



1. Incident occurred on	<b>TYSYS_TEXT</b>	3. Material involved ( <i>pipe, fitting, or other component</i> )
<input type="radio"/> Main	<input type="radio"/> Meter Set	<input type="radio"/> Steel
<input type="radio"/> Service Line	<input type="radio"/> Other: <u>TYSYO</u>	<input type="radio"/> Cast/Wrought Iron
<input type="radio"/> Pressure Limiting and Regulating Facility		<input type="radio"/> Polyethylene Plastic (complete all items that apply in a-c)
2. Failure occurred on	<b>PRTFL_TEXT</b>	<input type="radio"/> Other Plastic (complete all items that apply in a-c)
<input type="radio"/> Body of pipe	<input type="radio"/> Pipe Seam	Plastic failure was: <input type="checkbox"/> a.ductile <input type="checkbox"/> b.brittle <input type="checkbox"/> c.joint failure
<input type="radio"/> Joint	<input type="radio"/> Component	<input type="radio"/> Other material: <u>MLKDO</u> <u>PLAS_DUCT</u> , <u>PLAS_BRIT</u> , <u>PLAST_JNT</u>
<input type="radio"/> Other: <u>PRTFLO</u>		4. Year the pipe or component which failed was installed: / / / / / <b>PRTYR</b>

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

1. Nominal pipe size (NPS) **NPS** / / / / in.  
 2. Wall thickness **WALLTHK** / / / / in.  
 3. Specification **SPEC** **SMYS** / / / / / /  
 4. Seam type **SEAM**  
 5. Valve type **VALVE**  
 6. Pipe or valve manufactured by **MANU**

**PART E – ENVIRONMENT**

1. Area of incident  
 In open ditch **LOCLK\_TEXT**  
 Under pavement  
 Under ground  
 Under water  
 Inside/under building **LOCLKO**
2. Depth of cover: **DEPTH\_COV** inches

**MANYR**

in year / / / / /

**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. **CAUSE** **CAUSE\_DETAILS**

**F1 – CORROSION**

- If either F1 (1) External Corrosion, or F1 (2) Internal Corrosion is checked, complete all subparts a – e.
- |  |  |   |  |  |
|--|--|---|--|--|
| 1. <input type="checkbox"/> External Corrosion | <b>PIPE_COAT_TEXT</b>  | <b>VIS_EXAM_TEXT</b>                          | <b>COR_CAUSE_TEXT</b>                              |  |
|  | a. Pipe Coating  | b. Visual Examination                         | c. Cause of Corrosion                              |  |
|  | <input type="radio"/> Bare   | <input type="radio"/> Localized Pitting       | <input type="radio"/> Galvanic                     | <input type="radio"/> Stray Current                  |
|  | <input type="radio"/> Coated   | <input type="radio"/> General Corrosion       | <input type="radio"/> Improper Cathodic Protection |  |
|  | <input type="radio"/> Unknown  | <input type="radio"/> Other: <b>VIS_EXAMO</b> | <input type="radio"/> Microbiological              |  |
|  |  |   | <input type="radio"/> Other: <b>COR_CAUSEO</b>     |  |
| 2. <input type="checkbox"/> Internal Corrosion | d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering incident? | Year Protection Started: / / / /              |  |  |
|  | <input type="radio"/> No   | <input type="radio"/> Yes                     | <input type="radio"/> Unknown                      | <b>PROT_TEXT</b> <b>CPYR</b>                         |
|  | e. Was pipe previously damaged in the area of corrosion?   | <b>PREV DAM TEXT</b>                          | <b>PREV DAM YR</b>                                 | <b>PREV DAM MO</b>                                   |
|  | <input type="radio"/> No   | <input type="radio"/> Yes                     | <input type="radio"/> Unknown                      | How long prior to incident: / / / years / / / months |

**F2 – NATURAL FORCES** **EARTH\_MOVE\_TEXT**

3.  Earth Movement  $\Rightarrow$   Earthquake  Subsidence  Landslide  Other: **EARTH\_MOVEO**
4.  Lightning **FLOODS\_TEXT**
5.  Heavy Rains/Floods  $\Rightarrow$   Washouts  Flotation  Mudslide  Scouring  Other: **FLOODSO**
6.  Temperature **TEMPER\_TEXT**  $\Rightarrow$   Thermal stress  Frost heave  Frozen components  Other: **TEMPO**
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 **THIRD PARTY\_GRP\_TEXT**  
 General Public  Government  Excavator other than Operator/subcontractor **THIRD PARTY\_TYPE\_TEXT**
- b. Type:  Road Work  Pipeline  Water  Electric  Sewer  Phone/Cable/Fiber  Landowner  Railroad  
 Building Construction  Other: **THIRD PARTY\_TYPEO**
- NOTIF** c. Did operator get prior notification of excavation activity? **NOTIF\_DATE**  
 No  Yes: Date received: / / / mo. / / / day / / / yr. **NOTIF\_RCVD\_TEXT**
- NOTIF\_RCVD** Notification received from:  One Call System  Excavator  General Contractor  Landowner
- MARKED** d. Was pipeline marked?  
 No  Yes (*If Yes, check applicable items i – iv*)
- TEMP\_MARK\_TEXT** i. Temporary markings:  Flags  Stakes  Paint
- PERM\_MARK** ii. Permanent markings:  Yes  No
- ACC\_MARK\_TEXT** iii. Marks were (*check one*):  Accurate  Not Accurate
- MKD\_IN\_TIME** iv. Were marks made within required time?  Yes  No

**F4 – OTHER OUTSIDE FORCE DAMAGE** **FIRE\_EXPLO\_TEXT**

10.  Fire/Explosion as primary cause of failure  $\Rightarrow$  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  $\Rightarrow$   Dent  Gouge  Wrinkle Bend  Arc Burn  Other: PIPE\_BODYO  
 15.  Component  $\Rightarrow$   Valve  Fitting  Vessel  Extruded Outlet  Other: COMPONENTO  
 16.  Joint  $\Rightarrow$   Gasket  O-Ring  Threads  Fusion  Other: JOINTO

**Weld**

17.  Butt  $\Rightarrow$   Pipe  Fabrication  Other: BUTTO  
 18.  Fillet  $\Rightarrow$   Branch  Hot Tap  Fitting  Repair Sleeve  Other: FILLETO  
 19.  Pipe Seam  $\Rightarrow$   LF ERW  DSAW  Seamless  Flash Weld  Other: PIPE\_SEAMO  
                           HF ERW  SAW  Spiral



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

FAIL\_TYPEMAT   FAIL\_TYPECONS

- a. Type of failure: CONS\_DEF\_TEXT  
 Construction Defect  $\Rightarrow$   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 PRS\_TEST
- d. Date of test: TEST\_MO / TEST\_DAY / TEST\_YR
- e. Time held at test pressure: TEST\_TP
- f. Estimated test pressure at point of incident: TEST\_PRS PSIG

**F6 – EQUIPMENT OR OPERATIONS**

20.  Malfunction of Control/Relief Equipment  $\Rightarrow$   Valve  Instrumentation  Pressure Regulator  Other: MALFUNCO  
 21.  Threads Stripped, Broken Pipe Coupling  $\Rightarrow$   Nipples  Valve Threads  Mechanical Couplings  Other: THREADSO  
 22.  Leaking Seals
23.  Incorrect Operation IO\_TYPE\_TEXT  
 a. Type:  Inadequate Procedures  Inadequate Safety Practices  Failure to Follow Procedures  Other: IO\_TYPEO  
 b. Number of employees involved in incident who failed post-incident drug test: IO\_DRUG / Alcohol test: IO\_ALCO  
 c. Was person involved in incident qualified per OQ rule?  Yes  No d. Hours on duty for person involved: IO\_QUAL IO\_QUAL\_HRS

**F7 – OTHER**

24.  Miscellaneous, describe: MISC
25.  Unknown UNKNOWN\_TEXT  
 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)**NARRATIVE**

Field Name	Field Name Description
<b>DATAFILE_AS_OF</b>	<i>Data as of date</i>
<b>FF</b>	<i>Identify if incident was cause by fire first or not</i>
<b>SIGNIFICANT</b>	<i>Identify if record meets the significant criteria or not: If there was fatality, injury, or total property damage is \$50K or more in 1984 dollars, then SIGNIFICANT='YES', else SIGNIFICANT='NO'. If FF criteria is true then SIGNIFICANT = 'NO'.</i>
<b>IYEAR</b>	<i>Year incident occurred, derived from incident date</i>
<b>TOTAL_COST_IN84</b>	<i>Converted Property Damage to 1984 dollars</i>
<b>TOTAL_COST_CURRENT</b>	<i>Converted Property Damage to Current Year dollars</i>
<b>PRPTYCURRENT</b>	<i>Converted Property Damage to Current Year dollars</i>
<b>GASPRPCURRENT</b>	<i>Converted Property Damage to Current Year dollars</i>
<b>OPPRPCURRENT</b>	<i>Converted Property Damage to Current Year dollars</i>
<b>PPRPCURRENT</b>	<i>Converted Property Damage to Current Year dollars</i>
<b>MAP_SEVEN_CAUSE</b>	<i>Cause by PHMSA for 20 year incident trending</i>
<b>MAP_SEVEN_SUBCAUSE</b>	<i>SubCause by PHMSA for 20 year incident trending</i>
<b>MAP_EIGHT_CAUSE</b>	<i>Cause by PHMSA for 20 year incident trending</i>
<b>MAP_EIGHT_SUBCAUSE</b>	<i>SubCause by PHMSA for 20 year incident trending</i>
<b>SERIOUS</b>	<i>Identify if record meets the SERIOUS criteria or not: If there was fatality or injury and if FF criteria is false then SERIOUS = 'YES' else SERIOUS = 'NO'.</i>