

PSDTS STAND-ALONE in Blue

RELEASE RECORD – HAZARDOUS LIQUID PIPELINE SYSTEMS

PART DS. DESCRIPTION OF RELEASE

1. Estimated Date/Time when the release first started: _____

2. Date/Time when the release was initially detected by the Operator: _____

3. How was the release **initially** detected? (check one):

- CPM
- SCADA-based systems with automated leak detection (alert/alarm)
- External systems with automated leak detection (alert/alarm)
- Controller monitoring (pressure, flow, etc.)
- Static shut-in test or other pressure or leak test
- Air patrol
- Ground patrol by Operator or its Contractor
- Notification from Public
- Notification from Third Party that caused the Accident
- Local Operating personnel, including Contractors
- Notification from Emergency Responder
- Other (please specify)

4. What was the operational status of the pipeline when the release occurred?

- Startup – process when the pipeline is starting up
- Shutdown – process when the pipeline is shutting down
- Steady-State – operating parameters remain nearly constant over a period of time
- Transient – operating parameters change over time; unsteady flow
- Shut-in - when pipeline is not flowing
- Other such as slack line flow or column separation (please specify)

5. Date/Time when the release was confirmed: _____

6. Was the release confirmed by? (check one):

- CPM
- SCADA-based systems with automated leak detection (alert/alarm)
- External systems with automated leak detection (alert/alarm)
- Controller monitoring (pressure, flow, etc.)
- Static shut-in test or other pressure or leak test
- Air patrol
- Ground patrol by Operator or its Contractor
- Notification from Public
- Notification from Third Party that caused the Accident
- Local Operating personnel, including Contractors
- Notification from Emergency Responder
- Other (please specify) _____

7. Is pipeline or facility? Interstate Intrastate

8. Is the pipeline or facility an unregulated gathering line under Part 195 or its state equivalent?

- Yes No

9. National Response Center Report Number (if applicable) _____

10. Transported commodity released (check one):

- HVL's or other flammable or toxic fluid which is a gas at ambient conditions
- CO₂, N₂ or other non-flammable, non-toxic fluid which is a gas at ambient conditions
- Gasoline, diesel, fuel oil, or other petroleum product which is a liquid at ambient conditions
- Crude Oil
- Biofuel (including all releases of any ethanol blends)
 - Fuel Grade Ethanol
 - Ethanol Blend E___/___
 - Biodiesel Blend B___/___/___
 - Other Biofuel _____

11. Was this pipeline segment or facility one that your Company's process showed to be a segment or facility that could affect a high consequence area? (This includes direct intersection as well as model spill)?

- Yes No

12. Did this release occur in or reach a High Consequence Area? (Any impact to the HCA does not matter for this question; this is a location question only)?

No

Yes, specify the types of HCAs intersected or reached

Commercially navigable waterway

Was this HCA identified in the "could affect" determination in your IMP?

Identified Not Identified

High Population area

Was this HCA identified in the "could affect" determination in your IMP?

Identified Not Identified

Other populated area

Was this HCA identified in the "could affect" determination in your IMP?

Identified Not Identified

Unusually Sensitive Area – Water

Was this HCA identified in the "could affect" determination in your IMP?

Identified Not Identified

Unusually Sensitive Area – Ecological

Was this HCA identified in the "could affect" determination in your IMP?

Identified Not Identified

13. Estimated size of release: _____ bbls

14. HVL releases: of the released amount, how much was associated with response (blow-down) _____ bbls

15. Amount of commodity recovered _____ bbls

16. Did the release occur:

Onshore

a) State ____

b) Location of Accident: (choose one)

- Totally contained on Operator-controlled property
- Originated on Operator-controlled property, but then flowed or migrated off the property
- Pipeline right-of-way

c) Area of Accident: (choose one)

- Tank, including attached appurtenances: (choose one)
- Underground: (choose one)
 - Under soil
 - Under pavement
 - Under a building
 - Exposed due to excavation
 - In underground enclosed space (e.g., vault)
 - Other _____

c1. Depth of cover at site of damage (in inches): _____

- o Aboveground
 - o Typical aboveground facility piping or appurtenance
 - o Overhead crossing
 - o In or spanning an open ditch
 - o Inside a building
 - o Inside other enclosed space
 - o Other _____

- o Transition Area
 - o Soil/air interface
 - o Wall sleeve
 - o Pipe support or other close contact area
 - o Other _____

d) Did the Accident occur in a crossing?

No

Yes, specify the type of crossing: (choose all that apply)

- Bridge Crossing → Specify: Cased Uncased
- Railroad Crossing → check all: Cased Uncased Bored/drilled
- Road Crossing → check all: Cased Uncased Bored/drilled
- Water Crossing → Specify: Cased Uncased

Name of body of water, if commonly known: _____

Water depth (in feet) at the point of accident: _____

Water subtype: (choose one)

- o Shoreline/Bank crossing
- o Below water, pipe in bored/drilled crossing
- o Below water, pipe buried below bottom (NOT in bored/drilled crossing)
- o Below water, pipe on or above bottom

Offshore

e) What type of waters: Federal OCS waters State waters

f) Offshore Area (without block number e.g. ship shoal) _____

g) Approximate water depth (in feet) _____

h) Area of Accident: (choose one)

- o Shoreline/Bank crossing or shore approach
- o Below water, pipe buried or jetted below seabed
- o Below water, pipe on or above sea
- o Splash Zone of riser
- o Portion of riser outside of Splash Zone, including riser bend
- o Platform

(SHORT FORM IS ONLY VISIBLE FOR SMALL RELEASES IN UNREGULATED GATHERING LINES)

[Navigation Node] If Estimated size of release is <5 barrels, and pipeline or facility is unregulated gathering, then go to PART SM. (Part SM only visible for Unregulated Gathering Lines)

PART SM. SHORT FORM FOR SMALL RELEASES

1. If Onshore, Location of Accident (choose one)

- Totally contained on Operator-controlled property
- Originated on Operator-controlled property, but then flowed or migrated off the property
- Pipeline right-of-way

2. Was Water impacted?

- No
- Yes, (check all that apply)

- Ocean/Seawater
- Surface water, Was an intake shutdown? Yes No Don't know
- Groundwater If checked, Was a well shutdown? Yes No Don't know
- Drinking water for human consumption
- A drinking water source identified as an area unusually sensitive to environmental damage under Part 195.6)

3. Part of system involved (check one):

- Onshore Tanks or Storage Vessels, Including Attached Appurtenances
- Belowground Storage or Cavern, including Associated Equipment and Piping
- Onshore Terminal/Tank Farm Equipment and Piping
- Onshore Pump/Meter Station Equipment and Piping
- Onshore Pipeline, Including Valve Sites
- Offshore Platform/Deepwater Port, Including Platform-mounted Equipment and Piping, Riser, or Riser Bend
- Offshore Pipeline

4. Cause of release (check one):

- Excavation damage
- Corrosion
- Material, seam, weld or repair weld failure for pipe or tank
- Equipment malfunction or failure of non-pipe component
- Operator error or other incorrect operation
- Natural forces
- Other Outside Force Damage
- Other

Required if Operator error or other incorrect operation is checked

Was the operator error failure due to: Excavation or physical damage to facility or pipeline by operator or operator's contractor? Yes (you will be navigated to the DIRT form)
 No

-----**END PART SM**-----

PART CQ. CONSEQUENCE OF RELEASE

1. Was there a fire? No Yes
2. Was there an explosion? No Yes
3. Were there fatalities? No Yes
4. Were there injuries requiring inpatient hospitalization? No Yes
5. Number of general public evacuated _____

6. Wildlife Impact?

- No
- Yes, (check all that apply):
 - Fish/aquatic
 - Birds
 - Terrestrial

7. Was water impacted?

- No
- Yes, (check all that apply):
 - Ocean/Seawater
 - Surface water
 - Groundwater
 - Drinking water Private Well Public Water Intake

7a. Estimated amount released in or reaching water: _____ bbls

7b. Name of body of water, if commonly known: : _____

8. Was there an impact to Soil? No Yes
9. Long term impact assessment performed or planned: No Yes
10. Anticipated Remediation?

- No
- Yes, (check all that apply):
 - Soil
 - Surface water
 - Groundwater
 - Vegetation
 - Wildlife

11. Was public, personal or commercial property disrupted or damaged? Yes No

If Yes, check all that apply:

- | | |
|---|---|
| <input type="checkbox"/> Homes and/or personal property | <input type="checkbox"/> Recreational resources |
| <input type="checkbox"/> Businesses/commercial | <input type="checkbox"/> Commercial navigation |
| <input type="checkbox"/> Farming/agricultural business | <input type="checkbox"/> Public place or facility |
| <input type="checkbox"/> Other _____ | |

12. Estimated Property Damage (in \$):

- a. Public and non-Operator private property damage _____
- b. Commodity lost _____
- c. Operator's property damage and repairs _____
- d. Operator's emergency response _____
- e. Operator's environmental remediation _____
- f. Other costs _____
- g. Total estimated property damage (sum of above) _____

PART PB. DETAILS OF PUBLIC SAFETY CONSEQUENCES

Fatalities and/or injuries:

Number of Operator employees	_____ fatalities	_____ injured
Number of Contractor employees working for the operator	_____ fatalities	_____ injured
Number of Non-Operator emergency responders	_____ fatalities	_____ injured
Number of Workers working on the ROW, but NOT associated with this operator	_____ fatalities	_____ injured
Number of Others (public)	_____ fatalities	_____ injured
Total	_____ fatalities	_____ injured

PART LD. LEAK DETECTION

1. Is this pipeline segment/facility at the release location under the operation of a control center?

- No Yes

If No, skip questions 2, 3, 7, 8, 9, 10, 11

2. Date/Time when the Control Center/Operations Center was notified of a possible release : _____

3. Did the Control Center/Operations Center take action?

- No Yes

a. If Yes, Date/Time when the Control Center/Operations Center action was taken : _____

b. What prompted the Control Center to take operational action?

- CPM
- SCADA-based systems with automated leak detection (alert/alarm)
- External systems with automated leak detection (alert/alarm)
- Controller monitoring (pressure, flow, etc.)
- Static shut-in test or other pressure or leak test
- Air patrol
- Ground patrol by Operator or its Contractor
- Notification from Public
- Notification from Third Party that caused the Accident
- Local Operating personnel, including Contractors
- Notification from Emergency Responder
- Other (please specify)

4. What type of leak detection methods are used on the section of pipeline/facility where the release occurred ?
(please check all that apply)

- CPM
- SCADA-based systems with automated leak detection (alert/alarm)
- External systems with automated leak detection (alert/alarm)
- Controller monitoring (pressure, flow, etc.)
- Static shut-in test or other pressure or leak test
- Air patrol
- Ground patrol by Operator or its Contractor
- Patrol by a 3rd party pipeline Operator
- Other (please specify)

6. Did the applied leak detection tools, whether human, software or hardware, perform as expected?

- Yes No

If No Reason for non-performance (check one):

- Field instrumentation failure
- Communications failure
- Software failure
- Human error
- Other

7. Indicate the type(s) of CPM or automated system(s) that were operational at the release location:

(select all that apply)

- Acoustic/Negative Pressure Wave CPM
- Line Balance CPM
- Pressure/flow Monitoring CPM
- Real-Time Transient Model (RTTM) CPM
- Statistical Analysis CPM
- External automated leak detection system or Other (please specify):
- None

8. If a CPM or automated leak detection system provided a valid release alarm, please indicate the type of system(s) that alarmed:

- None
- Acoustic/Negative Pressure Wave CPM
- Line Balance CPM
- Pressure/flow Monitoring CPM
- Real-Time Transient Model (RTTM) CPM
- Statistical Analysis CPM
- Automated external leak detection (e.g. cable-based, cameras, hydrocarbon sensors, etc.) or other (please specify):

a. Of the CPM or automated leak detection system(s) that provided a valid release alarm, which of the system(s) alarmed first? (choose one):

- Acoustic/Negative Pressure Wave CPM
- Line Balance CPM
- Pressure/flow Monitoring CPM
- Real-Time Transient Model (RTTM) CPM
- Statistical Analysis CPM

Automated external leak detection (e.g. cable-based, cameras, hydrocarbon sensors, etc.) or other (please specify):

b. If there was an alarm, Date/Time of CPM or automated system alarm that initially indicated a release? :_____

9. Did the CPM or automated Leak Detection System(s) provide an estimated location of events?

No Yes

a. If Yes, what was the error in feet, between the actual site of the release and the initial location estimated by the CPM or automated system(s)? :_____ ft

10. Did the release rate exceed the minimum detectable threshold of the automated Leak Detection system(s) that were operational during this event?

No Yes

11. Please provide a brief narrative of how the CPM/SCADA-based system(s) assisted with the Operator's response to and during this release.

PART LD. LEAK DETECTION for Onshore Pipelines Only

1. What was the maximum estimated release rate before mitigating steps were taken in response? Please provide both barrels per hour and as a % of flow.

Barrels per Hour

% of Flow

PART FA. FACILITY INVOLVED

1. Part of system involved (check one):

Onshore Tanks or Storage Vessels, Including Attached Appurtenances [Also complete PART TK]

Specify: Atmospheric or Low Pressure
 Pressurized

Belowground Storage or Cavern, including Associated Equipment and Piping

Onshore Terminal/Tank Farm Equipment and Piping

Onshore Pump/Meter Station Equipment and Piping

Onshore Pipeline, Including Valve Sites

Offshore Platform/Deepwater Port, Including Platform-mounted Equipment and Piping, Riser, or Riser Bend

Offshore Pipeline

2. Item involved (check one):

Pipe → Specify Pipe Body Pipe Seam

a. Nominal pipe size in inches _____

b. Wall thickness in inches _____

c. SMYS (psi) _____

d. Type of Pipe

- Seamless
- Flash welded
- Spiral welded DSAW
- Longitudinal ERW - Low Frequency
- Longitudinal ERW - High Frequency
- Furnace Butt welded
- Spiral welded ERW
- Single SAW
- Lap welded
- Plastic/non-metallic
- DSAW
- Continuous welded
- Longitudinal ERW - Unknown Frequency
- Other _____

e. Pipe Manufacturer _____

f. Year of manufacture _____

g. Pipeline coating type at point of accident: (choose one)

- Coal Tar
- Cold Applied Tape
- Extruded Polyethylene
- Fusion Bonded Epoxy
- Paint
- Composite
- Asphalt
- Polyolefin
- Epoxy other than FBE
- Field Applied Epoxy
- None
- Other _____

Weld, including heat-affected zone

Valve, specify:

- Mainline
- Auxiliary
- Relief Valve

- Pump
 - Specify type of pump
 - Positive Displacement
 - Centrifugal
 - Gear
 - Other, specify _____
 - Specify type of service
 - Mainline Pipeline
 - Pipeline Booster
 - Injection
 - Pump for Truck Rack (if on terminal side of truck rack canopy)
 - Other, specify _____
- Meter/Prover
- Relief Line
- Scraper/Pig trap
- Sump/Separator
- Repair sleeve or clamp
- Hot Tap Equipment
- Stopple Fitting
- Flange
- Auxiliary piping (e.g. drain lines)
- Tubing
 - Specify tubing Material:
 - Stainless Steel
 - Carbon Steel
 - Copper
 - Other _____
 - Specify type of Tubing:
 - Rigid
 - Flexible
- Instrumentation
- Tank/Vessel
- Other, please indicate the item involved _____

3. Year item was installed (actual or estimated if necessary): _____

4. Type of Accident involved: (check one)

- Mechanical Puncture → Axial size in inches _____ by Circumference in inches _____
- Leak, (choose one)
 - Connection Failure
 - Crack
 - Pinhole
 - Seal or Packing
 - Other _____
- Rupture, (choose one)
 - Circumferential
 - Longitudinal
 - Other _____

Rupture Width in inches at widest opening _____ by length (circum or axially) in inches _____
- Other _____

PART TK. DETAILS WHEN ONSHORE TANK OR STORAGE VESSEL, INCLUDING ATTACHED APPURTENANCES ARE INVOLVED

1. Item involved/Type of Failure (check one):
 - Single Bottom System failure (you will be navigated to PART TK2)
 - Double Bottom System failure (you will be navigated to PART TK2)
 - Chime Failure (you will be navigated to PART TK2)
 - Shell or Head failure (you will be navigated to PART TK2)
If Shell or Head failure, was the failure in a riveted seam? Yes No
 - Overfill/overpressure (check one)
 - Operator error only
 - Equipment malfunction only
 - Operator error with equipment malfunction
 - Other, please specify _____
 - Appurtenance failure (check one) (you will be navigated to PART TK2)
 - Roof drain failure
 - Other, please specify _____
 - Other failure (you will be navigated to PART TK2) _____
2. Is this tank a breakout tank? Yes No

PART TK2. DETAILS WHEN ABOVE GROUND STORAGE TANK IS INVOLVED AND OVERFILL IS NOT THE TYPE OF FAILURE.

1. Was this a catastrophic failure? Yes No
2. Was the tank hydrotested or otherwise pressure tested upon construction or major repair?
 Yes No
3. Is the tank bottom cathodically protected? Yes No
4. Is the tank bottom internally lined or coated? Yes No
5. Was vortex erosion a factor in this failure? Yes No
6. Year item involved was installed (actual or estimated if necessary) _____
7. Year of most recent API 653 internal tank inspection or equivalent _____ Not yet required
8. Year of most recent API 653 shell thickness external tank inspection or equivalent _____ Not yet required

DETAILS RELATING TO CAUSES

PART PW. DETAILS WHEN CAUSE IS MATERIAL, SEAM, WELD OR REPAIR WELD FAILURE FOR PIPE OR TANK

1. The sub-cause selected below is based on the following (select all that apply)
 - Field Examination
 - Determined by Metallurgical Analysis
 - Sub-cause is Tentative or Suspected; Still under investigation
 - Other _____

1b. Failure Type (check one)

 - Construction-, Installation-, or Fabrication-related
 - Original Manufacturing-related (not girth weld or other welds formed in the field)
 - Environmental Cracking-related (check one)
 - Stress Corrosion Cracking
 - Sulfide Stress Cracking
 - Hydrogen Stress Cracking
 - Other _____
2. List contributing factors (check all that apply **for 1b except Environmental Cracking**):
 - Fatigue or Vibration related (check one)
 - Defective pipe body or tank plate material
 - Defective pipe seam
 - Defective girth weld
 - Defective fabrication weld or repair weld
 - Original construction or fabrication damage or defect
 - Pipe transport damage
 - Prior third party damage
 - Defective tank shell seam
 - Other defective weld or material
 - Mechanically-induced fatigue prior to installation (such as during transport of pipe)
 - Mechanical Vibration
 - Pressure-related
 - Thermal
 - Other _____
 - Mechanical Stress
 - Other _____
3. What other factors do you suspect played a role in the incident: (select all that apply)
 - Fatigue crack growth
 - Overpressurization
 - Ground settling or other loss of support
 - Dent
 - Gouge
 - Pipe Bend
 - Arc Burn
 - Crack
 - Lack of Fusion
 - Lamination
 - Buckle
 - Wrinkle
 - Misalignment
 - Burnt Steel
 - Other factors

PART EX. DETAILS WHEN CAUSE IS EXCAVATION DAMAGE

1. Excavation Damage (select one):
 - Excavation Damage by Operator (First Party)
 - Excavation Damage by Operator's Contractor (Second Party)
 - Excavation Damage by Third Party
 - Previous Damage due to Excavation Activity

2. Was there a job specific excavation plan in effect? Yes No

3. Did the Operator get prior notification of the excavation activity?
 - Yes, *select all that apply*
 - One Call System
 - Excavator
 - Contractor
 - Landowner
 - No

4. Pipeline operator's response to One-Call notification (check all that apply):
 - Marked or staked centerline of pipe
 - Provided on-site representation during excavation
 - Excavated own line for the third party
 - Pipeline operator was unaware of excavation activity

5. Right-of-way patrol frequency: Weekly Bi-weekly Other

6. Were permanent pipeline right-of-way markers visible to third party at the site?
 - Yes No

Also, you will be navigated to Part DT – DIRT Module

If Prior Damage:

- | | |
|--|--|
| <ol style="list-style-type: none">7. Evidence of damage (check one):<ul style="list-style-type: none"><input type="radio"/> Coating damage only<input type="radio"/> Dent or buckle without metal loss<input type="radio"/> Gouge or other metal loss (with or without dent or buckle)<input type="radio"/> Other | <ol style="list-style-type: none">8. Position of damage on pipe (check one):<ul style="list-style-type: none"><input type="radio"/> Top (10-2 o'clock position)<input type="radio"/> Side (8-10 & 2-4 o'clock position)<input type="radio"/> Bottom (4-8 o'clock position) |
|--|--|

PART OF. DETAILS WHEN CAUSE IS OTHER OUTSIDE FORCE DAMAGE

- 1. Other Outside Force Damage (select one):
 - Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause of Incident
 - Damage by Car, Truck, or Other Motorized Vehicle/Equipment not engaged in Excavation
 - Vehicle/Equipment operated by:** (select only one)
 - Operator
 - Operator's Contractor
 - Third Party
 - Damage by Boats, Barges, Drilling Rigs, or other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring
 - Select one or more if an extreme weather event was a factor:**
 - Hurricane
 - Tropical Storm
 - Tornado
 - Heavy Rains/Flood
 - Other _____
 - Routine or Normal Fishing or Other Maritime Activity not engaged in Excavation
 - Electrical Arcing from Other Equipment or Facility
 - Previous Mechanical Damage Not related to Excavation
 - Intentional Damage, (select only one)
 - Vandalism
 - Terrorism
 - Theft of transported commodity
 - Theft of equipment
 - Other _____
 - Other Outside Force Damage _____

PART CR. DETAILS WHEN CAUSE IS CORROSION

1. Location of corrosion: External Internal

2. If **External Corrosion**, complete the following:
 - a) Type of corrosion (select all that apply):
 - Galvanic
 - Atmospheric
 - Selective seam corrosion
 - Microbiologically-induced corrosion
 - Stress corrosion cracking
 - Stray current corrosion
 - Other _____

 - b) Facility under Cathodic protection? Yes No

 - c) Was the failed item externally coated or painted? Yes No

 - d) Was shielding, tenting, or disbanded coating a factor in this failure? Yes No

 - e) Was damaged coating a factor in this failure? Yes No

 - e) Has a Close Interval Cathodic Protection Survey been performed?
 - Yes, specify the year of most recent CIS _____
 - No

Internal Corrosion questions to be skipped if the facility involves is Onshore Tanks or Storage Vessels, Including Attached Appurtenances.

3. If **Internal Corrosion**, complete the following:
 - a) Flow Characteristics: How would you categorize the flow in this piece of pipe?
 - Continuous Intermittent No Flow Not applicable to item involved

 - b) Was the commodity treated with corrosion inhibitors or biocides? Yes No

 - c) Were cleaning /dewatering pigs (or other operations) routinely utilized?
 - Yes No Not applicable – Not mainline pipe

Also, you will be navigated to CD – Conditions Related to Release

PART OP. DETAILS WHEN CAUSE IS OPERATOR ERROR OR INCORRECT OPERATION

1. Operation Type (select one):
 - Damage by Operator or Operator's contractor NOT related to Excavation and NOT due to Motorized Vehicle/Equipment Damage
 - Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow

What is the main reason for the overflow: (select only one)

 - Valve misalignment
 - Incorrect reference data/calculation
 - Miscommunication
 - Inadequate monitoring
 - Other _____

Valve left or placed in wrong position, but not resulting in a tank, vessel, or sump/separator overflow or facility overpressure

 - Pipeline or equipment overpressured
 - Equipment not installed properly
 - Wrong equipment specified or installed
 - Other incorrect operation _____

2. Was this Accident related to: (check all that apply)
 - Inadequate procedure
 - No procedure established
 - Failure to follow procedure
 - Other _____

3. Was the individual involved:
 - A direct employee of the operator
 - A contract employee engaged by the operator

4. What category type was the activity that caused the release: (select one)
 - Construction
 - Commissioning
 - Routine maintenance
 - Other maintenance
 - Normal operating conditions
 - Non-routine operating conditions (abnormal operations or emergencies)
 - Right-Of-Way activities
 - Decommissioning

PART OQ required for all Operator Error Releases and some Excavation Releases. Consult your OQ Coordinator for help with these questions.

PART OQ. OPERATOR QUALIFICATION

1. Was this release related to an Operator Qualification "covered task"?
 - No
 - Yes

If yes, was the individual qualified for the task at the time the task was being performed?

 - Yes

How much time had passed since the qualification date?

 - less than 6 months
 - 6 months – 1 year
 - 1-2 years

- 2-3 years
- more than 3 years

What method of qualification was used?

- Skills evaluation
- Knowledge evaluation
- Combination
- Other

No, but they were under the “span of control” of a qualified individual

What was ratio of the span of control?

Ratio of ___ person to___ person (people)

- 1 to 1
- 1 to 2
- 1 to 3
- More than 1 to 3

No, individual was not qualified or under a “span of control”

1b. What was the task category of the activity being performed?

- Control center operations
- Field operations
- Corrosion prevention
- Electrical and/or instrumentation tasks
- Mechanical tasks
- Maintenance (pipeline repair, etc.)
- Damage Prevention
- Other

PART EQ. DETAILS WHEN CAUSE IS EQUIPMENT MALFUNCTION & NON-PIPE COMPONENT FAILURE

1. Equipment Failure Type (select one):

- Malfunction of control/relief equipment

Select all that apply:

- Control Valve
 - Instrumentation
 - SCADA
 - Communications
 - Block Valve
 - Check Valve
 - Relief Valve
 - Power Failure
 - Stopple/Control Fitting
 - ESD System Failure
 - Other _____
- Pump or Pump-related equipment, (select only one)
- Seal/Packing Failure
 - Body Failure
 - Crack in Body
 - Appurtenance Failure
 - Other _____
- Threaded Connection/Coupling Failure, (select only one)
- Pipe Nipple
 - Valve Threads
 - Mechanical Coupling
 - Threaded Pipe Collar
 - Threaded Fitting
 - Other _____
- Non-threaded Connection Failure, (select only one)
- O-Ring
 - Gasket
 - Seal (Not pump seal) or Packing
 - Other _____
- Defective or Loose Tubing or Fitting
- Failure of Equipment Body (except Pump), Tank Plate, or other Material
- Other equipment failure _____

2. Additional factors that contributed to the equipment failure: (select all that apply)

- Excessive vibration
- Breakdown of soft goods due to compatibility issues with transported commodity
- 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
- Valve vault or valve can contributed to the release
- Alarm/status failure
- Misalignment
- Thermal stress
- Other _____

PART NF. DETAILS WHEN CAUSE IS NATURAL FORCE DAMAGE

1. Which of the following Natural Forces were involved in this failure (select one):
 - Earth movement, NOT due to Heavy Rains/Floods
 - Select only one:
 - Earthquake
 - Subsidence
 - Landslide
 - Other _____
 - Heavy Rains/Floods, (select only one)
 - Washout/Scouring
 - Flootation
 - Mudslide
 - Other _____
 - Temperature, (select only one)
 - Thermal stress
 - Frost Heave
 - Frozen Components
 - Other _____
 - Lightning, (select only one)
 - Direct Hit
 - Secondary Impact such as resulting nearby fires
 - High Winds
 - Other Natural Force Damage _____

2. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?
 - No
 - Yes (select all that apply)
 - Hurricane
 - Tropical Storm
 - Tornado
 - Other _____

PART OT. DETAILS WHEN CAUSE IS "OTHER ACCIDENT" CAUSE

1. Which of the following best describes this failure cause? (select one)
 - Miscellaneous _____
 - Unknown (select only one)
 - Investigation complete, cause of Accident is unknown
 - Still under investigation, cause of Accident to be determined

PART DT required for all Excavation Damage Releases including Third Party Damage Excavation Releases and Operator Error Excavation Releases.

PART DT. DIRT MODULE

PART A - Who is submitting this information

Who is providing the information?

- Electric
- Engineer/Design
- Equipment Manufacturer
- Excavator
- Liquid Pipeline
- Locator
- Natural Gas
- Private Water
- Public Works
- Railroad
- Road Builders
- Federal/State Regulator
- Telecommunications
- Unknown/Other

Name of the person providing the information? _____

Part B – Type, Date and Location of Event

Type of Event: DIRT Event Underground Damage Underground Near Miss
Non-DIRT Event Above Grade Aerial Natural Cause Submarine

Date of Event _____

Country _____

State _____

City _____

County _____

Street Address _____

Nearest Intesection _____

Latitude/Longitude: Lat: _____ Long: _____ Decimal Degrees D M S

Right of Way where event occurred

- Pipeline
- City Street
- State Highway
- County Road
- Interstate Highway
- Public-Other
- Private Business
- Private Land Owner
- Private Easement
- Power/Transmission Line
- Dedicated Public Utility Easement
- Federal Land
- Railroad
- Unknown/Other

Part C – Affected Facility Information

What type of facility operation was affected?

- Cable Television
- Electric
- Natural Gas
- Liquid Pipeline
- Sewer (Sanitary Sewer)
- Steam
- Telecommunications
- Water
- Unknown/Other

What type of facility was affected?

- Distribution
- Gathering
- Service/Drop
- Transmission
- Unknown/Other

Was the facility affected part of a joint trench?

- Yes
- No
- Unknown

Did this event involve a Cross Bore?

- Yes
- No

Was the facility owner a member of One-Call Center?

- Unknown
- Yes
- No

If No, is facility owner exempt from One Call Center membership?

- Yes
- No
- Unknown

Measured Depth from Grade: Embedded in concrete/asphalt pavement <18" / 46cm 18" – 36" /46 – 91cm >36" / 91cm

Part D – Excavation Information

Type of Excavator

- Contractor
- Farmer
- Municipality
- Occupant
- Railroad
- State
- County
- Utility
- Developer
- Unknown/Other

Type of Excavation Equipment

- Auger
- Backhoe/Trackhoe
- Boring
- Bulldozer
- Drilling
- Directional Drilling
- Explosives
- Farm Equipment
- Grader/Scraper
- Hand Tools
- Milling Equipment
- Probing Device
- Trencher
- Vacuum Equipment
- Unknown/Other

Type of Work Performed

- | | |
|--|--|
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Public Transit Authority |
| <input type="checkbox"/> Cable Television | <input type="checkbox"/> Railroad |
| <input type="checkbox"/> Building Construction | <input type="checkbox"/> Road Work |
| <input type="checkbox"/> Curb/Sidewalk | <input type="checkbox"/> Sewer |
| <input type="checkbox"/> Building Demolition | <input type="checkbox"/> Site Development |
| <input type="checkbox"/> Drainage | <input type="checkbox"/> Steam |
| <input type="checkbox"/> Driveway | <input type="checkbox"/> Storm Drain/Culvert |
| <input type="checkbox"/> Electric | <input type="checkbox"/> Street Light |
| <input type="checkbox"/> Engineering/Surveying | <input type="checkbox"/> Telecommunications |
| <input type="checkbox"/> Fencing | <input type="checkbox"/> Traffic Signal |
| <input type="checkbox"/> Natural Gas | <input type="checkbox"/> Traffic Sign |
| <input type="checkbox"/> Grading | <input type="checkbox"/> Water |
| <input type="checkbox"/> Irrigation | <input type="checkbox"/> Waterway Improvements |
| <input type="checkbox"/> Landscaping | <input type="checkbox"/> Milling |
| <input type="checkbox"/> Liquid Pipeline | <input type="checkbox"/> Pole <input type="checkbox"/> Unknown/Other |

Part E – Notification and Locating

Was the one call center notified?

- Yes Ticket Number _____ No

If Yes, type of locator Facility Owner Contract Locator Unknown/Other

If No, is excavation activity and/or excavator type exempt from notification? Yes No Unknown

Was work area white-lined? Yes No Unknown

Part F – Intentionally left blank

Part G – Excavator Downtime

Did Excavator incur down time?

- Yes
- No

If yes, how much time?

- Less than 1 hr
- 1 to 2 hrs
- 2 to 3 hrs
- 3+ hrs
- Unknown
- OR Enter Exact Value _____

Estimated cost of down time?

- \$0
- \$1 to 1,000
- \$1,001 to 5,000
- \$5,001 to 25,000
- \$25,001 to 50,000
- \$50,001 and over
- Unknown
- OR Enter Exact Value _____

Part H – Interruption and Restoration

Did the damage cause an interruption in service?

- Yes
- No
- Unknown/Other

If yes, duration of interruption?

- Less than 1 hr
- 1 to 6 hrs
- 6 to 12 hrs
- 12 to 24 hrs
- 24 to 48 hrs
- 48+ hrs
- Unknown
- OR Enter Exact Value _____

Approximately how many customers were affected?

- 0
- 1
- 2 to 10
- 11 to 50
- 51 or more
- Unknown
- OR Enter Exact Value _____

Estimated cost of damage/repair/restoration?

- \$0
- \$1 to 1,000
- \$1,001 to 5,000
- \$5,001 to 25,000
- \$25,001 to 50,000
- \$50,001 and over
- Unknown

OR Enter Exact Value _____

Part I –Root Cause

Root Cause: Please choose one

- Locating Issue
 - Facility not marked due to:*
 - Abandoned facility
 - Locator error
 - No response from operator/contract locator
 - Incomplete marks at damage location
 - Tracer wire issue
 - Unlocatable Facility
 - Incorrect facility records/maps
 - Facility marked inaccurately due to*
 - Abandoned facility
 - Incorrect facility records/maps
 - Locator error
 - Tracer wire issue
- Notification issue
 - No notification made to the One Call center/811
 - Excavator dug outside area described on ticket
 - Excavator dug prior to valid start date/time
 - Excavator dug after valid ticket expired
 - Excavator provided incorrect notification information
- Excavation Issue
 - Excavator dug prior to verifying marks by test-hole (pothole)
 - Excavator failed to maintain clearance after verifying marks
 - Excavator failed to protect/shore support facilities
 - Excavator provided incorrect notification information
 - Improper backfilling practices
 - Marks faded or not maintained
 - Improper excavation practice not listed above
- Miscellaneous Root Causes
 - One-Call Center error
 - Deteriorated facility
 - Previous damage
 - Root Cause not listed (comment required) _____

Part J – Additional Comments

Please enter your comments (for DIRT) below!!

-----End of Part DT -----

-----Survey Complete -----