

PART C – ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility: **PIPE_FACILITY_TYPE**

- Interstate
- Intrastate

2. Part of system involved in Accident: (select only one) **SYSTEM_PART_INVOLVED**

SYSTEM_SUBPART_INVOLVED

- Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances ⇨ Atmospheric or Low Pressure
 Pressurized
- Onshore Terminal/Tank Farm Equipment and Piping
- Onshore Equipment and Piping Associated with Belowground Storage
- Onshore Pump/Meter Station Equipment and Piping
- Onshore Pipeline, Including Valve Sites
- Offshore Platform/Deepwater Port, Including Platform-mounted Equipment and Piping
- Offshore Pipeline, Including Riser and Riser Bend

3. Item involved in Accident: (select only one) **ITEM_INVOLVED**

PIPE_TYPE

- Pipe ⇨ Specify: Pipe Body Pipe Seam

3.a Nominal diameter of pipe (in): / / / / / / **PIPE_DIAMETER**

3.b Wall thickness (in): / / / / / / **PIPE_WALL_THICKNESS**

3.c SMYS (Specified Minimum Yield Strength) of pipe (psi): / / / / / / / **PIPE_SMYS**

3.d Pipe specification: PIPE_SPECIFICATION

3.e Pipe Seam ⇨ Specify: Longitudinal ERW - High Frequency

PIPE_SEAM_TYPE

Longitudinal ERW - Low Frequency

Longitudinal ERW – Unknown Frequency

Spiral Welded ERW

Lap Welded

Single SAW

DSAW

Spiral Welded DSAW

Other PIPE_SEAM_DETAILS

Flash Welded

Continuous Welded

Furnace Butt Welded

3.f Pipe manufacturer: PIPE_MANUFACTURER

3.g Year of manufacture: / / / / / / **PIPE_MANUFACTURE_YEAR**

3.h Pipeline coating type at point of Accident **PIPE_COATING_TYPE**

⇨ Specify:

Fusion Bonded Epoxy

Coal Tar

Asphalt

Polyolefin

Extruded Polyethylene

Field Applied Epoxy

Cold Applied Tape

Paint

Composite

None

Other PIPE_COATING_DETAILS

WELD_SUBTYPE

- Weld, including heat-affected zone ⇨ Specify: Pipe Girth Weld Other Butt Weld Fillet Weld Other WELD_DETAILS

If Pipe Girth Weld is selected, complete items 3.a. through h. above. If the values differ on either side of the girth weld, enter one value in 3.a. through h. and list the different value(s) in Part H - Narrative Description of the Accident.

VALVE_TYPE VALVE_MAINLINE_TYPE

- Valve Mainline ⇨ Specify: Butterfly Check Gate Plug Ball Globe

Other VALVE_MAINLINE_DETAILS

3.i Mainline valve manufacturer: VALVE_MANUFACTURER

3.j Year of manufacture: / / / / / / **VALVE_MANUFACTURE_YEAR**

Relief Valve

Auxiliary or Other Valve

Pump

Meter/Prover

Scraper/Pig Trap

Sump/Separator

Repair Sleeve or Clamp

Hot Tap Equipment

Stopple Fitting

Flange

Relief Line

Auxiliary Piping (e.g. drain lines)

Tubing

Instrumentation

Tank/Vessel ⇨ Specify: Single Bottom System

Double Bottom System

Tank Shell

Chime

TANK_VESSEL_SUBTYPE

Roof/Roof Seal

Roof Drain System

Mixer

Pressure Vessel Head or Wall

Appurtenance

Other

TANK_VESSEL_DETAILS

Other ITEM_INVOLVED_DETAILS

4. Year item involved in Accident was installed: / / / / / / **INSTALLATION_YEAR**

5. Material involved in Accident: (select only one) **MATERIAL_INVOLVED**

Carbon Steel

Material other than Carbon Steel ⇨ Specify: _____ **MATERIAL_DETAILS**

RELEASE_TYPE

6. Type of Accident involved: (select only one) **PUNCTURE_AXIAL** **PUNCTURE_CIRCUM**

Mechanical Puncture ⇨ Approx. size: / / / / / / / / in. (axial) by / / / / / / / / in. (circumferential)

Leak ⇨ **LEAK_TYPE** Select Type: Pinhole Crack Connection Failure Seal or Packing Other **LEAK_TYPE_OTHER**

Rupture ⇨ **RUPTURE_ORIENT** Select Orientation: Circumferential Longitudinal Other **RUPTURE_DETAILS**

Approx. size: / / / / / / / / in. (widest opening) by / / / / / / / / in. (length circumferentially or axially)

Overfill or Overflow

Other ⇨ Describe: _____ **RELEASE_TYPE_DETAILS**

PART D – ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact: Yes No **WILDLIFE_IMPACT_IND**

1.a If Yes, specify all that apply:

Fish/aquatic **FISH_AQUATIC_IMPACT_IND**

Birds **BIRDS_IMPACT_IND**

Terrestrial **TERRESTRIAL_IMPACT_IND**

2. Soil contamination: Yes No **SOIL_CONTAMINATION**

3. Long term impact assessment performed or planned: Yes No **LONG_TERM_ASSESSMENT**

4. Anticipated remediation: Yes No (not needed) **REMEDATION_IND**

4.a If Yes, specify all that apply:

SURFACE_WATER_REMED_IND, Surface water **GROUNDWATER_REMED_IND**, Groundwater Soil Vegetation Wildlife **VEGETATION_REMED_IND**, **WILDLIFE_REMED_IND**

WATER_CONTAM_IND

5. Water contamination: Yes ⇨ (Complete 5.a – 5.c below) No

5.a Specify all that apply:

Ocean/Seawater **OCEAN_SEAWATER_IND**

Surface **SURFACE_CONTAM_IND**

Groundwater **GROUNDWATER_CONTAM_IND**

Drinking water ⇨ (Select one or both) Private Well Public Water Intake **DRINKING_WATER_CONTAM_IND** **PRIVATE_WELL_CONTAM_IND** **PUBLIC_WATER_CONTAM_IND**

5.b Estimated amount released in or reaching water: / / / / / / / / / / Barrels **AMOUNT_RELEASED**

5.c Name of body of water, if commonly known: _____ **REL_WATER_NAME**

COULD_BE_HCA

6. At the location of this Accident, had the pipeline segment or facility been identified as one that “could affect” a High Consequence Area (HCA) as determined in the Operator’s Integrity Management Program? Yes No

COMMODITY_REACHED_HCA

7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)? Yes No

7.a If Yes, specify HCA type(s): (select all that apply)

Commercially Navigable Waterway **COMMERCIALLY_NAV_IND**

Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?

Yes No **COMMERCIALLY_NAV_YES_NO**

High Population Area **HIGH_POP_IND**

Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?

Yes No **HIGH_POP_YES_NO**

Other Populated Area **OTHER_POP_IND**

Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?

Yes No **OTHER_POP_YES_NO**

Unusually Sensitive Area (USA) – Drinking Water **USA_DRINKING_IND**

Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?

Yes No **USA_DRINKING_YES_NO**

Unusually Sensitive Area (USA) – Ecological **USA_ECOLOGICAL_IND**

Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?

Yes No **USA_ECOLOGICAL_YES_NO**

8. Estimated Property Damage:

- 8.a Estimated cost of public and non-Operator private property damage
EST_COST_OPER_PAID \$ / / / / / / / / / / / / / / / /
- 8.b Estimated cost of commodity lost **EST_COST_GAS_RELEASED** \$ / / / / / / / / / / / / / / / /
- 8.c Estimated cost of Operator's property damage & repairs **EST_COST_PROP_DAMAGE** \$ / / / / / / / / / / / / / / / /
- 8.d Estimated cost of Operator's emergency response **EST_COST_EMERGENCY** \$ / / / / / / / / / / / / / / / /
- 8.e Estimated cost of Operator's environmental remediation **EST_COST_ENVIRONMENTAL** \$ / / / / / / / / / / / / / / / /
- 8.f Estimated other costs **EST_COST_OTHER** \$ / / / / / / / / / / / / / / / /
- Describe **EST_COST_OTHER_DETAILS** _____
- 8.g Total estimated property damage (sum of above) **TOTAL_COST** \$ / / / / / / / / / / / / / / / /

PART E – ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig): / / / / / / / / **ACCIDENT_PSIG**
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig) : / / / / / / / / **MOP_PSIG**
3. Describe the pressure on the system or facility relating to the Accident: (select only one) **ACCIDENT_PRESSURE**
- Pressure did not exceed MOP
- Pressure exceeded MOP, but did not exceed 110% of MOP
- Pressure exceeded 110% of MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?
- No **PRESSURE_RESTRICTION_IND**
- Yes ⇒ (Complete 4.a and 4.b below) **EXCEED_RESTRICTION_IND**
- 4.a Did the pressure exceed this established pressure restriction? Yes No
- 4.b Was this pressure restriction mandated by PHMSA or the State? PHMSA State Not mandated

5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?
- No **PART_C_QUESTION_2_IND**
- Yes ⇒ (Complete 5.a – 5.e below)
- 5.a Type of upstream valve used to initially isolate release source: Manual Automatic Remotely Controlled
- UPSTREAM_VALVE_TYPE_IND**
- 5.b Type of downstream valve used to initially isolate release source: Manual Automatic Remotely Controlled
- Check Valve
- DOWNSTREAM_VALVE_TYPE_IND**
- 5.c Length of segment initially isolated between valves (ft): / / / / / / / / **LENGTH_SEGMENT_ISOLATED**
- 5.d Is the pipeline configured to accommodate internal inspection tools? **INTERNAL_INSPECTION_IND**
- Yes
- No ⇒ Which physical features limit tool accommodation? (select all that apply)
- Changes in line pipe diameter **DIAMETER_CHANGE_IND**
- Presence of unsuitable mainline valves **UNSUITABLE_MAINLINE_IND**
- Tight or mitered pipe bends **TIGHT_MITERED_IND**
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.) **OTHER_RESTRICTIONS_IND**
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools) **EXTRA_THICK_WALL_IND**
- Other ⇒ Describe: **OTHER_INSPECTION_IND** **INTERNAL_INSPECTION_DETAILS**
- 5.e For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?
- No **OPERATION_COMPLICATIONS_IND**
- Yes ⇒ Which operational factors complicate execution? (select all that apply)
- Excessive debris or scale, wax, or other wall build-up **EXCESSIVE_DEBRIS_IND**
- Low operating pressure(s) **LOW_OP_PRESSURE_IND**
- Low flow or absence of flow **LOW_FLOW_IND**
- Incompatible commodity **INCOMPAT_COMMOD_IND**
- Other ⇒ Describe: **OTHER_COMPLICATIONS_IND** **INSPECT_COMP_DETAILS**
- 5.f Function of pipeline system: (select only one) **PIPELINE_FUNCTION**
- > 20% SMYS Regulated Trunkline/Transmission > 20% SMYS Regulated Gathering
- ≤ 20% SMYS Regulated Trunkline/Transmission ≤ 20% SMYS Regulated Gathering

6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?

- No **SCADA_IN_PLACE_IND**
- Yes ⇨
 - 6.a Was it operating at the time of the Accident? Yes No **SCADA_OPERATING_IND**
 - 6.b Was it fully functional at the time of the Accident? Yes No **SCADA_FUNCTIONAL_IND**
 - 6.c Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident? Yes No **SCADA_DETECTION_IND**
 - 6.d Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident? Yes No **SCADA_CONF_IND**

7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?

- No **CPM_IN_PLACE_IND**
- Yes ⇨
 - 7.a Was it operating at the time of the Accident? Yes No **CPM_OPERATING_IND**
 - 7.b Was it fully functional at the time of the Accident? Yes No **CPM_FUNCTIONAL_IND**
 - 7.c Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident? Yes No **CPM_DETECTION_IND**
 - 7.d Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident? Yes No **CPM_CONF_IND**

8. How was the Accident initially identified for the Operator? (select only one) **ACCIDENT_IDENTIFIER**

- CPM leak detection system or SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations)
- Static Shut-in Test or Other Pressure or Leak Test
- Controller Local Operating Personnel, including contractors
- Air Patrol Ground Patrol by Operator or its contractor
- Notification from Public Notification from Emergency Responder
- Notification from Third Party that caused the Accident Other **ACCIDENT_DETAILS**

8.a If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify the following: (select only one) **OPERATOR_TYPE**

- Operator employee
- Contractor working for the Operator

9. 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 Accident? (select only one) **INVESTIGATION_STATUS**

- Yes, but the investigation of the control room and/or controller actions has not yet been completed by the Operator (Supplemental Report required)
- No, the facility was not monitored by a controller(s) at the time of the Accident
- 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) **INVESTIGATION_STATUS_DETAILS**

Yes, specify 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 **INVEST_SCHEDULE_IND**
- 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) **INVEST_NO_SCHEDULE_IND**

- Investigation identified no control room issues **INVEST_NO_CONTROL_ROOM_IND**
- Investigation identified no controller issues **INVEST_NO_CONTROLLER_IND**
- Investigation identified incorrect controller action or controller error **INVEST_INCORRECT_ACTION_IND**
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response **INVEST_FATIGUE_IND**
- Investigation identified incorrect procedures **INVEST_INCORRECT_PROCEDURE_IND**
- Investigation identified incorrect control room equipment operation **INVEST_INCORRECT_CONTROL_IND**
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response **INVEST_MAINT_IND**
- Investigation identified areas other than those above ⇨ Describe: **INVEST_OTHER_IND, INVEST_OTHER_IND_DETAILS**

G2 - Natural Force Damage - *only one sub-cause can be picked from shaded left-hand column	
<input type="checkbox"/> NATURAL_FORCE_TYPE Earth Movement, NOT due to Heavy Rains/Floods	EARTH_SUBTYPE 1. Specify: <input type="radio"/> Earthquake <input type="radio"/> Subsidence <input type="radio"/> Landslide <input type="radio"/> Other NF_OTHER_DETAILS
<input type="checkbox"/> Heavy Rains/Floods	HEAVY_RAINS_SUBTYPE 2. Specify: <input type="radio"/> Washout/Scouring <input type="radio"/> Flotation <input type="radio"/> Mudslide <input type="radio"/> Other NF_OTHER_DETAILS
<input type="checkbox"/> Lightning	LIGHTNING_SUBTYPE 3. Specify: <input type="radio"/> Direct hit <input type="radio"/> Secondary impact such as resulting nearby fires
<input type="checkbox"/> Temperature	TEMPERATURE_SUBTYPE 4. Specify: <input type="radio"/> Thermal Stress <input type="radio"/> Frost Heave <input type="radio"/> Frozen Components <input type="radio"/> Other NF_OTHER_DETAILS
<input type="checkbox"/> High Winds	
<input type="checkbox"/> Other Natural Force Damage	5. Describe: NF_OTHER_DETAILS
Complete the following if any Natural Force Damage sub-cause is selected. NF_EXTREME_WEATHER_IND 6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event? <input type="radio"/> Yes <input type="radio"/> No 6.a If Yes, specify: (select all that apply) NF_HURRICANE_IND <input type="radio"/> Hurricane NF_TROPICAL_STORM_IND <input type="radio"/> Tropical Storm NF_TORNADO_IND <input type="radio"/> Tornado <input type="radio"/> Other NF_OTHER_IND NF_EXTREME_WEATHER_DETAILS	

G3 – Excavation Damage - *only one sub-cause can be picked from shaded left-hand column	
<input type="checkbox"/> PARTY_TYPE Excavation Damage by Operator (First Party)	
<input type="checkbox"/> Excavation Damage by Operator's Contractor (Second Party)	
<input type="checkbox"/> Excavation Damage by Third Party	
<input type="checkbox"/> Previous Damage due to Excavation Activity EX_MAGNETIC_FLUX_LEAKAGE_IND, _YEAR ⇨ EX_ULTRASONIC_IND, _YEAR ⇨ EX_GEOMETRY_IND, _YEAR ⇨ EX_CALIPER_IND, _YEAR ⇨ EX_CRACK_IND, _YEAR ⇨ EX_HARDSPOT_IND, _YEAR ⇨ EX_COMBINATION_TOOL_IND, _YEAR ⇨ EX_TRANSVERSE_FIELD_IND, _YEAR ⇨ EX_INSPECTION_OTHER_IND, _YEAR, _DETAILS ⇨	Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld. 1. Has one or more internal inspection tool collected data at the point of the Accident? <input type="radio"/> Yes <input type="radio"/> No EX_INSPECT_TOOL_COLLECTED_IND 1.a If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: <input type="radio"/> Magnetic Flux Leakage / / / / / <input type="radio"/> Ultrasonic / / / / / <input type="radio"/> Geometry / / / / / <input type="radio"/> Caliper / / / / / <input type="radio"/> Crack / / / / / <input type="radio"/> Hard Spot / / / / / <input type="radio"/> Combination Tool / / / / / <input type="radio"/> Transverse Field/Triaxial / / / / / <input type="radio"/> Other _____ / / / / / 2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained? <input type="radio"/> Yes <input type="radio"/> No EX_BEFORE_DAMAGE 3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident? EX_HYDROTEST_CONDUCTED_IND <input type="radio"/> Yes ⇨ Most recent year tested: / / / / / EX_HYDROTEST_CONDUCTED_YEAR Test pressure (psig): / / / / / EX_HYDROTEST_PRESSURE <input type="radio"/> No EX_DIRECT_INSPECTION_TYPE 4. Has one or more Direct Assessment been conducted on the pipeline segment? <input type="radio"/> Yes, and an investigative dig was conducted at the point of the Accident ⇨ Most recent year conducted: / / / / / EX_DIRECT_YES_DIG_YEAR <input type="radio"/> Yes, but the point of the Accident was not identified as a dig site ⇨ Most recent year conducted: / / / / / <input type="radio"/> No EX_DIRECT_YES_NO_DIG_YEAR

5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002? **EX_NON_DESTRUCTIVE_IND**
 Yes No

5.a 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:

EX_RADIOGRAPHY_IND, _YEAR ⇨	<input type="radio"/> Radiography	____/____/____/____/____
EX_GUIDED_WAVE_IND, _YEAR ⇨	<input type="radio"/> Guided Wave Ultrasonic	____/____/____/____/____
EX_HANDHELD_ULTRA_IND, _YEAR ⇨	<input type="radio"/> Handheld Ultrasonic Tool	____/____/____/____/____
EX_WET_MAGNETIC_IND, _YEAR ⇨	<input type="radio"/> Wet Magnetic Particle Test	____/____/____/____/____
EX_DRY_MAGNETIC_IND, _YEAR ⇨	<input type="radio"/> Dry Magnetic Particle Test	____/____/____/____/____
EX_NON_DEST_OTHER_IND, _YEAR ⇨	<input type="radio"/> Other EX_NON_DEST_OTHER_DETAILS	____/____/____/____/____

Complete the following if Excavation Damage by Third Party is selected as the sub-cause.

6. Did the Operator get prior notification of the excavation activity? Yes No **PRIOR_NOTIFICATION_IND**

6.a If Yes, Notification received from: (select all that apply) One-Call System Excavator Contractor Landowner
ONE_CALL_SYSTEM_IND, EXCAVATOR_IND, CONTRACTOR_IND, LANDOWNER_IND

Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.

7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)? Yes No **NOTIFY_CGA_DIRT**

8. Right-of-Way where event occurred: (select all that apply)

<input type="checkbox"/> Public ⇨ Specify:	<input type="radio"/> City Street	<input type="radio"/> State Highway	<input type="radio"/> County Road	<input type="radio"/> Interstate Highway	<input type="radio"/> Other
<input type="checkbox"/> Private ⇨ Specify:	<input type="radio"/> Private Landowner	<input type="radio"/> Private Business	<input type="radio"/> Private Easement		
<input type="checkbox"/> Pipeline Property/Easement	PIPELINE_EASEMENT_ROW_IND				
<input type="checkbox"/> Power/Transmission Line	POWER_TRANSMISSION_ROW_IND				
<input type="checkbox"/> Railroad	RAILROAD_ROW_IND				
<input type="checkbox"/> Dedicated Public Utility Easement	PUBLIC_UTIL_EASEMENT_ROW_IND				
<input type="checkbox"/> Federal Land	FEDERAL_LAND_ROW_IND				
<input type="checkbox"/> Data not collected	DATA_NOT_COLLECTED_ROW_IND				
<input type="checkbox"/> Unknown/Other	UNKNOWN_ROW_IND				

9. Type of excavator: (select only one) **EXCAVATOR_TYPE**

<input type="radio"/> Contractor	<input type="radio"/> County	<input type="radio"/> Developer	<input type="radio"/> Farmer	<input type="radio"/> Municipality	<input type="radio"/> Occupant
<input type="radio"/> Railroad	<input type="radio"/> State	<input type="radio"/> Utility	<input type="radio"/> Data not collected	<input type="radio"/> Unknown/Other	

10. Type of excavation equipment: (select only one) **EXCAVATOR_EQUIPMENT**

<input type="radio"/> Auger	<input type="radio"/> Backhoe/Trackhoe	<input type="radio"/> Boring	<input type="radio"/> Drilling	<input type="radio"/> Directional Drilling
<input type="radio"/> Explosives	<input type="radio"/> Farm Equipment	<input type="radio"/> Grader/Scraper	<input type="radio"/> Hand Tools	<input type="radio"/> Milling Equipment
<input type="radio"/> Probing Device	<input type="radio"/> Trencher	<input type="radio"/> Vacuum Equipment	<input type="radio"/> Data not collected	<input type="radio"/> Unknown/Other

11. Type of work performed: (select only one) **WORK_PERFORMED**

<input type="radio"/> Agriculture	<input type="radio"/> Cable TV	<input type="radio"/> Curb/Sidewalk	<input type="radio"/> Building Construction	<input type="radio"/> Building Demolition
<input type="radio"/> Drainage	<input type="radio"/> Driveway	<input type="radio"/> Electric	<input type="radio"/> Engineering/Surveying	<input type="radio"/> Fencing
<input type="radio"/> Grading	<input type="radio"/> Irrigation	<input type="radio"/> Landscaping	<input type="radio"/> Liquid Pipeline	<input type="radio"/> Milling
<input type="radio"/> Natural Gas	<input type="radio"/> Pole	<input type="radio"/> Public Transit Authority	<input type="radio"/> Railroad Maintenance	<input type="radio"/> Road Work
<input type="radio"/> Sewer (Sanitary/Storm)	<input type="radio"/> Site Development	<input type="radio"/> Steam	<input type="radio"/> Storm Drain/Culvert	<input type="radio"/> Street Light
<input type="radio"/> Telecommunications	<input type="radio"/> Traffic Signal	<input type="radio"/> Traffic Sign	<input type="radio"/> Water	<input type="radio"/> Waterway Improvement
<input type="radio"/> Data not collected	<input type="radio"/> Unknown/Other			

ONE_CALL_NOTIFIED_IND

12. Was the One-Call Center notified? Yes No **ONE_CALL_TICKET_NUM**

*12.a If Yes, specify ticket number: _____

*12.b If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:
ONE_CALL_CENTER_NAME _____

13. Type of Locator: **LOCATOR_TYPE** Utility Owner Contract Locator Data not collected Unknown/Other
VISIBLE_MARKS

14. Were facility locate marks visible in the area of excavation? No Yes Data not collected Unknown/Other

15. Were facilities marked correctly? **FACILITIES_MARKED** No Yes Data not collected Unknown/Other
SERVICE_INTERRUPTION

16. Did the damage cause an interruption in service? No Yes Data not collected Unknown/Other

16.a If Yes, specify duration of the interruption: _____ hours **SERVICE_INTERRUPTION_HOURS**

17. Description of the CGA-DIRT Root Cause (select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well): **ROOT_CAUSE**

One-Call Notification Practices Not Sufficient: (select only one) **ONE_CALL_SUBTYPE**

- No notification made to the One-Call Center
- Notification to One-Call Center made, but not sufficient
- Wrong information provided

Locating Practices Not Sufficient: (select only one) **LOCATING_SUBTYPE**

- Facility could not be found/located
- Facility marking or location not sufficient
- Facility was not located or marked
- Incorrect facility records/maps

Excavation Practices Not Sufficient: (select only one) **EXCAVATION_SUBTYPE**

- Excavation practices not sufficient (other)
- Failure to maintain clearance
- Failure to maintain the marks
- Failure to support exposed facilities
- Failure to use hand tools where required
- Failure to verify location by test-hole (pot-holing)
- Improper backfilling

One-Call Notification Center Error

Abandoned Facility

Deteriorated Facility

Previous Damage

Data Not Collected

Other / None of the Above (explain) **ROOT_CAUSE_OTHER**

<input type="checkbox"/> OSF_RADIOGRAPHY_IND , _YEAR <input type="checkbox"/> OSF_GUIDED_WAVE_IND , _YEAR <input type="checkbox"/> OSF_HANDHELD_ULTRA_IND , _YEAR <input type="checkbox"/> OSF_WET_MAGNETIC_IND , _YEAR <input type="checkbox"/> OSF_DRY_MAGNETIC_IND , _YEAR <input type="checkbox"/> OSF_NON_DEST_OTHER_IND , _YEAR	7.a 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: <input type="checkbox"/> Radiography _____ <input type="checkbox"/> Guided Wave Ultrasonic _____ <input type="checkbox"/> Handheld Ultrasonic Tool _____ <input type="checkbox"/> Wet Magnetic Particle Test _____ <input type="checkbox"/> Dry Magnetic Particle Test _____ <input type="checkbox"/> Other OSF_NON_DEST_DETAILS _____
<input type="checkbox"/> Intentional Damage	8. Specify: INTENTIONAL_SUBTYPE <input type="checkbox"/> Vandalism <input type="checkbox"/> Terrorism <input type="checkbox"/> Theft of transported commodity <input type="checkbox"/> Theft of equipment <input type="checkbox"/> Other INTENTIONAL_DETAILS _____
<input type="checkbox"/> Other Outside Force Damage	9. Describe: OSF_OTHER_DETAILS _____

G5 - Material Failure of Pipe or Weld	Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."
*Only one sub-cause can be picked from shaded left-hand column	

1. The sub-cause selected below is based on the following: <i>(select all that apply)</i> <input type="checkbox"/> Field Examination <input type="checkbox"/> Determined by Metallurgical Analysis <input type="checkbox"/> Other Analysis OTHER_ANALYSIS_IND, OTHER_ANALYSIS_DETAILS <input type="checkbox"/> Sub-cause is Tentative or Suspected; Still Under Investigation <i>(Supplemental Report required)</i>	
<input type="checkbox"/> FAILURE_TYPE Construction-, Installation-, or Fabrication-related	2. List contributing factors: <i>(select all that apply)</i> <input type="checkbox"/> Fatigue- or Vibration-related: FATIGUE_VIBR_RELATED_1, _2 FAILURE_SUBTYPE_1, _2 <input type="checkbox"/> Mechanically-induced prior to installation (such as during transport of pipe) <input type="checkbox"/> Mechanical Vibration <input type="checkbox"/> Pressure-related <input type="checkbox"/> Thermal <input type="checkbox"/> Other FATIGUE_VIBR_RELATED_OTHER_1, _2 <input type="checkbox"/> Mechanical Stress MECHANICAL_STRESS_1, _2 <input type="checkbox"/> Other OTHER_FACTOR_1, _2 OTHER_FACTOR_DETAILS_1, _2
<input type="checkbox"/> Original Manufacturing-related (NOT girth weld or other welds formed in the field)	
<input type="checkbox"/> Environmental Cracking-related	3. Specify: <input type="checkbox"/> Stress Corrosion Cracking <input type="checkbox"/> Sulfide Stress Cracking STRESS_SUBTYPE <input type="checkbox"/> Hydrogen Stress Cracking <input type="checkbox"/> Other STRESS_DETAILS _____

Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.

ADDITIONAL_DENT_IND, ADDITIONAL_GOUGE_IND, ADDITIONAL_PIPE_BEND_IND, ADDITIONAL_ARC_BURN_IND, ADDITIONAL_CRACK_IND,

4. Additional factors: *(select all that apply)* Dent Gouge Pipe Bend Arc Burn Crack Lack of Fusion
 Lamination Buckle Wrinkle Misalignment Burnt Steel **ADDITIONAL_LACK_FUSION_IND**
 Other **ADDITIONAL_LAMINATION_IND, ADDITIONAL_BUCKLE_IND, ADDITIONAL_WRINKLE_IND, PWF_ADDITIONAL_MISALIGNMENT_IND**
ADDITIONAL_BURNT_STEEL_IND, PWF_ADDITIONAL_OTHER_IND, PWF_ADDITIONAL_OTHER_DETAILS

PWF_INSP_TOOL_COLLECTED_IND

5. Has one or more internal inspection tool collected data at the point of the Accident? Yes No

5.a If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:

<input type="checkbox"/> Magnetic Flux Leakage Tool _____	PWF_MAGNETIC_FLUX_LEAKAGE_IND, _YEAR
<input type="checkbox"/> Ultrasonic _____	PWF_ULTRASONIC_IND, _YEAR
<input type="checkbox"/> Geometry _____	PWF_GEOMETRY_IND, _YEAR
<input type="checkbox"/> Caliper _____	PWF_CALIPER_IND, _YEAR
<input type="checkbox"/> Crack _____	PWF_CRACK_IND, _YEAR
<input type="checkbox"/> Hard Spot _____	PWF_HARDSPOT_IND, _YEAR
<input type="checkbox"/> Combination Tool _____	PWF_COMBINATION_TOOL_IND, _YEAR
<input type="checkbox"/> Transverse Field/Triaxial _____	PWF_TRANSVERSE_FIELD_IND, _YEAR
<input type="checkbox"/> Other _____	PWF_INSPECTION_OTHER_IND, _YEAR, _DETAILS

PWF_HYDROTEST_CONDUCTED_IND

6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?
 Yes ⇒ Most recent year tested: _____ Test pressure (psig): _____
 No **PWF_HYDROTEST_CONDUCTED_YEAR PWF_HYDROTEST_PRESSURE**

PWF_DIRECT_INSPECTION_TYPE

7. Has one or more Direct Assessment been conducted on the pipeline segment? **PWF_DIRECT_YES_DIG_YEAR**
 Yes, and an investigative dig was conducted at the point of the Accident ⇒ Most recent year conducted: _____
 Yes, but the point of the Accident was not identified as a dig site ⇒ Most recent year conducted: _____
 No **PWF_DIRECT_YES_NO_DIG_YEAR**

PWF_NON_DEST_IND

8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?
 Yes No

8.a 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:

<input type="checkbox"/> Radiography _____	PWF_RADIOGRAPHY_IND, _YEAR
<input type="checkbox"/> Guided Wave Ultrasonic _____	PWF_GUIDED_WAVE_IND, _YEAR
<input type="checkbox"/> Handheld Ultrasonic Tool _____	PWF_HANDHELD_ULTRA_IND, _YEAR
<input type="checkbox"/> Wet Magnetic Particle Test _____	PWF_WET_MAGNETIC_IND, _YEAR
<input type="checkbox"/> Dry Magnetic Particle Test _____	PWF_DRY_MAGNETIC_IND, _YEAR
<input type="checkbox"/> Other _____	PWF_NON_DEST_OTHER_IND, _YEAR, _DETAILS

G6 - Equipment Failure - *only one **sub-cause** can be picked from shaded left-hand column

<input type="checkbox"/> Malfunction of Control/Relief Equipment	<p>CONTROL_VALVE_IND, INSTRUMENTATION_IND, SCADA_IND, COMMUNICATIONS_IND, BLOCK_VALVE_IND</p> <p>1. Specify: <i>(select all that apply)</i> CHECK_VALVE_IND, RELIEF_VALVE_IND, POWER_FAILURE_IND</p> <p> <input type="radio"/> Control Valve <input type="radio"/> Instrumentation <input type="radio"/> SCADA <input type="radio"/> Communications <input type="radio"/> Block Valve <input type="radio"/> Check Valve <input type="radio"/> Relief Valve <input type="radio"/> Power Failure <input type="radio"/> Stopp/Control Fitting <input type="radio"/> ESD System Failure ESD_SYSTEM_FAILURE_IND STOPPLE_CONTROL_FITTING_IND <input type="radio"/> Other OTHER_CONTROL_RELIEF_IND, OTHER_CONTROL_RELIEF_DETAILS </p>
<input type="checkbox"/> Pump or Pump-related Equipment	<p>OTHER_PUMP_IND</p> <p>2. Specify: <input type="radio"/> Seal/Packing Failure <input type="radio"/> Body Failure <input type="radio"/> Crack in Body</p> <p> <input type="radio"/> Appurtenance Failure <input type="radio"/> Other OTHER_PUMP_DETAILS </p>
<input type="checkbox"/> Threaded Connection/Coupling Failure	<p>OTHER_STRIPPED_IND</p> <p>3. Specify: <input type="radio"/> Pipe Nipple <input type="radio"/> Valve Threads <input type="radio"/> Mechanical Coupling</p> <p> <input type="radio"/> Threaded Pipe Collar <input type="radio"/> Threaded Fitting <input type="radio"/> Other OTHER_STRIPPED_DETAILS </p>
<input type="checkbox"/> Non-threaded Connection Failure	<p>OTHER_NON_THREADED_IND</p> <p>4. Specify: <input type="radio"/> O-Ring <input type="radio"/> Gasket <input type="radio"/> Seal (NOT pump seal) or Packing</p> <p> <input type="radio"/> Other OTHER_NON_THREADED_DETAILS </p>
<input type="checkbox"/> Defective or Loose Tubing or Fitting	
<input type="checkbox"/> Failure of Equipment Body (except Pump), Tank Plate, or other Material	
<input type="checkbox"/> Other Equipment Failure	<p>5. Describe: FAILURE_DETAILS</p> <p>_____</p> <p>_____</p>

Complete the following if any Equipment Failure sub-cause is selected.

6. Additional factors that contributed to the equipment failure: *(select all that apply)*
- Excessive vibration **ADDITIONAL_VIBRATION_IND**
 - Overpressurization **ADDITIONAL_OVERPRESSURE_IND**
 - No support or loss of support **ADDITIONAL_SUPPORT_IND**
 - Manufacturing defect **ADDITIONAL_DEFECT_IND**
 - Loss of electricity **ADDITIONAL_ELECTRICITY_IND**
 - Improper installation **ADDITIONAL_INSTALLATION_IND**
 - Mismatched items (different manufacturer for tubing and tubing fittings) **ADDITIONAL_MISMATCH_IND**
 - Dissimilar metals **ADDITIONAL_DISSIMILAR_IND**
 - Breakdown of soft goods due to compatibility issues with transported commodity **ADDITIONAL_BREAKDOWN_IND**
 - Valve vault or valve can contributed to the release **ADDITIONAL_VALVE_IND**
 - Alarm/status failure **ADDITIONAL_ALARM_IND**
 - Misalignment **IEF_ADDL_MISALIGNMENT_IND**
 - Thermal stress **ADDITIONAL_THERMAL_IND**
 - Other **EQ_ADDITIONAL_OTHER_IND, EQ_ADDITIONAL_OTHER_DETAILS**

G7 - Incorrect Operation - *only one **sub-cause** can be picked from shaded left-hand column

<input type="checkbox"/> OPERATION_TYPE Damage by Operator or Operator's Contractor NOT Related to Excavation and NOT due to Motorized Vehicle/Equipment Damage	
<input type="checkbox"/> Tank, Vessel, or Sump/Separator Allowed or Caused to Overflow or Overflow	OVERFLOW_OTHER_IND 1. Specify: <input type="radio"/> Valve misalignment <input type="radio"/> Incorrect reference data/calculation <input type="radio"/> Miscommunication <input type="radio"/> Inadequate monitoring <input type="radio"/> Other _____ OVERFLOW_OTHER_DETAILS
<input type="checkbox"/> Valve Left or Placed in Wrong Position, but NOT Resulting in a Tank, Vessel, or Sump/Separator Overflow or Facility Overpressure	
<input type="checkbox"/> Pipeline or Equipment Overpressured	
<input type="checkbox"/> Equipment Not Installed Properly	
<input type="checkbox"/> Wrong Equipment Specified or Installed	
<input type="checkbox"/> Other Incorrect Operation	2. Describe: _____ OPERATION_DETAILS

Complete the following if any Incorrect Operation sub-cause is selected.

3. Was this Accident related to: *(select all that apply)*

- Inadequate procedure **RELATED_INADEQUATE_PROC_IND**
- No procedure established **RELATED_NO_PROC_IND**
- Failure to follow procedure **RELATED_FAILURE_FOLLOW_IND**
- Other: _____ **RELATED_OTHER_IND** **OPERATION_RELATED_DETAILS**

4. What category type was the activity that caused the Accident: **CATEGORY_TYPE**

- Construction
- Commissioning
- Decommissioning
- Right-of-Way activities
- Routine maintenance
- Other maintenance
- Normal operating conditions
- Non-routine operating conditions (abnormal operations or emergencies)

OPERATOR_QUALIFICATION_IND

5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program? Yes No

5.a If Yes, were the individuals performing the task(s) qualified for the task(s)? **QUALIFIED_INDIVIDUALS**

- Yes, they were qualified for the task(s)
- No, but they were performing the task(s) under the direction and observation of a qualified individual
- No, they were not qualified for the task(s) nor were they performing the task(s) under the direction and observation of a qualified individual

G8 – Other Accident Cause - *only one **sub-cause** can be picked from shaded left-hand column

<input type="checkbox"/> OTHER_TYPE Miscellaneous	1. Describe: _____ MISC_DETAILS
<input type="checkbox"/> Unknown	2. Specify: <input type="radio"/> Investigation complete, cause of Accident unknown <input type="radio"/> Still under investigation, cause of Accident to be determined* UNKNOWN_SUBTYPE (*Supplemental Report required)

Note: Field names not on the form are as following:

Field Name	Field Name Description
DATAFILE_AS_OF	<i>Data as of date</i>
SIGNIFICANT	<i>Identify if record meets the significant criteria or not: If there was fatality, injury, fire, explosion, total property damage \$50K or more in 1984 dollars, non-HVL loss >= 50bbls, HVL loss >= 5bbls, then SIGNIFICANT='YES', else SIGNIFICANT='NO'.</i>
IYEAR	<i>Year accident occurred, derived from accident date</i>
NET_LOSS_BBLs	<i>UNINTENTIONAL_RELEASE_BBLs – RECOVERED_BBLs</i>
EST_COST_OPER_PAID_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_GAS_RELEASED_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_PROP_DAMAGE_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_EMERGENCY_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_ENVIRONMENTAL_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_OTHER_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
TOTAL_COST_IN84	<i>Converted Property Damage to 1984 dollars</i>
TOTAL_COST_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
MAP_CAUSE	<i>Cause by PHMSA for 20 year accident trending</i>
MAP_SUBCAUSE	<i>SubCause by PHMSA for 20 year accident trending</i>
SPILL_TYPE_CATEGORY	<i>Spill type category by PHMSA for accident trending; If there was fatality, injury, fire, explosion, water contamination, total property damage > \$50K, or unintentional loss >= 5bbls, then SPILL_TYPE_CATEGORY='LARGE', else SPILL_TYPE_CATEGORY='SMALL'.</i>
SERIOUS	<i>Identify if record meets the SERIOUS criteria or not: If there was fatality or injury then SERIOUS = 'YES' else SERIOUS = 'NO'.</i>