



U.S. Department of Transportation
Research and Special Programs
Administration

ACCIDENT REPORT – HAZARDOUS LIQUID PIPELINE SYSTEMS

Report Date _____

No. **RPTID** _____
(DOT Use Only)

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 Office Of Pipeline Safety Web Page at <http://ops.dot.gov>.

PART A – GENERAL REPORT INFORMATION

Check: ☐ Original Report ☐ Supplemental Report ☐ Final Report

1. a. Operator's OPS 5-digit Identification Number (if known) / / / / / **OPERATOR_ID**
2. b. If Operator does not own the pipeline, enter Owner's OPS 5-digit Identification Number (if known) / / / / / **OWNER_OPERATOR_ID**
- c. Name of Operator **NAME**
- d. Operator street address **OPSTREET**
- e. Operator address **OPCITY OPCOUNTY OPSTATE OPZIP**
City, County, State and Zip Code

IMPORTANT: IF THE SPILL IS SMALL, THAT IS, THE AMOUNT IS AT LEAST 5 GALLONS BUT IS LESS THAN 5 BARRELS, COMPLETE THIS PAGE ONLY, UNLESS THE SPILL IS TO WATER AS DESCRIBED IN 49 CFR §195.52(A)(4) OR IS OTHERWISE REPORTABLE UNDER §195.50 AS REVISED IN CY 2001.

2. Time and date of the accident **IDATE**
/ / / / / **IHOUR** / / / / /
hr. month day year

3. Location of accident
(If offshore, do not complete a through d. See Part C.1)
a. Latitude: **LATITUDE** Longitude: **LONGITUDE**
(if not available, see instructions for how to provide specific location)

b. **ACCITY ACCOUNTY**
City, and County or Parish

c. **ACSTATE ACZIP**
State and Zip Code

d. Mile post/valve station ☐ or survey station no. ☐
(whichever gives more accurate location)
MPVST SURNO

4. Telephone report **TELRN** **TELDT**
/ / / / / / / / / / /
NRC Report Number month day year

5. Losses (Estimated)

Public/Community Losses reimbursed by operator:

Public/private property damage \$ **PPPRP**
Cost of emergency response phase \$ **EMRPRP**
Cost of environmental remediation \$ **ENVPRP**
Other Costs \$ **OPCPRP**
(describe) **OPCPRPO**

Operator Losses:

Value of product lost \$ **PRODPRP**
Value of operator property damage \$ **OPPRP**
Other Costs \$ **OOPPRP**
(describe) **OOPPRPO**

Total Costs \$ **PRPTY**

6. Commodity Spilled ☐ Yes ☐ No **SPILLED**
(If Yes, complete Parts a through c where applicable)

- a. Name of commodity spilled **COMM**
- b. Classification of commodity spilled: **CLASS CLASS_TXT**
 - ☐ HVLs /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

- c. Estimated amount of commodity involved : **SPUNIT SPUNIT_TXT**
 - ☐ Barrels
 - ☐ Gallons (check only if spill is less than one barrel)

Amounts:
Spilled : **LOSS**
Recovered: **RECOV**

CAUSES FOR SMALL SPILLS ONLY (5 gallons to under 5 barrels) :

(For large spills [5 barrels or greater] see Part H)

- GEN_CAUSE GEN_CAUSE_TXT**
- ☐ Corrosion ☐ Natural Forces ☐ Excavation Damage ☐ Other Outside Force Damage
- ☐ Material and/or Weld Failures ☐ Equipment ☐ Incorrect Operation ☐ Other

PART B – PREPARER AND AUTHORIZED SIGNATURE

PNAME
(type or print) Preparer's Name and Title

PTEL
Area Code and Telephone Number

PEMAIL
Preparer's E-mail Address

PFAX
Area Code and Facsimile Number

Authorized Signature (type or print) Name and Title Date

Area Code and Telephone Number

PART C – ORIGIN OF THE ACCIDENT (Check all that apply)											
1. Additional location information a. Line segment name or ID <u>LINE_SEG</u> b. Accident on Federal land other than Outer Continental Shelf <input type="radio"/> Yes <input type="radio"/> No <u>IFED</u> c. Is pipeline interstate? <input type="radio"/> Yes <input type="radio"/> No <u>INTER</u>		OFFSHORE Offshore: <input type="radio"/> Yes <input type="radio"/> No (complete d if offshore) d. Area <u>OFFAREA</u> Block # <u>BNUMB</u> State <u> </u> / <u> </u> / <u> </u> or Outer Continental Shelf <input type="checkbox"/> <u>OC</u> <u>OFFST</u>									
2. Location of system involved (check all that apply) <input type="checkbox"/> Operator's Property <u>OPPROP</u> <input type="checkbox"/> Pipeline Right of Way <u>PIPEROW</u> <input type="checkbox"/> High Consequence Area (HCA)? <u>HCA</u> Describe HCA <u>HCADESC</u>		a. Type of leak or rupture <u>LRTYPE</u> <u>LRTYPE_TXT</u> <input type="radio"/> Leak: <input type="radio"/> Pinhole <input type="radio"/> Connection Failure (complete sec. H5) <u>LEAK</u> <input type="radio"/> Puncture, diameter (inches) <u>PUNC_DIAM</u> <input type="radio"/> Rupture: <input type="radio"/> Circumferential – Separation <u>RUPTURE</u> <input type="radio"/> Longitudinal – Tear/Crack, length (inches) <u>RUPLN</u> Propagation Length, total, both sides (feet) <u>PROPLN</u> <input type="radio"/> N/A <input type="radio"/> Other <u>LRTYPEO</u>									
3. Part of system involved in accident <u>SYSPRT</u> <u>SYSPRT_TXT</u> <input type="radio"/> Above Ground Storage Tank <input type="radio"/> Cavern or other below ground storage facility <input type="radio"/> Pump/meter station; terminal/tank farm piping and equipment, including sumps <input type="radio"/> Other Specify: <u>SYSPRTO</u> <input type="radio"/> Onshore pipeline, including valve sites <input type="radio"/> Offshore pipeline, including platforms		b. Type of block valve used for isolation of immediate section: Upstream: <u>M</u> <input type="checkbox"/> Manual <u>A</u> <input type="checkbox"/> Automatic <u>R</u> <input type="checkbox"/> Remote Control <u>UBLKV *</u> <u>C</u> <input type="checkbox"/> Check Valve Downstream: <input type="checkbox"/> Manual <u>A</u> <input type="checkbox"/> Automatic <u>R</u> <input type="checkbox"/> Remote Control <u>DBLKV *</u> <u>C</u> <input type="checkbox"/> Check Valve									
If failure occurred on Pipeline, complete items a - g:											
4. Failure occurred on <u>FAIL_OC</u> <u>FAIL_OC_TXT</u> <input type="radio"/> Body of Pipe <input type="radio"/> Pipe Seam <input type="radio"/> Scraper Trap <input type="radio"/> Pump <input type="radio"/> Sump <input type="radio"/> Joint <input type="radio"/> Component <input type="radio"/> Valve <input type="radio"/> Metering Facility <input type="radio"/> Repair Sleeve <input type="radio"/> Welded Fitting <input type="radio"/> Bolted Fitting <input type="radio"/> Girth Weld Other (specify) <u>FAIL_OCO</u>		c. Length of segment isolated <u>SEGISO</u> ft d. Distance between valves <u>VLVDIST</u> ft e. Is segment configured for internal inspection tools? <input type="radio"/> Yes <input type="radio"/> No f. Had there been an in-line inspection device run at the point of failure? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Don't Know <u>INLINE</u> <u>INLINE_TXT</u> <input type="radio"/> Not Possible due to physical constraints in the system									
Year the component that failed was installed: <u> </u> / <u> </u> / <u> </u> 5. Maximum operating pressure (MOP) a. Estimated pressure at point and time of accident: <u>INC_PRS</u> PSIG b. MOP at time of accident: <u>MOP</u> PSIG c. Did an overpressurization occur relating to the accident? <input type="radio"/> Yes <input type="radio"/> No <u>OPRS</u>		g. If Yes, type of device run (check all that apply) <input type="checkbox"/> High Resolution Magnetic Flux tool Year run: <u>DRHRMFY</u> <input type="checkbox"/> Low Resolution Magnetic Flux tool Year run: <u>DRLRMFY</u> <input type="checkbox"/> UT tool <u>DRUT</u> Year run: <u>DRUTY</u> <input type="checkbox"/> Geometry tool <u>DRGEO</u> Year run: <u>DRGEOY</u> <input type="checkbox"/> Caliper tool <u>DRCAL</u> Year run: <u>DRCALY</u> <input type="checkbox"/> Crack tool <u>DRCRK</u> Year run: <u>DRCRKY</u> <input type="checkbox"/> Hard Spot tool <u>DRHARD</u> Year run: <u>DRHARDY</u> <input type="checkbox"/> Other tool <u>DROTH</u> Year run: <u>DROTHY</u>									
PART D – MATERIAL SPECIFICATION		PART E – ENVIRONMENT									
1. Nominal pipe size (NPS) <u>NPS</u> <u> </u> / <u> </u> / <u> </u> in. 2. Wall thickness <u>WALLTHK</u> <u> </u> / <u> </u> / <u> </u> in. 3. Specification <u>SPEC</u> SMYS <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> 4. Seam type <u>SEAM</u> <u>SMYS</u> 5. Valve type <u>VALVE</u> <u>MANYR</u> 6. Manufactured by <u>MANU</u> in year <u> </u> / <u> </u> / <u> </u>		1. Area of accident <input type="radio"/> In open ditch <u>LOCKL</u> <u>LOCKL_TXT</u> <input type="radio"/> Under pavement <input type="radio"/> Above ground <input type="radio"/> Underground <input type="radio"/> Under water <input type="radio"/> Inside/under building <input type="radio"/> Other <u>LOCKLO</u> 2. Depth of cover: <u>DEPTH_COV</u> inches									
PART F – CONSEQUENCES											
1. Consequences (check and complete all that apply) a. <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Number of operator employees: <u>EFAT</u></td> <td style="width: 50%;">Injuries <u>EINJ</u></td> </tr> <tr> <td>Contractor employees working for operator: <u>NFAT</u></td> <td><u>NINJ</u></td> </tr> <tr> <td>General public: <u>GPAT</u></td> <td><u>GPINJ</u></td> </tr> <tr> <td>Totals: <u>SHUTDOWN</u></td> <td><u>FATAL</u> <u>INJURE</u></td> </tr> </table> b. Was pipeline/segment shutdown due to leak? <input type="radio"/> Yes <input type="radio"/> No If Yes, how long? <u>SHUTDAY</u> days <u>SHUTHR</u> hours <u>SHUTMIN</u> minutes				Number of operator employees: <u>EFAT</u>	Injuries <u>EINJ</u>	Contractor employees working for operator: <u>NFAT</u>	<u>NINJ</u>	General public: <u>GPAT</u>	<u>GPINJ</u>	Totals: <u>SHUTDOWN</u>	<u>FATAL</u> <u>INJURE</u>
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Totals: <u>SHUTDOWN</u>	<u>FATAL</u> <u>INJURE</u>										
c. IGNITE Product ignited <input type="radio"/> Yes <input type="radio"/> No <u>EVAC</u> d. EXPLO Explosion <input type="radio"/> Yes <input type="radio"/> No <u>EVACNO</u> e. <input type="checkbox"/> Evacuation (general public only) <u> </u> / <u> </u> / <u> </u> / <u> </u> people Reason for Evacuation: <u>EVAC_REASON</u> <u>EVAC_REASON_TXT</u> <input type="radio"/> Precautionary by company <input type="radio"/> Evacuation required or initiated by public official f. Elapsed time until area was made safe: <u>STHH</u> <u> </u> / <u> </u> / <u> </u> hr. <u> </u> / <u> </u> / <u> </u> min. <u>STMIN</u>											
2. Environmental Impact a. Wildlife Impact: Fish/aquatic <input type="radio"/> Yes <input type="radio"/> No <u>FISH</u> Birds <input type="radio"/> Yes <input type="radio"/> No <u>BIRDS</u> Terrestrial <input type="radio"/> Yes <input type="radio"/> No <u>TERRESTRIAL</u> b. Soil Contamination <input type="radio"/> Yes <input type="radio"/> No <u>SOIL</u> If Yes, estimated number of cubic yards: <u>SOIL_YRD</u> c. Long term impact assessment performed: <input type="radio"/> Yes <input type="radio"/> No <u>IMPACT</u> d. Anticipated remediation <input type="radio"/> Yes <input type="radio"/> No <u>REMEDIAL</u> <u>RGROUND</u> <u>RSOIL</u> <u>RVEG</u> <u>RWILD</u> If Yes, check all that apply: <input type="checkbox"/> Surface water <input type="checkbox"/> Groundwater <input type="checkbox"/> Soil <input type="checkbox"/> Vegetation <input type="checkbox"/> Wildlife <u>DRINKSRC</u> <u>DRINKSRC_TXT</u>											
e. Water Contamination: <input type="radio"/> Yes <input type="radio"/> No (If Yes, provide the following) Amount in water <u> </u> barrels <u>AMT_IN_WATER</u> Ocean/Seawater <input type="radio"/> No <input type="radio"/> Yes <u>OCEAN</u> Surface <input type="radio"/> No <input type="radio"/> Yes <u>SURFACE</u> Groundwater <input type="radio"/> No <input type="radio"/> Yes <u>GROUNDW</u> Drinking water <input type="radio"/> No <input type="radio"/> Yes (If Yes, check below.) <u>DRINK</u> <input type="checkbox"/> Private well <input type="checkbox"/> Public water intake <u>DRINKSRC</u> <u>DRINKSRC_TXT</u>											

PART G – LEAK DETECTION INFORMATION

1. Computer based leak detection capability in place? ☐ Yes ☐ No **COMP_BASED**
2. Was the release initially detected by? (check one): **DETECTED** **DETECTED_TXT**
- ☐ CPM/SCADA-based system with leak detection
- ☐ Static shut-in test or other pressure or leak test
- ☐ Local operating personnel, procedures or equipment
- ☐ Remote operating personnel, including controllers
- ☐ Air patrol or ground surveillance
- ☐ A third party ☐ Other (specify) **DETECTEDO**
3. Estimated leak duration **DURLEAK_DAY** days **DURLEAK_HR** hours

PART H – APPARENT CAUSE

Important: There are 25 numbered causes in this Part H. Check the box corresponding to the primary cause of the accident. Check one circle in each of the supplemental categories corresponding to the cause you indicate. See the instructions for guidance.

H1 – CORROSION

1. ☐ External Corrosion

2. ☐ Internal Corrosion

(Complete items a – e where applicable.)

PIPE_COAT, PIPE_COAT_TXT

- a. Pipe Coating

- ☐ Bare
- ☐ Coated

VIS_EXAM, VIS_EXAM_TXT

- b. Visual Examination

- ☐ Localized Pitting
- ☐ General Corrosion
- ☐ Other **VIS_EXAMO**

COR_CAUSE, COR_CAUSE_TXT

- c. Cause of Corrosion

- ☐ Galvanic ☐ Atmospheric
- ☐ Stray Current ☐ Microbiological
- ☐ Cathodic Protection Disrupted
- ☐ Stress Corrosion Cracking
- ☐ Selective Seam Corrosion
- ☐ Other **COR_CAUSEO**

PROT

- d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?

- ☐ No ☐ Yes, Year Protection Started: / / / / **CPYR**

PREV_DAM

- e. Was pipe previously damaged in the area of corrosion?

- ☐ No ☐ Yes ⇒ Estimated time prior to accident: / / / years / / / months **PREV_DAM_YR** **PREV_DAM_MO** Unknown ☐ **PREV_DAM_UK**

H2 – NATURAL FORCES

3. ☐ **EARTH_MOVE** Earth Movement ⇒ ☐ **EARTH_MOVE_TXT** Earthquake ☐ Subsidence ☐ Landslide ☐ Other **EARTH_MOVEO**
4. ☐ Lightning
5. ☐ **FLOODS** Heavy Rains/Floods ⇒ ☐ **FLOODS_TXT** Washouts ☐ Flotation ☐ Mudslide ☐ Scouring ☐ Other **FLOODSO**
6. ☐ **TEMPER** Temperature ⇒ ☐ **TEMPER_TXT** Thermal stress ☐ Frost heave ☐ Frozen components ☐ Other **TEMPERO**
7. ☐ High Winds

H3 – EXCAVATION DAMAGE

8. ☐ Operator Excavation Damage (including their contractors/Not Third Party)

9. ☐ Third Party (complete a-f)

- a. Excavator group

THIRD_PARTY_GRP, THIRD_PARTY_GRP_TXT

- ☐ General Public ☐ Government ☐ Excavator other than Operator/subcontractor

THIRD_PARTY_TYPE, THIRD_PARTY_TYPE_TXT

- b. Type: ☐ Road Work ☐ Pipeline ☐ Water ☐ Electric ☐ Sewer ☐ Phone/Cable

- ☐ Landowner-not farming related ☐ Farming ☐ Railroad

- ☐ Other liquid or gas transmission pipeline operator or their contractor

- ☐ Nautical Operations ☐ Other **THIRD_PARTY_TYPEO**

EXCAV_TYPE, EXCAV_TYPE_TXT

- c. Excavation was: ☐ Open Trench ☐ Sub-strata (boring, directional drilling, etc...)

EXCAV_ON

- d. Excavation was an ongoing activity (Month or longer) ☐ Yes ☐ No If Yes, Date of last contact / / /

NOTIF

- e. Did operator get prior notification of excavation activity?

- ☐ Yes; Date received: / / / mo. / / / day / / / / / yr. ☐ No **NOTIF_DATE**

- Notification received from: ☐ One Call System ☐ Excavator ☐ Contractor ☐ Landowner **NOTIF_RCVD_TXT**

- MARKED** f. Was pipeline marked as result of location request for excavation? ☐ No ☐ Yes (If Yes, check applicable items i - iv)

- TEMP_MARK** i. Temporary markings: ☐ Flags ☐ Stakes ☐ Paint **TEMP_MARK_TXT**

- PERM_MARK** ii. Permanent markings: ☐

- ACC_MARK** iii. Marks were (check one): ☐ Accurate ☐ Not Accurate **ACC_MARK_TXT**

- MKD_IN_TIME** iv. Were marks made within required time? ☐ Yes ☐ No

H4 – OTHER OUTSIDE FORCE DAMAGE

10. ☐ **FIRE_EXPLO** Fire/Explosion as primary cause of failure ⇒ Fire/Explosion cause: ☐ Man made ☐ Natural **FIRE_EXPLO_TXT**

11. ☐ Car, truck or other vehicle not relating to excavation activity damaging pipe

12. ☐ Rupture of Previously Damaged Pipe

13. ☐ Vandalism

H5 – MATERIAL AND/OR WELD FAILURES**Material**

14. ☐ **PIPE_BODY** ⇒ ☐ **PIPE_BODY_TXT** ☐ Dent ☐ Gouge ☐ Bend ☐ Arc Burn ☐ Other **PIPE_BODYO**
15. ☐ **COMPONENT** ⇒ ☐ **COMPONENT_TXT** ☐ Valve ☐ Fitting ☐ Vessel ☐ Extruded Outlet ☐ Other **COMPONENTO**
16. ☐ **JOINT** ⇒ ☐ **JOINT_TXT** ☐ Gasket ☐ O-Ring ☐ Threads ☐ Other **JOINTO**

Weld

17. ☐ **BUTT** ⇒ ☐ **BUTT_TXT** ☐ Pipe ☐ Fabrication ☐ Other **BUTTO**
18. ☐ **FILLET** ⇒ ☐ **FILLET_TXT** ☐ Branch ☐ Hot Tap ☐ Fitting ☐ Repair Sleeve ☐ Other **FILLETO**
19. ☐ Pipe Seam ⇒ ☐ LF ERW ☐ DSAW ☐ Seamless ☐ Flash Weld
- PIPE_SEAM** ☐ HF ERW ☐ SAW ☐ Spiral ☐ Other **PIPE_SEAMO**

Complete a-g if you indicate **any** cause in part H5.

- a. Type of failure: **FAIL_TYPE** **FAIL_TYPE_TXT**
☐ 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 accident occurred? ☐ Yes, complete d-g ☐ No **PRS_TEST**
- d. Date of test: ____/____/____ yr. ____/____/____ mo. ____/____/____ day **TEST_DATE**
- e. Test medium: **TEST_MED** **TEST_MED_TXT** ☐ Water ☐ Inert Gas ☐ Other **TEST_MEDO**
- f. Time held at test pressure: ____/____/____ hr. **TEST_TP**
- g. Estimated test pressure at point of accident: **TEST_PRS** PSIG

H6 – EQUIPMENT

20. ☐ **MALFUNC** **MALFUNC_TXT** ⇒ ☐ Control valve ☐ Instrumentation ☐ SCADA ☐ Communications
☐ Block valve ☐ Relief valve ☐ Power failure ☐ Other **MALFUNCO**
21. ☐ **THREADS** **THREADS_TXT** ⇒ ☐ Nipples ☐ Valve Threads ☐ Dresser Couplings ☐ Other **THREADSO**
22. ☐ **SEAL** **SEAL_TXT** ⇒ ☐ Gasket ☐ O-Ring ☐ Seal/Pump Packing ☐ Other **SEALO**

H7 – INCORRECT OPERATION

23. ☐ **IO_TYPE** **IO_TYPE_TXT**
a. Type: ☐ Inadequate Procedures ☐ Inadequate Safety Practices ☐ Failure to Follow Procedures
☐ Other **IO_TYPEO**
- b. Number of employees involved who failed a post-accident test: drug test: ____/____/____ **IO_DRUG** alcohol test ____/____/____ **IO_ALCO**

H8 – OTHER

24. ☐ **MISC** **MISC_TXT** Miscellaneous, describe: _____
25. ☐ **UNKNOWN** **UNKNOWN_TXT** Unknown
☐ Investigation Complete ☐ Still Under Investigation (submit a supplemental report when investigation is complete)

PART I – NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

(Attach additional sheets as necessary)

NARRATIVE

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

Field Name	Field Name Description
IYEAR	<i>Year accident occurred, derived from accident date</i>