

PHMSA Form 19 Question Set (IA Equivalent)
HAZARDOUS LIQUID INTEGRITY MANAGEMENT IMPLEMENTATION INSPECTION

Name of Operator: McChord Pipeline Co		
OPID No. 31049	Unit ID No.	
HQ Address: 3001 Marshall Avenue Tacoma, WA 98421	System/Unit Name & Address:	
Operator Official: Daniel H. Yoder Title: Phone: 253-680-3220 Emergency Phone/Cell: 253-593-6085	Address: City: State: Zip Code:	
Persons Interviewed	Title	Phone No.
Nicholas Peelo	Chief Engineer	253-680-6658
John Williamson	Senior Inspector	253-593-6085
Brady Winder	Engineering Manager	253-377-0915
State Representative(s):	Inspection Date(s) August 8-10, 2016	
Records Location:	Tacoma, WA	

Unit Description:
(Background data from AJ inspection) The McChord Pipeline is a buried intrastate pipeline 14.25 miles in length, constructed in 1966 with 6-inch nominal steel pipe grade B, wall thickness of 0.188 inch to 0.432 inch. The pipeline has a 720 psig MOP (36% SMYS) with a normal operating pressure at 450 psig (21% SMYS). The pipeline is divided into four sections with isolation valves between each section. The entire pipeline is within a HCA with about 400 foot elevation differential. The pipeline transports jet fuel from US Oil Refinery located in Tacoma near Commencement Bay to the McChord Air Base storage facility. Jurisdiction begins at the pump suction valves (P-1401) and ends at the custody transfer manifold valves downstream of the meters at McChord Air Force Base. The pipeline was hydrostatically tested in 1996, inline inspected in 2004 (GE pig), MFL pig completed in 2009 and Baker Hughes ran a calibration pig and a MFL tool in 2013.
Portion of Unit Inspected:
Entire pipeline (except McChord Meter station)

<p>Sat+ - Exceeds requirements/exemplary performance Sat - Meets requirements Con - "Concern" meets requirements, but is an area of recommendation and/or area that if not addressed may lead to non-compliance Unsat - Does not meet requirements N/A - Not Applicable N/C - Not Checked</p>
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Assessment and Repair - Repair Criteria (HCA)

2. Timely Discovery From the review of the results of selected ILI and remediation projects, did discovery of all anomalies occur promptly, but no later than 180 days of completion of the assessment? (AR.RCHCA.DISCOVERY.R) (detail) 195.452(h)(2)

Notes

SAT

Tool run date 10/30/14, report date 12/19/14

7. Pressure Reduction From the review of the results of ILI and remediation projects, was an acceptable pressure reduction promptly taken for each Immediate Repair condition or when a repair schedule could not be met? (AR.RCHCA.PRESSREDUCE.R) (detail) 195.452(l)(1)(ii) (95.404(a); 195.404 (b); 195.452(h)(1)(ii); 195.452(h)(4)(i); 195.55(a))

Notes

n/a-no pressure reduction

8. Categorization of Defects From the review of the results of integrity assessments and remediation projects, were there any defects that were not properly categorized? (AR.RCHCA.DEFECTCAT.R) (detail) 195.452(l)(1)(ii) (195.452(h)(4))

Notes

N/A-all categorized properly

10. IM Schedule Do records demonstrate that the operator has met the schedule for remediating a condition in accordance with 195.452(h)(3)? (AR.RCHCA.IMSCHEDULE.R) (detail) 195.452(l)(1)(ii) (195.452.(h)(3))

Notes

SAT

57th and Waller Rd ILI Dig 1/19-22/2015 Dent on top of pipe. Repair was a clockspring

11. Timely Remediation From the review of the results of selected ILI and remediation projects, were defects in segments that could affect an HCA remediated or dispositioned within the applicable mandatory time limits of 195.452(h)(4)? (AR.RCHCA.SCHEDULEIMPL.R) (detail) 195.452(l)(1)(ii) (195.452(h)(4))

Notes

SAT

57th and Waller Rd ILI Dig 1/19-22/2015 Dent on top of pipe. Repair was a clockspring

Assessment and Repair - Repair Criteria (O and M)

3. Remedial Actions (OM) Do the performance and documentation of remediation meet procedural requirements for repairs in both HCA and non-HCA? (AR.RCOM.REMEDIATIONOM.O) (detail) 195.422(a) (195.422(b); 195.402(a); 195.402(c)(14); 195.569; 195.579(c))

Notes

n/a-no remedial actions observed during this inspection

Assessment and Repair - External Corrosion Direct Assessment (ECDA)

4. ECDA Indirect Examination *Was the indirect examination performed in accordance with the operator's procedures and 195.588(b)(3)?* (AR.EC.ECDAINDIRECT.O) (detail) 195.588(c) (195.452(j)(5)(iii))

Notes

N/A-Operator does not use ECDA

6. ECDA Direct Examination *Was the direct examination performed in accordance with requirements?* (AR.EC.ECDADIRECT.O) (detail) 195.588(b)(4) (195.452(j)(5)(iii))

Notes

N/A Operator does not use ECDA

7. Post Assessment *Do records indicate that requirements were met for post assessment?* (AR.EC.ECDAPOSTASSESS.R) (detail) 195.589(c) (195.588(b)(5); 195.452(j)(3); 195.452(j)(4))

Notes

N/A Operator does not use ECDA

Assessment and Repair - In-Line Inspection (Smart Pigs)

9. IMP Baseline and/or Continual Assessments Prioritized Assessment Schedule *Does a review of records indicate that continual assessments are implemented as specified in the plan?* (AR.IL.ASSESSSCHEDULE.R) (detail) 195.452(l)(1)(ii) (195.452(b)(5); 195.452(c); 195.452(d); 195.452(f)(2); 195.452(f)(5))

Notes

SAT-5 year max re assessment

2009 dig-report received on 10/29/09

2014 dig-report received on 12/19/14

13. Integration of ILI Results with Other Information *Did the operator integrate other data/information when evaluating tool data/results in the records reviewed?* (AR.IL.ILIINTEGRATION.R) (detail) 195.452(l)(1)(ii) (195.452(g))

Notes

SAT

2013 CIS (Appendix J in IMP), 2004, 2009 previous tool runs

20. Compliance with ILI Procedures *Have the ILI procedures been followed?* (AR.IL.ILIIMPLEMENT.O) (detail) 195.452(b)(5)

Notes

N/C

Did not observe tool run during this inspection

Assessment and Repair - Other Technology

2. Other Technology Process *From the review of the results of selected integrity assessments, do records show that the assessment was performed in accordance with procedures and vendor recommendations?* (AR.OT.OTPLAN.R) (detail) 195.452(l)(1)(ii) (195.452(j)(5)(iv); 195.452(f)(5))

Notes

n/a operator does not employ other technology

3. Other Technology Process *Has the process for the use of "Other Technology" been followed?* (AR.OT.OTPLAN.O) (detail) 195.452(j)(5)(iv)

Notes

n/a operator does not employ other technology

4. Categorization of Defects *From the review of the results of selected integrity assessments, were defects identified and categorized within 180 days or other applicable timeframe?* (AR.OT.OTDEFECTCAT.R) (detail) 195.452(l)(1)(ii) (195.452(f)(4); 195.452(h)(2))

Notes

n/a operator does not employ other technology

Assessment and Repair - Integrity Assessment Via Pressure Test

4. Conduct of Pressure Tests *From the review of the results of pressure tests, do the test records validate the pressure test?* (AR.PTI.PRESSTESTRESULT.R) (detail) 195.452(l)(1)(ii) (195.452(f)(2); 195.452(c))

Notes

n/a operator uses ILI tools

5. Conduct of Pressure Tests *Was the pressure test conducted in accordance with procedures?* (AR.PTI.PRESSTESTRESULT.O) (detail) 195.452(j)(5)(ii) (195.452(c)(1)(i)(b))

Notes

n/a operator uses ILI tools

Assessment and Repair - Repair Criteria

3. Remedial Actions (IM) *Are anomaly remediation and documentation of remediation adequate?* (AR.RC.REMEDIATION.O) (detail) 195.452(h) (195.402(a); 195.402(c)(14); 195.422(a); 195.569; 195.589(c))

Notes

n/a-did not witness any repairs during this inspection

Assessment and Repair - Repair Methods and Practices

2. Safety While Making Repair *Are repairs made in a safe manner and to prevent injury to persons and/or property damage?* (AR.RMP.SAFETY.O) (detail) 195.422(a) (195.402(c)(14))

Notes

n/a-did not witness any repairs during this inspection

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4. Permissible Repair Methods *From the review of the results of integrity assessment and remediation projects, were all repairs performed in accordance with procedures and applicable sections of 49 CFR Part 195? (AR.RMP.METHOD.R) (detail) 195.404(c)(1) (195.422(a); 195.422(b); 195.452(h)(1))*

Notes

57th and Waller Rd ILI Dig 1/19-22/2015 Dent on top of pipe. Repair was a clockspring which is permissible in IMP

5. Qualification of Personnel Performing Pipeline Repair *From the review of the results of integrity assessment and remediation projects, were personnel performing repairs, other than welding, qualified for the task they performed? (AR.RMP.REPAIRQUAL.R) (detail) 195.505(b) (195.507(a); 195.505(c); 195.452(h)(1))*

Notes

57th and Waller Rd ILI Dig 1/19-22/2015 Dent on top of pipe. Repair was a clockspring. Checked OQs.

6. Repair Records *From the review of the results of integrity assessment and remediation projects and/or field observation, do repair records document all information needed to understand the conditions of the pipe and its environment and provide the information needed to support the Integrity Management risk model? (AR.RMP.PIPECONDITION.R) (detail) 195.404(c)(1) (195.404(c)(2))*

Notes

Sat-57th and Waller Rd ILI Dig 1/19-22/2015 Dent on top of pipe. Repair was a clockspring. Exposed pipe condition report for external corrosion, mag particle testing of pipe for SCC OK.

7. Replacement Components *From the review of the results of integrity assessment and remediation projects and/or field observation, were components that were replaced constructed to the same or higher standards as the original component? (AR.RMP.REPLACESTD.R) (detail) 195.422(b)*

Notes

n/a-no replacement components since last inspection

9. Welder Qualification *From the review of the results of integrity assessment and remediation projects, were repairs requiring welding performed by qualified welders using qualified welding procedures? (AR.RMP.WELDERQUAL.R) (detail) 195.214(a) (195.214(b); 195.222(a); 195.222(b); 195.452(h)(1))*

Notes

n/a-no welding since last inspection

10. Repair of Weld Defects *From the review of the results of integrity assessment and remediation projects, were weld defects repaired in accordance with §195.226 or §195.230? (AR.RMP.WELDQUAL.R) (detail) 195.226(a) (195.226(b); 195.226(c); 195.230(a); 195.230(b); 195.230(c); 195.452(h)(1))*

Notes

n/a-no weld repairs since last inspection

11. Inspection of Welds *From the review of the results of integrity assessment and remediation projects, were welds inspected and examined in accordance with 195.228 or 195.234? (AR.RMP.WELDINSPECT.R) (detail) 195.228(a) (195.228(b); 195.234(a); 195.234(b); 195.234(c); 195.234(d); 195.234(e); 195.452(h)(1))*

Notes

n/a-no welding since last inspection

13. Crack Repair Criteria *If the IM risk assessment and integrity assessments found cracks, SCC, or crack like features cracking to be a threat on pipeline segments, have remedial actions been taken to address integrity issues when assessment criteria have been exceeded? (AR.RMP.CRACKREMEDIATION.R) (detail) 195.452(l)(1)(ii) (195.452(f)(3))*

Notes

n/a-no cracks found 2015 ILI dig 57th and Waller Rd.

Integrity Management - High Consequence Areas

3. IMP High Consequence Areas HCA Identification *Do records show that locations and boundaries of HCA-affecting segments are correctly identified and maintained up-to-date?* (IM.HC.HCALOCATION.R) (detail) 195.452(l)(1)(ii) (195.452(f)(1); 195.452(a); 195.452(b)(2); 195.452(d)(3))

Notes

Sat-entire line is in HCA.

4. IMP High Consequence Areas HCA Identification *Are locations and boundaries of segments that can affect HCAs correctly identified and maintained up-to-date?* (IM.HC.HCALOCATION.O) (detail) 195.452(b)(5) (195.452(a); 195.452(b)(2); 195.453(f)(1))

Notes

Sat-entire line is in HCA.

Integrity Management - Preventive and Mitigative Measures

2. P&M Measures Actions Considered *Is there documentation of preventive and mitigative actions that have been considered and implemented?* (IM.PM.PMMGENERAL.R) (detail) 195.452(l)(1)(ii) (195.452(f)(6); 195.452(i)(1); 195.452(i)(2))

Notes

Sat

3. P&M Measures Actions Implemented *Have preventive and mitigative actions been implemented as described in the records?* (IM.PM.PMMIMPLEMENT.O) (detail) 195.452(f)(6) (195.452(i)(1); 195.452(i)(2); 195.452(i)(3); 195.452(i)(4))

Notes

Sat

811, additional markers, additional patrolling, additional mailings for affected public, personal contact with landowners, onsite during all construction, checkvalve at MP 2.337

10. P&M Measures Leak Detection Capability Evaluation *Do records indicate that all required and other relevant leak detection evaluation factors have been adequately evaluated?* (IM.PM.IMLEAKDETEVAL.R) (detail) 195.452(I)(1)(ii) (195.452(f)(6); 195.452(i)(3))

Notes

SAT

From the McChord IMP

There is a remote telemetry system, which transmits the McChord AFB information, including pressures, temperature and flow totalization to the control room. The distributed control system (DCS) in the control room calculates the difference between meter readings at the U.S. Oil end and the McChord AFB end on a continuous basis. The leak detection system on the McChord Pipeline has been upgraded since August 2003 to meet the requirements of WAC 480-75-300. The system is capable of detecting an eight percent of maximum flow leak within fifteen minutes or less. The system will alarm at approximately 550-gallons (13 bbl) when the pipeline is transferring product at full flow (650 bbl/hr). When an alarm occurs, the pipeline transfer will be stopped and the alarm investigated prior to resuming normal operations. During transfer operations, if the pressure drops more than 15 psig at either location an alarm is triggered and the operator stops the transfer. If the pressure at the U.S. Oil pump station drops below 175 psig, the transfer pump automatically shuts down.

When the pipeline is not transferring product, it is isolated and pressurized to above 200 psig at the U.S. Oil pump station. This provides a continuous leak detection system in the event any leak would result in a static pipeline pressure decrease. An alarm will occur if the static pipeline pressure drops below 175 psig. Also the system will alarm if the pressure suddenly drops more than 15 psig.

15. P&M Measures EFRD Need Evaluation *Have identified EFRD projects been implemented as planned?* (IM.PM.PMMEFRD.O) (detail) 195.452(i)(4)

Notes

SAT

Only EFRD is check valve at MP 2.337. Analysis showed additional valves would not significantly reduce risk (350.4 bbls with EFRD, 289.6 without).

Integrity Management - Quality Assurance

2. Performance Measures *Does the operator's evaluation of the selected performance measures provide meaningful insight into integrity management program performance?* (IM.QA.IMPERFMEAS.R) (detail) 195.452(l)(1)(ii) (195.452(f)(7); 195.452(k))

Notes

SAT

Reviewed 2014 IMP Performance Measures Appendix D-1

Integrity Management - Risk Analysis

7. Risk Analysis Input Information *Are conditions on the pipeline segments accurately reflected in the appropriate risk assessment data and information?* (IM.RA.RADATA.O) (detail) 195.452(f)(3) (195.452(g))

Notes

SAT

Reviewed segment risk analysis in IMP (note for a random sampling of segments in HCAs)

Maintenance and Operations - Low-Stress Rural Pipelines

3. Categorizing Rural Low Stress Pipelines *Are locations and boundaries of segments that can affect a USA correctly identified?* (MO.LS.CATEGORIZATION.O) (detail) 195.12(b) (195.12(b)(1); 195.12(b)(2); 195.12(b)(3); 195.452(a))

Notes

n/a-not a low stress rural pipeline

Reporting - Notices and Reporting

5. Notifications *Has notification been made if Other Technology is used, technology is unavailable, the 5 year reassessment interval cannot be met, remediation schedule cannot be met and pressure cannot be reduced, or a pressure reduction exceeds 365 days?* (RPT.NR.NOTIFICATIONS.R) (detail) 195.452(l)(1)(ii) (195.452(m))

Notes

n/a-operator did not employ other technology

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