S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/ \bar{C} – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

A completed **Standard Inspection Checklist, Cover Letter and Field Report** is to be submitted to the Chief Engineer within 30 days from completion of the inspection.

	Inspection Report							
Inspection ID/Docket number	•	8019						
Inspector Name & Submit Date		Dave Cullom 1/22/2020						
Chief Eng. Name & Review Date		Joe Subsits, 1/23/2020						
		Operator Information						
Name of Operator:	Sol	vay Chemicals Inc.		OP ID #:	32399			
Name of Unit(s):	Hea	dquarters						
Records Location:	350	0 Industrial Way, Longview, WA 98632						
Date(s) of Last (unit) Inspection:	5/17	7/2017	Inspection Date(s):	1/8/2020-1/	9/2020			

Inspection Summary:

No probable violations or areas of concern were found during this inspection. In 2020, Solvay's status was changed from distribution to transmission.

Solvay Chemicals operates a 6" hydrogen pipeline for approximately 481 feet across State Highway 432 in Longview, WA. The line is not odorized and is leak surveyed monthly. We were able to perform interrupted cathodic protection testing to obtain IR free readings during this inspection.

Other inspections scheduled for Solvay in 2020 are:

An O&M plan and procedure review (transmission) technical assistance inspection.

A Drug and Alcohol Program inspection.

An Operator Qualification inspection.

HQ Address:		Syste	m/Unit Name &	Address:
3333 Richmond Ave	e	3500	Industrial Way	
Houston, TX 77098		Longy	view, WA 98632	
Co. Official:	James Daly	Phon	21000	360-577-7800
Phone No.:	713-525-6830	Fax N	o.:	
Fax No.:		Emer	gency Phone No).:
Emergency Phone	No.:			
Persons In	terviewed	Title		Phone No.
Pascal	Mansy	Engineering & Maintenar	ce Manager	360-577-7800
Eric I	arson	Gas Systems Super	visor	503-692-0995

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	Toom inc	pection was performed (Within the past five ye	and enter appropriate date)		Date:	
M		C Inspector reviewed the O & M Manual (Sin		manual by	Date:	2018 DNorwood
		GAS SYST	TEM OPERATIONS			
Gas Su	pplier	Westlake				
Numbe	r of report	able safety related conditions last year 0	Number of deferred leaks in syst	em 0		
Numbe	er of <u>non-re</u>	eportable safety related conditions last year 0	Number of third party hits last ye	ear 0		
	& 4 areas)	sion pipeline within unit (total miles and miles in .091 miles – No part of pipeline is in a class 3				
		Operating Pressure(s):	MAOP (Within last year) Act		al Operat	ting Pressure Inspection)
Feeder	:		150 psig	~60 psig		
Town:						
Other:						
Does th	ne operator	have any transmission pipelines?	Yes			
Compr	essor static	ons? Use Attachment 4.	No			
Have in	ncident rep	orts and the annual report been reviewed for accurac	cy and analyzed for trends and opera	ator issues? Y	∕es ⊠	No□
~	ents:					

Pipe Specifications:			
Year Installed (Range)	2006	Pipe Diameter	6.625"
Material Type	MTR states material is X42/52 Solvay and prior inspections has it listed as Grade B (35,000YS) .280 WT. WPS SMAW-6R3 also substantiates the material being X52 since the welding procedure is qualified for 42ksi to 65ksi yield strength pipe.	Line Pipe Specification Used	API5L
Mileage	.091 mi – 481 ft	SMYS %	4.7% (Using 52ksi material instead of grade B for a Class 1 location)

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			Alternatively, it is 5.1% using Grade B material in a Class 1
			location.
Supply Company	Ipsco	Class Locations	1

		REPORTING RECORDS	S	U	N/A	N/C
1.	RCW 81.88.080	Pipeline Mapping System: Has the operator submitted information into NPMS database along with changes made after the original submission and have they provided accurate maps (or updates) of pipelines, operating over two hundred fifty pounds per square inch gauge, to specifications developed by the commission sufficient to meet the needs of first responders? **Notes – The operator's status has changed from distribution to transmission starting in 1/2020. There will be some time needed for them to create a submission to the NPMS and add this requirement to their Plans and Procedures. ***				X
2.	480-93-200(1)	Telephonic Reports to UTC Pipeline Safety Incident Notification 1-888-321-9144 (Within 2 hours) for events which (regardless of cause);				
3.	480-93-200(1)(a)	Result in a fatality or personal injury requiring hospitalization;			X	
4.	480-93-200(1)(b)	Results in damage to property of the operator and others of a combined total exceeding fifty thousand dollars; Note: Report all damages regardless if claim was filed with pipeline company or not.			X	
5.	480-93-200(1)(c)	Results in the evacuation of a building, or high occupancy structures or areas;			X	
6.	480-93-200(1)(d)	Results in the unintentional ignition of gas;			X	
7.	480-93-200(1)(e)	Results in the unscheduled interruption of service furnished by any operator to twenty five or more distribution customers;			X	
8.	480-93-200(1)(f)	Results in a pipeline or system pressure exceeding the MAOP plus ten percent or the maximum pressure allowed by proximity considerations outlined in WAC 480-93-020;			X	
9.	480-93-200(1)(g)	Is significant, in the judgment of the operator, even though it does not meet the criteria of (a) through (e) of this subsection; or			X	
10.	480-93-200(2)	Telephonic Reports to UTC Pipeline Safety Incident Notification 1-888-321-9144 (Within 24 hours) for;			X	
11.	480-93-200(2)(a)	The uncontrolled release of gas for more than two hours;			X	
12.	480-93-200(2)(b)	The taking of a high pressure supply or transmission pipeline or a major distribution supply pipeline out of service;			X	
13.	480-93-200(2)(c)	A pipeline operating at low pressure dropping below the safe operating conditions of attached appliances and gas equipment; or			X	
14.	480-93-200(2)(d)	A pipeline pressure exceeding the MAOP			X	

Comments:

2-14 - The operator has not had any of these conditions occur during this inspection time period.

15.	480-93-200(5)	Written incident reports (within 30 days) including the following;	S	U	N/A	N/C
16.	480-93-200(4)(a)	Name(s) and address(es) of any person or persons injured or killed, or whose property was damaged;			X	
17.	480-93-200(4)(b)	The extent of injuries and damage;			X	
18.	480-93-200(4)(c)	A description of the incident or hazardous condition including the date, time, and place, and reason why the incident occurred. If more than one reportable condition arises from a single incident, each must be included in the report;			X	
19.	480-93-200(4)(d)	A description of the gas pipeline involved in the incident or hazardous condition, the system operating pressure at that time, and the MAOP of the facilities involved;			X	
20.	480-93-200(4)(e)	The date and time the gas pipeline company was first notified of the incident;			X	
21.	480-93-200(4)(f)	The date and time the ((operators')) gas pipeline company's first responders arrived on-site;			X	
22.	480-93-200(4)(g)	The date and time the gas ((facility)) pipeline was made safe;			X	

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23.	480-93-200(4)(h)	The date, time, and type of any temporary or permanent repair that was made;		X	
24.	480-93-200(4)(i)	The cost of the incident to the ((operator)) gas pipeline company;		X	
25.	480-93-200(4)(j)	Line type;		X	
26.	480-93-200(4)(k)	City and county of incident; and		X	
27.	480-93-200(4)(1)	Any other information deemed necessary by the commission.		X	
28.	480-93-200(5)	Submit a supplemental report if required information becomes available		X	
29.	480-93-200(6)	Written report within 45 days of receiving the failure analysis of any incident or hazardous condition due to construction defects or material failure		X	

Comments:

Notes 15-29 - The operator has not had any of these conditions occur during this inspection time period.

			1		
30.	480-93-200(7)	Filing Reports of Damage to Gas Pipeline Facilities to the commission. (eff 4/1/2013)			
		(Via the commission's Virtual DIRT system or on-line damage reporting form)			
31.	49 CFR 192.617	Did the operator have appropriate records of previous accidents and failures including third party damage and leak response to ensure appropriate operator response?		X	
32.	480-93-200(7)(a)	Does the operator report to the commission the requirements set forth in RCW 19.122.053(3) (a) through (n)		X	
33.	480-93-200(7)(b)	Does the operator report the name, address, and phone number of the person or entity that the company has reason to believe may have caused damage due to excavations conducted without facility locates first being completed?		Х	
34.	480-93-200(7)(c)	Does the operator retain all damage and damage claim records it creates related to damage events reported under 93-200(7)(b), including photographs and documentation supporting the conclusion that a facilities locate was not completed? Note: Records maintained for two years and made available to the commission upon request.		X	
35.	480-93-200(8)	Does the operator provide the following information to excavators who damage gas pipeline facilities?			
36.	480-93-200(8)(a)	Notification requirements for excavators under RCW 19.122.050(1)		X	
37.	480-93-200(8)(b)	A description of the excavator's responsibilities for reporting damages under RCW 19.122.053; and		X	
38.	480-93-200(8)(c)	 Information concerning the safety committee referenced under RCW 19.122.130, including committee contact information, and the process for filing a complaint with the safety committee. 		X	
39.	480-93-200(9)	Reports to the commission only when the operator or its contractor observes or becomes aware of the following activities • An excavator digs within thirty-five feet of a transmission pipeline, as defined by RCW 19.122.020(26) without first obtaining a facilities locate; (200(9)(a) • A person intentionally damages or removes marks indicating the location or presence of gas pipeline facilities. 200(9)(b)		X	
40.	480-93-200(7)	Filing Reports of Damage to Gas Pipeline Facilities to the commission. (eff 4/1/2013) (Via the commission's Virtual DIRT system or on-line damage reporting form)***Notes – This is in Solvay's manual on page 11.***	X		
41.	442(c)(6)	Does the operator have directional drilling/boring procedures which include taking actions necessary to protect their facilities from the dangers posed by drilling and other trenchless technologies? ***Notes – NMF, Solvay's maintenance contractor, has safe boring practices in their OQ construction manual. It is contained within Solvay's O&M manual.***	X		

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					ı	
42.		Does the operator have a quality assurance program in place for monitoring the locating and marking of facilities? Do operators conduct regular field audits of the performance of locators/contractors and take action when necessary? (CGA Best Practices v. 6.0, Best Practice 4-18. Recommended only, not required) ***Notes – Solvay performs an annual review on contractor performance. However, no specific QA program for locating was identified.***	X			
43.		Does operator including performance measures in facility locating services contracts with corresponding and meaningful incentives and penalties? ***Notes – Solvay performs an annual review on contractor performance***	X			
44.	Damage Prevention (Operator Internal Performance	Do locate contractors address performance problems for persons performing locating services through mechanisms such as re-training, process change, or changes in staffing levels ***Notes – NMF has procedures and evaluation checklists contained within their OQ manual.***	Х			
45.	Measures) PHMSA – State Program Evaluation	Does the operator periodically review the Operator Qualification plan criteria and methods used to qualify personnel to perform locates? ***Notes – Solvay performs an annual review on contractor performance and any changes to plans or procedures.***	X			
46.	Questions	Review operator locating and excavation <u>procedures</u> for compliance with state law and regulations. ***Notes – Locate procedures were reviewed from the inspection time period of 2017-2019 and locate requests are being processed within the required time period.***	X			
47.		Are locates are being made within the timeframes required by state law and regulations? Examine record sample. ***Notes - I reviewed several record samples. No exceedances noted.***	X			
48.		Are locating and excavating personnel properly <u>qualified</u> in accordance with the operator's Operator Qualification plan and with federal and state requirements? ***Notes – NMF is qualified to perform locating for Solvay.***	X			
49.	480-93-200(10)	Annual Reports filed with the commission no later than March 15 for the proceeding calendar year. (<i>NOTE: PHMSA extension to June 15, 2013 for the year 2012</i>).	S	U	N/A	N/C
50.	480-93-200(10)(a)	A copy of PHMSA F-7100.1-1 and F-7100.2-1 annual report required by U.S. Department of Transportation, PHMSA/Office of Pipeline Safety ***Notes – The operator has been filing as a distribution system. They will be filing as a transmission system for March 15, 2020.***	X			
51.	49 CFR 195.402	Did the operator follow written procedures pertaining to notification of excavation, marking, positive response ant the availability and use of the one call system? ***Notes – The operator uses One-Call and receives requests for locates but is able to clear them without having to perform locates. I reviewed several records samples. Solvay has not had to call NMF and have them perform locates during this inspection time period.	х			
52.	480-93-200(10)(b)	Reports detailing all construction defects and material failures resulting in leakage. Categorizing the different types of construction defects and material failures. The report must include the following: (i) Types and numbers of construction defects; and (ii) Types and numbers of material failures.			X	
53.		***Notes – Solvay has not had any construction defects or material failures.*** Providing updated emergency contact information to the commission and appropriate			-	
	480-93-200(11)	officials of all municipalities where gas pipeline companies have facilities.	X			
54.	480-93-200(12)	Providing by email, reports of daily construction and repair activities no later than 10:00 a.m. ***Notes – Solvay has not performed any construction since 2006.***			X	
55.		Submitting copy of DOT Drug and Alcohol Testing MIS Data Collection Form when	X			



***Notes 31-39 - The operator has not had any of these conditions occur during this inspection time period. ***

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		CONSTRUCTION RECORDS	S	U	N/A	N/C
56.	480-93-080(1)(b)	Use of testing equipment to record and document essential variables			X	
57.	480-93-115(2)	Test leads on casings (without vents) installed after 9/05/1992			X	
58.	480-93-115(3)	Sealing ends of casings or conduits on transmission pipelines and main			X	
59.	480-93-115(4)	Sealing ends (nearest building wall) of casings or conduits on services			X	
60.	480-93-160(1)	Detailed report filed 45 days prior to construction or replacement of transmission pipelines \geq 100 feet in length			X	
61.	480-93-170(3)	Pressure Tests Performed on new and replacement pipelines			X	
62.	480-93-170(10)	Pressure Testing Equipment checked for Accuracy/Intervals (Manufacturers recommendation or operators schedule)			X	
63.	480-93-175(1)	Study prepared and approved prior to moving and lowering of metallic pipelines > 60 psig			X	

Comments: ***Notes – 56-63 – There has been no new construction since 2006***

		OPERATIONS and MAINTENANCE RECORDS	S	U	N/A	N/C
64.		Damage Prevention Program				
65.	480-93-250(3)	Are locates are being made within the timeframes required by RCW 19.122? Examine record sample. ***Notes – I reviewed several requests for locates from the One Call system and the operator has been resolving the requests within the allowed time frame.***	X			
66.	480-93-015(1)	Odorization of Gas – Concentrations adequate? ***Notes – The line is not odorized***			X	
67.	480-93-015(2)	Monthly Odorant Sniff Testing ***Notes – The line is not odorized***			X	
68.	480-93-015(3)	Prompt action taken to investigate and remediate odorant concentrations not meeting the minimum requirements ***Notes – The line is not odorized***			X	
69.	480-93-015(4)	Odorant Testing Equipment Calibration/Intervals (Annually or Manufacturers Recommendation) ***Notes – The line is not odorized***			X	
70.	480-93-124(3)	Pipeline markers attached to bridges or other spans inspected? 1/yr(15 months) ***Notes – Solvay leak surveys ever month. The pipeline patrols are conducted every other month.***	X			
71.	480-93-124(4)	Markers reported missing or damaged replaced within 45 days? ***Notes – No markers reported missing or damaged***			X	
72.	480-93-185(1)	Reported gas leaks investigated promptly/graded/record retained ***Notes – No leaks have occurred on this system. ***			X	
73.	480-93-185(3)	Leaks originating from a foreign source reported promptly/notification by mail/record retained ***Notes – No foreign leaks have occurred on this system.***			X	
74.	480-93-187	Gas Leak records – Content ***Notes – Leak survey records were reviewed since 2017***	X			
75.	480-93-188(1)	Gas Leak surveys – Coverage ***Notes – Monthly leak survey records were reviewed since 2017***	X			
76.	480-93-188(2)	Gas detection instruments tested for accuracy/intervals (Mfct rec or monthly not to exceed 45 days) ***Notes - DPIR 9101446001 self-tests each time they are used. DP4 1500642013 calibrated 10-03-19.	X			
77.	480-93-188(3)	Leak survey frequency (Refer to Table Below) ***Notes – This line is leak surveyed once a month due to the commodity transported.***	X			

Business Districts (By 6/02/07)	1/yr (15 months)
High Occupancy Structures	1/yr (15 months)
Pipelines Operating ≥ 250 psig	1/yr (15 months)
Other Mains: CI, WI, copper, unprotected steel	2/yr (7.5 months)

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		OPERATIONS and MAINTENANCE RECORDS	S	U	N/A	N/C
78.	480-93-188(4)(a)	Special leak surveys - Prior to paving or resurfacing, following street alterations or repairs ***Notes - No special leak surveys have been necessary.***			X	
79.	480-93-188(4)(b)	Special leak surveys - areas where substructure construction occurs adjacent to underground gas facilities, and damage could have occurred***Notes – No special leak surveys have been necessary.***			X	
80.	480-93-188(4)(c)	Special leak surveys - Unstable soil areas where active gas lines could be affected***Notes - No special leak surveys have been necessary.***			X	
81.	480-93-188(4)(d)	Special leak surveys - areas and at times of unusual activity, such as earthquake, floods, and explosions***Notes – No special leak surveys have been necessary.***			X	
82.	480-93-188(4)(e)	Special leak surveys - After third-party excavation damage, operators must perform a gas leak survey to eliminate the possibility of multiple leaks and underground migration into nearby buildings. ***Notes - No special leak surveys have been necessary.***			Х	
83.	480-93-188(5)	Gas survey records: Retention/Content ***Notes – Solvay keeps records of all tests performed on the system.***	X			
84.	480-93-188(6)	Leak Survey Program/Self Audits. ***Notes – Solvay performs an annual review of contractor deliverables***	X			

Comments:		

CORROSION CONTROL RECORDS			S	U	N/A	N/C
85.	480-93-110(8)	CP test reading on all exposed facilities where coating has been removed ***Notes – Coating has not been removed during this inspection time period.***			X	
86.	480-93-110(2)	Remedial action taken within 90 days (Up to 30 additional days if other circumstances. Must document) .465(d) ***Notes – Low CP conditions have not occurred during this inspection time period***			Х	
87.	480-93-110(3)	CP Test Equipment and Instruments checked for Accuracy/Intervals (Mfct Rec or Opr Sched) ***Notes – Equipment is kept in calibration by NMF and was verified before the field portion of the inspection***	X			
88.	480-93-110(5)	Casings inspected/tested annually not to exceed fifteen months ***Notes – Casing readings are taken when the CP readings are taken every two months.***	X			
89.	480-93-110(5)(a)	Casings w/no test leads installed prior to 9/05/1992. Demonstrate other acceptable test methods. ***Notes – Casings were installed after 1992, but they have metal casing vents installed to check isolation of the carrier pipe and casing***			X	
90.	480-93-110(5)(b)	Possible shorted conditions – Perform confirmatory follow-up inspection within 90 days ***Notes – No shorted conditions noted for this inspection time period.***			X	
91.	480-93-110(5)(c)	Casing shorts cleared when practical ***Notes – No casing shorts were observed during the records review or field portion***			X	
92.	480-93-110(5)(d)	Shorted conditions leak surveyed within 90 days of discovery. Twice annually/7.5 months***Notes – No shorted conditions noted for this inspection time period.***			X	

Comments:			

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PIPELINE INSPECTION (Field)		S	U	N/A	N/C	
93.	480-93-015(1)	Odorization levels ***Notes – The line is not odorized***			X	
94.	480-93-115(2)	Casings – Test Leads (Casings w/o vents installed after 9/05/1992) ***Notes – Casings were installed after 1992, but they have metal casing vents installed to check isolation of the carrier pipe and casing***			X	

Comments:

NMF properly hooked up a current interrupter, performed instant-off readings, isolation PSP readings, and demonstrated atmospheric corrosion monitoring steps.

EXIT INTERVIEW				
Exit Interview Conducted? Yes Items Covered: Change in status from distribution to transmission and the need for the operator to have documentation	Date:	1/8/2020		

For PHMSA Advisory Bulletins, go to https://www.phmsa.dot.gov/regulations-fr/notices