





**PART C - ORIGIN OF THE INCIDENT**

- 1. Incident occurred on
  - Main  Meter Set
  - Service Line  Other: \_\_\_\_\_
  - Pressure Limiting and Regulating Facility
- 2. Failure occurred on
  - Body of pipe  Pipe Seam
  - Joint  Component
  - Other: \_\_\_\_\_
- 3. Material involved (*pipe, fitting, or other component*)
  - Steel
  - Cast/Wrought Iron
  - Polyethylene Plastic (complete all items that apply in a-c)
  - Other Plastic (complete all items that apply in a-c)  
Plastic failure was:  a. ductile  b. brittle  c. joint failure
  - Other material: \_\_\_\_\_
- 4. Year the pipe or component which failed was installed: / / / / /

**PART D - MATERIAL SPECIFICATION (if applicable)**

- 1. Nominal pipe size (NPS) / / / / / in.
- 2. Wall thickness / / / / / in.
- 3. Specification \_\_\_\_\_ SMYS / / / / /
- 4. Seam type \_\_\_\_\_
- 5. Valve type \_\_\_\_\_
- 6. Pipe or valve manufactured by \_\_\_\_\_ in year / / / / /

**PART E - ENVIRONMENT**

- 1. Area of incident
  - In open ditch
  - Under pavement  Above ground
  - Under ground  Under water
  - Inside/under building  Other: \_\_\_\_\_
- 2. Depth of cover: \_\_\_\_\_ inches

**PART F - APPARENT CAUSE**

**Important: There are 25 numbered causes in this section. Check the box to the left of the primary cause of the incident. Check one circle in each of the supplemental items to the right of or below the cause you indicate. See the instructions for this form for guidance.**

**F1 - CORROSION**

*If either F1 (1) External Corrosion, or F1 (2) Internal Corrosion is checked, complete all subparts a - e.*

- 1.  External Corrosion
  - a. Pipe Coating
    - Bare
    - Coated
    - Unknown
  - b. Visual Examination
    - Localized Pitting
    - General Corrosion
    - Other: \_\_\_\_\_
  - c. Cause of Corrosion
    - Galvanic  Stray Current
    - Improper Cathodic Protection
    - Microbiological
    - Other: \_\_\_\_\_
- 2.  Internal Corrosion
  - d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering incident?
    - No  Yes  Unknown
    - Year Protection Started: / / / / /
  - e. Was pipe previously damaged in the area of corrosion?
    - No  Yes  Unknown
    - How long prior to incident: / / / / / years / / / / / months

**F2 - NATURAL FORCES**

- 3.  Earth Movement ⇒  Earthquake  Subsidence  Landslide  Other: \_\_\_\_\_
- 4.  Lightning
- 5.  Heavy Rains/Floods ⇒  Washouts  Flotation  Mudslide  Scouring  Other: \_\_\_\_\_
- 6.  Temperature ⇒  Thermal stress  Frost heave  Frozen components  Other: \_\_\_\_\_
- 7.  High Winds

**F3 - EXCAVATION**

- 8.  Operator Excavation Damage (*including their contractors*) / Not Third Party
- 9.  Third Party Excavation Damage (*complete a-d*)
  - a. Excavator group
    - General Public  Government  Excavator other than Operator/subcontractor
  - b. Type:  Road Work  Pipeline  Water  Electric  Sewer  Phone/Cable/Fiber  Landowner  Railroad
    - Building Construction  Other: \_\_\_\_\_
  - c. Did operator get prior notification of excavation activity?
    - No  Yes: Date received: / / / / / mo. / / / / / day / / / / / yr.
    - Notification received from:  One Call System  Excavator  General Contractor  Landowner
  - d. Was pipeline marked?
    - No  Yes (*If Yes, check applicable items i - iv*)
    - i. Temporary markings:  Flags  Stakes  Paint
    - ii. Permanent markings:  Yes  No
    - iii. Marks were (*check one*)  Accurate  Not Accurate
    - iv. Were marks made within required time?  Yes  No

**F4 - OTHER OUTSIDE FORCE DAMAGE**

- 10.  Fire/Explosion as primary cause of failure ⇒ Fire/Explosion cause:  Man made  Natural *Describe in Part G*
- 11.  Car, truck or other vehicle not relating to excavation activity damaging pipe
- 12.  Rupture of Previously Damaged Pipe
- 13.  Vandalism

**F5 – MATERIAL OR WELDS**

**Material**

- 14.  Body of Pipe ⇒  Dent       Gouge       Wrinkle Bend       Arc Burn       Other: \_\_\_\_\_
- 15.  Component ⇒  Valve       Fitting       Vessel       Extruded Outlet       Other: \_\_\_\_\_
- 16.  Joint ⇒  Gasket       O-Ring       Threads       Fusion       Other: \_\_\_\_\_

**Weld**

- 17.  Butt ⇒  Pipe       Fabrication       Other: \_\_\_\_\_
- 18.  Fillet ⇒  Branch       Hot Tap       Fitting       Repair Sleeve       Other: \_\_\_\_\_
- 19.  Pipe Seam ⇒  LF ERW       DSAW       Seamless       Flash Weld       Other: \_\_\_\_\_
- HF ERW       SAW       Spiral

Complete a-f if you indicate **any** cause in part F5.

a. Type of failure:

- Construction Defect ⇒  Poor Workmanship       Procedure not followed       Poor Construction Procedures
- Material Defect



b. Was failure due to pipe damage sustained in transportation to the construction or fabrication site?       Yes       No

c. Was part which leaked pressure tested before incident occurred?       Yes, complete d-f, if known       No

d. Date of test:    /    /    mo.    /    /    day    /    /    yr.

e. Time held at test pressure:    /    /    hr.

f. Estimated test pressure at point of incident: \_\_\_\_\_ PSIG

**F6 – EQUIPMENT OR OPERATIONS**

- 20.  Malfunction of Control/Relief Equipment ⇒  Valve       Instrumentation       Pressure Regulator       Other: \_\_\_\_\_
- 21.  Threads Stripped, Broken Pipe Coupling ⇒  Nipples       Valve Threads       Mechanical Couplings       Other: \_\_\_\_\_
- 22.  Leaking Seals

23.  Incorrect Operation

a. Type:       Inadequate Procedures       Inadequate Safety Practices       Failure to Follow Procedures       Other: \_\_\_\_\_

b. Number of employees involved in incident who failed post-incident drug test:    /    /    /    Alcohol test:    /    /    /

c. Was person involved in incident qualified per OQ rule?       Yes       No      d. Hours on duty for person involved:    /    /    /

**F7 – OTHER**

- 24.  Miscellaneous, describe: \_\_\_\_\_
- 25.  Unknown
  - Investigation Complete       Still Under Investigation (submit a supplemental report when investigation is complete)

**PART G – NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT**

(Attach additional sheets as necessary)