - Crack   | Most recent year run:               |
| - Hard Spot   | Most recent year run:               |
| - Combination Tool  | Most recent year run:               |
| - Transverse Field/Triaxial   | Most recent year run:               |
| - Other:  | Most recent year run:               |
| Describe:   |                                     |
| 4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?  |                                     |
| 5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Incident?  |                                     |
| - If Yes:   |                                     |
| Most recent year tested:  |                                     |
| Test pressure (psig):   |                                     |
| 6. Has one or more Direct Assessment been conducted on the pipeline segment?  |                                     |
| - If Yes, and an investigative dig was conducted at the point of the Incident :   |                                     |

|   |  |
|---|--|
| Most recent year conducted:   |  |
| - If Yes, but the point of the Incident was not identified as a dig site:   |  |
| Most recent year conducted:   |  |
| 7. Has one or more non-destructive examination been conducted at the point of the Incident since January 1, 2002?   |  |
| 7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: |  |
| - Radiography   | Most recent year conducted:  |
| - Guided Wave Ultrasonic  | Most recent year conducted:  |
| - Handheld Ultrasonic Tool  | Most recent year conducted:  |
| - Wet Magnetic Particle Test  | Most recent year conducted:  |
| - Dry Magnetic Particle Test  | Most recent year conducted:  |
| - Other   | Most recent year conducted:  |
| Describe:   |  |
| <b>- If Intentional Damage:</b>   |  |
| 8. Specify:   |  |
| - If Other, Describe:   |  |
| <b>- If Other Outside Force Damage:</b>   |  |
| 9. Describe:  |  |
| <b>G5 - Pipe, Weld, or Joint Failure</b>  | <b>Use this section to report material failures ONLY IF the "Item Involved in Incident" (from PART C, Question 3) is "Pipe" or "Weld."</b> |
|   | Only one <b>sub-cause</b> can be selected from the shaded left-hand column   |
| <b>Pipe, Weld or Join Failure – Sub-Cause:</b>  |  |
| 1. The sub-cause shown above is based on the following ( <i>select all that apply</i> ):  |  |
| - Field Examination   |  |
| - Determined by Metallurgical Analysis  |  |
| - Other Analysis  |  |
| - If "Other Analysis", Describe   |  |
| - Sub-cause is Tentative or Suspected; Still Under Investigation<br>( <i>Supplemental Report required</i> )   |  |
| <b>- If Construction-, Installation- or Fabrication</b>   |  |
| 2. List contributing factors: ( <i>select all that apply</i> )  |  |
| - Fatigue or Vibration related:   |  |
| Specify:  |  |
| - If Other, Describe:   |  |
| - Mechanical Stress   |  |
| - Other   |  |
| - If Other, Describe:   |  |
| <b>- If Environmental Cracking-related:</b>   |  |
| 3. Specify:   |  |
| - If Other, Describe:   |  |
| <b>Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.</b>  |  |
| 4. Additional Factors ( <i>select all that apply</i> ):   |  |
| - Dent  |  |
| - Gouge   |  |
| - Pipe Bend   |  |
| - Arc Burn  |  |
| - Crack   |  |
| - Lack of Fusion  |  |
| - Lamination  |  |
| - Buckle  |  |
| - Wrinkle   |  |
| - Misalignment  |  |
| - Burnt Steel   |  |
| - Other   |  |
| - If Other, Describe:   |  |
| 5. Has one or more internal inspection tool collected data at the point of  |  |

|   |                             |
|---|-----------------------------|
| the Incident?   |                             |
| 5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:  |                             |
| - Magnetic Flux Leakage   | Most recent year run:       |
| - Ultrasonic  | Most recent year run:       |
| - Geometry  | Most recent year run:       |
| - Caliper   | Most recent year run:       |
| - Crack   | Most recent year run:       |
| - Hard Spot   | Most recent year run:       |
| - Combination Tool  | Most recent year run:       |
| - Transverse Field/Triaxial   | Most recent year run:       |
| - Other   | Most recent year run:       |
|   | Describe:                   |
| 6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Incident?  |                             |
| - If Yes:   |                             |
|   | Most recent year tested:    |
|   | Test pressure (psig):       |
| 7. Has one or more Direct Assessment been conducted on the pipeline segment?  |                             |
| - If Yes, and an investigative dig was conducted at the point of the Incident:  |                             |
|   | Most recent year conducted: |
| - If Yes, but the point of the Incident was not identified as a dig site:   |                             |
|   | Most recent year conducted: |
| 8. Has one or more non-destructive examination(s) been conducted at the point of the Incident since January 1,2002?   |                             |
| 8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: |                             |
| - Radiography   | Most recent year conducted: |
| - Guided Wave Ultrasonic  | Most recent year conducted: |
| - Handheld Ultrasonic Tool  | Most recent year conducted: |
| - Wet Magnetic Particle Test  | Most recent year conducted: |
| - Dry Magnetic Particle Test  | Most recent year conducted: |
| - Other   | Most recent year conducted: |
|   | Describe:                   |
| <b>G6 - Equipment Failure - only one sub-cause can be selected from the shaded left-hand column</b>   |                             |
| <b>Equipment Failure – Sub-Cause:</b>   |                             |
| <b>- If Malfunction of Control/Relief Equipment:</b>  |                             |
| 1. Specify:   |                             |
| - Control Valve   |                             |
| - Instrumentation   |                             |
| - SCADA   |                             |
| - Communications  |                             |
| - Block Valve   |                             |
| - Check Valve   |                             |
| - Relief Valve  |                             |
| - Power Failure   |                             |

|  |  |
|--|--|
| - Stopple/Control Fitting  |  |
| - Pressure Regulator   |  |
| - ESD System Failure   |  |
| - Other  |  |
| - If Other, Describe:  |  |
| <b>- If Compressor or Compressor-related Equipment:</b>  |  |
| 2. Specify:  |  |
| - If Other, Describe:  |  |
| <b>- If Threaded Connection/Coupling Failure:</b>  |  |
| 3. Specify:  |  |
| - If Other, Describe:  |  |
| <b>- If Non-threaded Connection Failure:</b>   |  |
| 4. Specify:  |  |
| - If Other, Describe:  |  |
| <b>- If Other Equipment Failure:</b>   |  |
| 5. Describe:   |  |
| <b>Complete the following if any Equipment Failure sub-cause is selected.</b>                                    |  |
| 6. Additional factors that contributed to the equipment failure <i>(select all that apply)</i>                   |  |
| - Excessive vibration  |  |
| - Overpressurization   |  |
| - No support or loss of support  |  |
| - Manufacturing defect   |  |
| - Loss of electricity  |  |
| - Improper installation  |  |
| - Mismatched items (different manufacturer for tubing and tubing fittings)                                       |  |
| - Dissimilar metals  |  |
| - Breakdown of soft goods due to compatibility issues with transported gas/fluid                                 |  |
| - Valve vault or valve can contributed to the release  |  |
| - Alarm/status failure   |  |
| - Misalignment   |  |
| - Thermal stress   |  |
| - Other  |  |
| - If Other, Describe:  |  |
| <b>G7 – Incorrect Operation - only one sub-cause can be selected from the shaded left-hand column</b>            |  |
| <b>Incorrect Operation – Sub-Cause:</b>  |  |
| <b>- If Underground Gas Storage, Pressure Vessel, or Cavern Allowed or Caused to Overpressure:</b>               |  |
| 1. Specify:  |  |
| - If Other, Describe:  |  |
| <b>- If Other Incorrect Operation:</b>   |  |
| 2. Describe:   |  |
| <b>Complete the following if any Incorrect Operation sub-cause is selected.</b>                                  |  |
| 3. Was this Incident related to: <i>(select all that apply)</i>  |  |
| - Inadequate procedure   |  |
| - No procedure established   |  |
| - Failure to follow procedure  |  |
| - Other:   |  |
| - If Other, Describe:  |  |
| 4. What category type was the activity that caused the Incident:   |  |
| 5. Was the task(s) that led to the Incident identified as a covered task in your Operator Qualification Program? |  |
| 5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?                               |  |
| <b>G8 - Other Incident Cause - only one sub-cause can be selected from the shaded left-hand column</b>           |  |
| <b>Other Incident Cause – Sub-Cause:</b>   |  |
| <b>- If Miscellaneous:</b>   |  |
| 1. Describe:   |  |
| <b>- If Unknown:</b>   |  |

|  |                               |
|--|-------------------------------|
| 2. Specify:  |                               |
| <b>PART - H NARRATIVE DESCRIPTION OF THE INCIDENT</b>  |                               |
| <p>On July 16, 2016 at 0659 hours, PG&amp;E was notified of a third party dig in at 5555 Robben Road in Dixon. A third party excavator, Atkinson Hay Company, struck a 10<math>\frac{1}{2}</math> steel transmission line (Line 220 Mile Point 5.15) with farming equipment. The equipment operator went to the hospital and was released with no injuries. There was a valid USA Ticket (#W616600507) and PG&amp;E facilities were properly located and marked. It was determined that the USA ticket belonged to the land owner, not for Atkinson Hay Company. In addition, the excavator failed to maintain the marks. PG&amp;E's Gas Service Representative (GSR) arrived on site at 0731 hours. PG&amp;E repair crews arrived on-site and stopped the flow of gas at 0822 hours by closing valves. The Sacramento OEC was activated. Repairs to the pipeline were completed and the line was restored on 7/18/16 at 2130 hours. Fire Department and Police Department were reported on site. There was no customer impact. There were no injuries, no fatalities, and no ignition associated with this incident. The volume of gas unintentionally release was estimated to be greater than 3 MMCF. Estimated damages to the pipeline were greater than \$50,000. This incident was reported to the DOT and CPUC due to the unintentional release of gas, volume of gas release estimated to be greater than 3 MMCF, and damages to the pipe greater than \$50,000.</p> |                               |
| <b>PART I - PREPARER AND AUTHORIZED SIGNATURE</b>  |                               |
| Preparer's Name  | Stephen Ramos                 |
| Preparer's Title   | Compliance Engineer           |
| Preparer's Telephone Number  | 9254137311                    |
| Preparer's E-mail Address  | s3rc@pge.com                  |
| Preparer's Facsimile Number  |                               |
| Authorized Signature Title   | Manager Regulatory Compliance |
| Authorized Signature Telephone Number  | 9253285776                    |
| Authorized Signature Email   | gsr8@pge.com                  |
| Date   | 08/16/2016                    |