


NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed \$100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed \$1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020	
 U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration	<b>Original Report Date:</b>		09/18/2020
	<b>No.</b>		20200256 - 34940 ----- (DOT Use Only)
<b>ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS</b>			
A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.			
<b>INSTRUCTIONS</b>			
<i><b>Important:</b> 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 PHMSA Pipeline Safety Community Web Page at <a href="http://www.phmsa.dot.gov/pipeline/library/forms">http://www.phmsa.dot.gov/pipeline/library/forms</a>.</i>			
<b>PART A - KEY REPORT INFORMATION</b>			
Report Type: <i>(select all that apply)</i>	<b>Original:</b>	<b>Supplemental:</b>	<b>Final:</b>
		<b>Yes</b>	
Last Revision Date:	03/02/2021		
1. Operator's OPS-issued Operator Identification Number (OPID):	31618		
2. Name of Operator	ENTERPRISE PRODUCTS OPERATING LLC		
3. Address of Operator:			
3a. Street Address	1100 Louisiana Street		
3b. City	HOUSTON		
3c. State	Texas		
3d. Zip Code	77002		
4. Local time (24-hr clock) and date of the Accident:	08/21/2020 08:02		
5. Location of Accident:			
Latitude / Longitude	[REDACTED]		
6. National Response Center Report Number (if applicable):	1285164		
7. Local time (24-hr clock) and date of initial telephonic report to the National Response Center (if applicable):	08/21/2020 10:12		
8. Commodity released: <i>(select only one, based on predominant volume released)</i>	HVL or Other Flammable or Toxic Fluid which is a Gas at Ambient Conditions		
- Specify Commodity Subtype:	Other HVL		
- If "Other" Subtype, Describe:	Propane		
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100			
9. Estimated volume of commodity released unintentionally (Barrels):	6,034.00		
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):			
12. Were there fatalities?	Yes		
- If Yes, specify the number in each category:			
12a. Operator employees	0		
12b. Contractor employees working for the Operator	0		
12c. Non-Operator emergency responders	0		
12d. Workers working on the right-of-way, but NOT associated with this Operator	5		
12e. General public	0		
12f. Total fatalities (sum of above)	5		
13. Were there injuries requiring inpatient hospitalization?	Yes		
- If Yes, specify the number in each category:			
13a. Operator employees	0		
13b. Contractor employees working for the Operator	0		
13c. Non-Operator emergency responders	0		
13d. Workers working on the right-of-way, but NOT associated with this Operator	4		
13e. General public	0		
13f. Total injuries (sum of above)	4		

14. Was the pipeline/facility shut down due to the Accident?	No
- If No, Explain:	The line operates as a batch line and was not flowing at the time.
- If Yes, complete Questions 14a and 14b: (use local time, 24-hr clock)	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	Yes
16. Did the commodity explode?	Yes
17. Number of general public evacuated:	0
18. Time sequence (use local time, 24-hour clock):	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	08/21/2020 08:02
18b. Local time Operator resources arrived on site:	08/21/2020 08:30
<b>PART B - ADDITIONAL LOCATION INFORMATION</b>	
1. Was the origin of the Accident onshore?	Yes
<i>If Yes, Complete Questions (2-12)</i>	
<i>If No, Complete Questions (13-15)</i>	
<b>- If Onshore:</b>	
2. State:	Texas
3. Zip Code:	78407
4. City:	Corpus Christi
5. County or Parish:	Nueces
6. Operator-designated location:	Survey Station No.
Specify:	171+97
7. Pipeline/Facility name:	Viola to Cantwell
8. Segment name/ID:	TX219
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Pipeline Right-of-way
11. Area of Accident (as found):	Underground
Specify:	Other
- If Other, Describe:	underwater
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
<b>- If Offshore:</b>	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	
<b>PART C - ADDITIONAL FACILITY INFORMATION</b>	
1. Is the pipeline or facility:	Intrastate
2. Part of system involved in Accident:	Onshore Pipeline, Including Valve Sites
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Pipe
- If Pipe, specify:	Pipe Body
3a. Nominal diameter of pipe (in):	16

3b. Wall thickness (in):	.219
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	46,000
3d. Pipe specification:	API-5L
3e. Pipe Seam, specify:	Longitudinal ERW - Unknown Frequency
- If Other, Describe:	
3f. Pipe manufacturer:	Unknown
3g. Year of manufacture:	Unknown
3h. Pipeline coating type at point of Accident, specify:	Other
- If Other, Describe:	Coal Tar and Concrete
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	1968
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Mechanical Puncture
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	7.00
in. (circumferential)	5.00
- If Leak - Select Type:	
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
<b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b>	
1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	No
3. Long term impact assessment performed or planned:	No
4. Anticipated remediation:	No
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	No
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	
- Groundwater	
- Drinking water: (Select one or both)	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	
5c. Name of body of water, if commonly known:	
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
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): (Select all that apply)	
- Commercially Navigable Waterway:	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	Yes

Integrity Management Program?	
- High Population Area:	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- Other Populated Area	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	\$ 0
8b. Estimated cost of commodity lost	\$ 121,600
8c. Estimated cost of Operator's property damage & repairs	\$ 1,967,000
8d. Estimated cost of Operator's emergency response	\$ 0
8e. Estimated cost of Operator's environmental remediation	\$ 0
8f. Estimated other costs	\$ 0
Describe:	0
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	\$ 2,088,600
<b>PART E - ADDITIONAL OPERATING INFORMATION</b>	
1. Estimated pressure at the point and time of the Accident (psig):	257.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	787.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed 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
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	Yes
- If Yes - (Complete 5a. – 5f below) effective 12-2012, changed to "(Complete 5.a – 5.e below)"	
5a. Type of upstream valve used to initially isolate release source:	Manual
5b. Type of downstream valve used to initially isolate release source:	Manual
5c. Length of segment isolated between valves (ft):	29,040
5d. Is the pipeline configured to accommodate internal inspection tools?	Yes
- If No, Which physical features limit tool accommodation? (select all that apply)	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	No
- If Yes, Which operational factors complicate execution? (select all that apply)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	Yes
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	Yes
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	Yes
- If Yes:	
7a. Was it operating at the time of the Accident?	Yes
7b. Was it fully functional at the time of the Accident?	Yes
7c. 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
7d. 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
8. How was the Accident initially identified for the Operator?	Controller
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Operator employee
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?	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)
- If 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)	The pipeline was struck by a third-party performing dredging operation.
- If 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	
- 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:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	
<b>PART F - DRUG &amp; ALCOHOL TESTING INFORMATION</b>	

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	Yes
- If Yes:	
1a. Specify how many were tested:	1
1b. Specify how many failed:	0
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	
<b>PART G – APPARENT CAUSE</b>	
<i>Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).</i>	
<b>Apparent Cause:</b>	G3 - Excavation Damage
<b>G1 - Corrosion Failure</b> - only one sub-cause can be picked from shaded left-hand column	
<b>Corrosion Failure – Sub-Cause:</b>	
<b>- If External Corrosion:</b>	
1. Results of visual examination:	
	- If Other, Descr be:
2. Type of corrosion: <i>(select all that apply)</i>	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
	- If Other, Descr be:
3. The type(s) of corrosion selected in Question 2 is based on the following: <i>(select all that apply)</i>	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
	- If Other, Descr be:
4. Was the failed item buried under the ground?	
- If Yes :	
<input type="checkbox"/> 4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
	If Yes - Year protection started:
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
	If "Yes, CP Annual Survey" – Most recent year conducted:
	If "Yes, Close Interval Survey" – Most recent year conducted:
	If "Yes, Other CP Survey" – Most recent year conducted:
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
<b>- If Internal Corrosion:</b>	
6. Results of visual examination:	
- Other:	
7. Type of corrosion <i>(select all that apply):</i> -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
	- If Other, Descr be:
8. The cause(s) of corrosion selected in Question 7 is based on the following <i>(select all that apply):</i> -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	

- If Other, Describe:		
9. Location of corrosion (select all that apply): -		
- Low point in pipe		
- E bow		
- Other:		
- If Other, Describe:		
10. Was the commodity treated with corrosion inhibitors or biocides?		
11. Was the interior coated or lined with protective coating?		
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?		
13. Were corrosion coupons routinely utilized?		
<b>Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.</b>		
14. List the year of the most recent inspections:		
14a. API Std 653 Out-of-Service Inspection		
- No Out-of-Service Inspection completed		
14b. API Std 653 In-Service Inspection		
- No In-Service Inspection completed		
<b>Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.</b>		
15. Has one or more internal inspection tool collected data at the point of the Accident?		
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -		
- Magnetic Flux Leakage Tool		
Most recent year:		
- Ultrasonic		
Most recent year:		
- Geometry		
Most recent year:		
- Caliper		
Most recent year:		
- Crack		
Most recent year:		
- Hard Spot		
Most recent year:		
- Combination Tool		
Most recent year:		
- Transverse Field/Triaxial		
Most recent year:		
- Other		
Most recent year:		
Describe:		
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?		
If Yes -		
Most recent year tested:		
Test pressure:		
17. Has one or more Direct Assessment been conducted on this segment?		
- If Yes, and an investigative dig was conducted at the point of the Accident::		
Most recent year conducted:		
- If Yes, but the point of the Accident was not identified as a dig site:		
Most recent year conducted:		
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?		
18a. 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:		
- Radiography		
Most recent year conducted:		
- Guided Wave Ultrasonic		
Most recent year conducted:		
- Handheld Ultrasonic Tool		
Most recent year conducted:		
- Wet Magnetic Particle Test		
Most recent year conducted:		
- Dry Magnetic Particle Test		
Most recent year conducted:		
- Other		
Most recent year conducted:		
Describe:		

<b>G2 - Natural Force Damage</b> - only one <b>sub-cause</b> can be picked from shaded left-handed column	
<b>Natural Force Damage – Sub-Cause:</b>	
<b>- If Earth Movement, NOT due to Heavy Rains/Floods:</b>	
1. Specify:	
	- If Other, Describe:
<b>- If Heavy Rains/Floods:</b>	
2. Specify:	
	- If Other, Describe:
<b>- If Lightning:</b>	
3. Specify:	
<b>- If Temperature:</b>	
4. Specify:	
	- If Other, Describe:
<b>- If Other Natural Force Damage:</b>	
5. Describe:	
<b>Complete the following if any Natural Force Damage sub-cause is selected.</b>	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: <i>(select all that apply)</i>	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
	- If Other, Describe:
<b>G3 - Excavation Damage</b> - only one <b>sub-cause</b> can be picked from shaded left-hand column	
<b>Excavation Damage – Sub-Cause:</b>	Excavation Damage by Third Party
<b>- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.</b>	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	Most recent year conducted:
- Ultrasonic	Most recent year conducted:
- Geometry	Most recent year conducted:
- Caliper	Most recent year conducted:
- Crack	Most recent year conducted:
- Hard Spot	Most recent year conducted:
- Combination Tool	Most recent year conducted:
- Transverse Field/Triaxial	Most recent year conducted:
- Other	Most recent year conducted:
	Describe:
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
	Most recent year tested:
	Test pressure (psig):
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
	Most recent year conducted:
- If Yes, but the point of the Accident was not identified as a dig site:	
	Most recent year conducted:
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	



5a. 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:	
- Radiography	Most recent year conducted:
- Guided Wave Ultrasonic	Most recent year conducted:
- Handheld Ultrasonic Tool	Most recent year conducted:
- Wet Magnetic Particle Test	Most recent year conducted:
- Dry Magnetic Particle Test	Most recent year conducted:
- Other	Most recent year conducted:
Describe:	
<b>Complete the following if Excavation Damage by Third Party is selected as the sub-cause.</b>	
6. Did the operator get prior notification of the excavation activity?	Yes
6a. If Yes, Notification received from: <i>(select all that apply)</i> -	
- One-Call System	Yes
- Excavator	Yes
- Contractor	
- Landowner	
<b>Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.</b>	
7. Do you want PHMSA to upload the following information to CGA-DIRT ( <a href="http://www.cga-dirt.com">www.cga-dirt.com</a> )?	No
8. Right-of-Way where event occurred: <i>(select all that apply)</i> -	
- Public	
- If "Public", Specify:	
- Private	Yes
- If "Private", Specify:	Private Business
- Pipeline Property/Easement	Yes
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	Contractor
10. Type of excavation equipment:	Unknown/Other
11. Type of work performed:	Unknown/Other
12. Was the One-Call Center notified?	Yes
12a. If Yes, specify ticket number:	TX2067555147
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	Texas811
13. Type of Locator:	Utility Owner
14. Were facility locate marks visible in the area of excavation?	Yes
15. Were facilities marked correctly?	Yes
16. Did the damage cause an interruption in service?	Yes
16a. If Yes, specify duration of the interruption (hours)	1,488
17. Description of the CGA-DIRT Root Cause <i>(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):</i>	
Root Cause:	Other
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	The accident is still under investigation
<b>G4 - Other Outside Force Damage - only one sub-cause can be selected from the shaded left-hand column</b>	
<b>Other Outside Force Damage – Sub-Cause:</b>	
<b>- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:</b>	
1. Vehicle/Equipment operated by:	
<b>- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:</b>	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	

- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
<b>- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.</b>	
3. Has one or more internal inspection tool collected data at the point of the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	Most recent year conducted:
- Ultrasonic	Most recent year conducted:
- Geometry	Most recent year conducted:
- Caliper	Most recent year conducted:
- Crack	Most recent year conducted:
- Hard Spot	Most recent year conducted:
- Combination Tool	Most recent year conducted:
- Transverse Field/Triaxial	Most recent year conducted:
- Other	Most recent year conducted:
	Describe:
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	Most recent year tested:
	Test pressure (psig):
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	Most recent year conducted:
- If Yes, but the point of the Accident was not identified as a dig site:	Most recent year conducted:
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. 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:	
- Radiography	Most recent year conducted:
- Guided Wave Ultrasonic	Most recent year conducted:
- Handheld Ultrasonic Tool	Most recent year conducted:
- Wet Magnetic Particle Test	Most recent year conducted:
- Dry Magnetic Particle Test	Most recent year conducted:
- Other	Most recent year conducted:
	Describe:
<b>- If Intentional Damage:</b>	
8. Specify:	
	- If Other, Describe:
<b>- If Other Outside Force Damage:</b>	
9. Describe:	
<b>G5 - Material Failure of Pipe or Weld - only one sub-cause can be selected from the shaded left-hand column</b>	
<b>Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."</b>	
<b>Material Failure of Pipe or Weld – Sub-Cause:</b>	
1. The sub-cause shown above is based on the following: <i>(select all that apply)</i>	

- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	
<b>- If Construction, Installation, or Fabrication-related:</b>	
2. List contributing factors: <i>(select all that apply)</i>	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
<b>- If Environmental Cracking-related:</b>	
3. Specify:	
- If Other - Describe:	
<b>Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.</b>	
4. Additional factors: <i>(select all that apply)</i> :	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	Most recent year run:
- Ultrasonic	Most recent year run:
- Geometry	Most recent year run:
- Caliper	Most recent year run:
- Crack	Most recent year run:
- Hard Spot	Most recent year run:
- Combination Tool	Most recent year run:
- Transverse Field/Triaxial	Most recent year run:
- Other	Most recent year run:
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. 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: -	

- Radiography	Most recent year conducted:	
- Guided Wave Ultrasonic	Most recent year conducted:	
- Handheld Ultrasonic Tool	Most recent year conducted:	
- Wet Magnetic Particle Test	Most recent year conducted:	
- Dry Magnetic Particle Test	Most recent year conducted:	
- Other	Most recent year conducted:	
	Describe:	
<b>G6 – Equipment Failure</b> - only one <b>sub-cause</b> can be selected from the shaded left-hand column		
<b>Equipment Failure – Sub-Cause:</b>		
<b>- If Malfunction of Control/Relief Equipment:</b>		
1. Specify: <i>(select all that apply)</i> -		
- Control Valve		
- Instrumentation		
- SCADA		
- Communications		
- Block Valve		
- Check Valve		
- Relief Valve		
- Power Failure		
- Stopple/Control Fitting		
- ESD System Failure		
- Other		
	- If Other – Describe:	
<b>- If Pump or Pump-related Equipment:</b>		
2. Specify:		
	- If Other – Describe:	
<b>- If Threaded Connection/Coupling Failure:</b>		
3. Specify:		
	- If Other – Describe:	
<b>- If Non-threaded Connection Failure:</b>		
4. Specify:		
	- If Other – Describe:	
<b>- If Other Equipment Failure:</b>		
5. Describe:		
<b>Complete the following if any Equipment Failure sub-cause is selected.</b>		
6. Additional factors that contributed to the equipment failure: <i>(select all that apply)</i>		
- Excessive vibration		
- 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		
- Breakdown of soft goods due to compatibility issues with transported commodity		
- Valve vault or valve can contributed to the release		
- Alarm/status failure		
- Misalignment		
- Thermal stress		
- Other		
	- If Other, Describe:	
<b>G7 - Incorrect Operation</b> - only one <b>sub-cause</b> can be selected from the shaded left-hand column		
<b>Incorrect Operation – Sub-Cause:</b>		

<b>- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow</b>	
1. Specify:	
- If Other, Descr be:	
<b>- If Other Incorrect Operation</b>	
2. Descr be:	
<b>Complete the following if any Incorrect Operation sub-cause is selected.</b>	
3. Was this Accident related to ( <i>select all that apply</i> ): -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Descr be:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
<b>G8 - Other Accident Cause</b> - only one <b>sub-cause</b> can be selected from the shaded left-hand column	
<b>Other Accident Cause – Sub-Cause:</b>	
<b>- If Miscellaneous:</b>	
1. Descr be:	
<b>- If Unknown:</b>	
2. Specify:	
<b>PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT</b>	
<p>In June 2020, Enterprise became aware that Orion Marine Group (Orion) was contracted by Epic Midstream to construct a bulkhead and barge dock in the Tule Lake Channel. The bulkhead construction would involve adding 5' of cover over Enterprise's Line 219. Through communications and conversations with Orion personnel in June and July 2020, Enterprise was told the dredging activities in the channel would be approximately 60' off the shoreline. On 7/16/20, Enterprise and Orion personnel met at the worksite. When the group arrived, cane poles installed in 2019 to mark Line 219 were still present in the water. Although the current scope of work didn't involve dredging within 50' of Line 219, Enterprise marked Line 219 as a courtesy because Orion may need to place an anchor in the vicinity of Line 219. Enterprise located and marked Line 219 on the shoreline and, for the portions of Line 219 in the water, Enterprise supplemented the existing cane poles with cane poles provided by Orion. The cane poles were placed ~5' to ~10' away from Line 219 (closer to the work area) to provide a "buffer" between the work area and Line 219. During this meeting, Orion confirmed that no work would be performed near Line 219, and Enterprise instructed Orion to contact them if there were any changes in the plans.</p> <p>On 8/21/20 at 8:02 AM, Enterprise's Controller received an alarm indicating low pressure at Viola station. At 8:05 AM, the control valve at Viola station, located downstream of meter 1004, automatically closed. At ~8:07 AM, the Viola meter registered no flow on the pipeline. At 8:09 AM, Enterprise Controller called local Operations Technicians to investigate the cause of the loss of pressure. Between ~8:30 AM and ~8:45 AM, Operations Technicians arrived at Viola Station (upstream of the incident site) and Origin Station (downstream of the incident site) to manually close valves at both locations to isolate the pipeline. At 9:05 AM, valves at Cantwell Station (upstream of Origin Station) were closed to further isolate the pipeline. At 9:47 AM, Pipeline Control received a call from the Port of Corpus Christi notifying them that a dredging operation had struck a pipeline and there was a fire. At ~9:53 AM, Local Enterprise Operations confirmed, based on available information, that line 219 was struck by a 3rd party. Enterprise called the NRC at 10:12 AM and the report was taken at 10:52 AM. Additional NRC notifications made: #1285319 (48-hr update) and #1285505. TRRC was notified at 10:18 AM (Incident #2251).</p> <p>On 8/24/20, an underwater inspection found evidence of mechanical damage and two punctures in the pipeline. Enterprise is participating in the National Transportation Safety Board's (NTSB) investigation of the incident. The damaged pipeline was cut out and replaced and the pipeline returned to service on 10/22/20. The damaged pipeline segment is in NTSB's custody and will be analyzed as part of the investigation.</p> <p>Notes:  A13d: Based on information available to date, we understand that 5 individuals working for Orion sustained injuries that required in-patient hospitalization with at least one overnight stay. On 2/8/21, Enterprise was notified of a 3rd party fatality; Part A 12d and 13d is adjusted accordingly.  A18b: This was the estimated time of arrival of the Operations Technician at Viola Station based on phone log.  B11a: The depth of water over the pipeline varies based on tide levels.  C6: There were two punctures at the 6 o'clock position of varying sizes (7" x 5" and 5" x 2.5").  G3.9: Orion was not working for Enterprise.  G3.10-11: The work being performed at the time was dredging.  G3.12-15: The One-call ticket was cleared by Enterprise based on information provided by Orion stating the work would be ~60' from the shoreline. The One-Call ticket further indicated that the method of excavation would be hydroexcavation. However, Enterprise located and marked Line 219 as a courtesy at the request of Orion.</p>	
<b>PART I - PREPARER AND AUTHORIZED SIGNATURE</b>	
Preparer's Name	Nhan Truong
Preparer's Title	Manager Compliance
Preparer's Telephone Number	
Preparer's E-mail Address	
Preparer's Facsimile Number	

Authorized Signer Name	Nhan Truong
Authorized Signer Title	Manager Compliance
Authorized Signer Telephone Number	[REDACTED]
Authorized Signer Email	[REDACTED]
Date	03/02/2021