

Inspection Output (IOR)

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Inspection Information

Inspection Name	8280 Northwest Natural Clark County Standard	Operator(s)	NORTHWEST NATURAL GAS CO (13840)	Plan Submitted	03/18/2021
Status	PLANNED	Lead	David Cullom	Plan Approval	03/18/2021 by Joe Submits
Start Year	2021	Team Members	Scott Rukke, Dennis Ritter, Lex Vinsel, Anthony Dorrough, Derek Norwood, Scott Anderson, Darren Tinnerstet	All Activity Start	03/01/2021
System Type	GD	Observer(s)	Deborah Becker, Rell Koizumi	All Activity End	03/23/2021
Protocol Set ID	WA.GD.2020.02	Supervisor	Joe Submits	Inspection Submitted	--
		Director	Sean Mayo	Inspection Approval	--

Inspection Summary

Inspection Scope and Summary

This inspection consisted of a records review for the time period of 2018-2021 and inspection of field facilities. It was conducted primarily in this application (IA), but some additional Washington State questions were completed in the UTC's inspection system.

Facilities visited and Total AFODs

Please review the attached Field Notes form for a complete list of facilities visited, the inspection items covered, and the results. The facilities visited were bridges, emergency valves, casings (PSP reads), isolated steel (PSP reads), rectifiers (function and output check), regulators (set points and function check), and reliefs (set points and function check).

2 Records Review Days

4 MS-Teams Days

5 Field Days (on site)

Summary of Significant Findings

The following probable violation(s) and areas of concern of WAC 480-93 were noted as a result of the 2021 inspection of the Northwest Natural Clark County unit. The inspection included a random selection of records, operation and maintenance (O&M), emergency response, inventory, and field inspection of the pipeline facilities.

PROBABLE VIOLATIONS

1. WAC 480-93-188 Gas Leak Surveys

(3) Each gas pipeline company must conduct gas leak surveys according to the following minimum frequencies:

(a) Business districts - At least once annually, but not to exceed fifteen months between surveys. All mains in the right of way adjoining a business district must be included in the survey;

Finding(s):

Business district leak surveys are not being conducted in all areas that they are required to be performed. The enclosed graphic, "Attachment 1," illustrates the plats the operator is leak surveying annually. A sample of areas that have facilities

that may meet the requirements of a business district as defined in WAC 480-93-005(3) are indicated by green asterisks on the map.

2. **WAC 480-93-170 Tests and Reports for Gas Pipelines**

(7) Each gas pipeline company must keep records of all pressure tests performed for the life of the pipeline and must document the following information:

(a) Gas pipeline company's name;

(b) Employee's name;

(c) Test medium used;

(d) Test pressure;

(e) Test duration;

(f) Line pipe size and length;

(g) Dates and times; and

(h) Test results.

Finding(s):

Pressure test records were verified and indicated all necessary information as required by WAC 480-93-170(7) for larger construction project records reviewed during this inspection. However, pressure test records for service line installations reviewed did not contain a location on the form to store test medium used or if the test passed or failed in all cases. The items missing were:

(c) Test medium used;

(h) Test results.

AREAS OF CONCERN

1. **WAC 480-93-110 Corrosion control**

(5) Each gas pipeline company must conduct inspections or tests for electrical isolation between metallic pipeline casings and metallic pipelines at least once annually, but not to exceed fifteen months between inspections or tests. The test or inspection must also determine whether the pipeline has adequate levels of cathodic protection at the casing to pipeline interface. These requirements do not apply to unprotected copper inserted in ferrous pipe.

(b) Whenever electrical isolation tests or inspections indicate that a possible shorted condition exists between a casing and a pipeline, the gas pipeline company must conduct a follow-up test within ninety days to determine whether an actual short exists. The gas pipeline company's procedures manual must have a level or threshold that would indicate a potential shorted condition and must also detail the method of determining whether the casing is actually shorted to the pipeline.

(c) The gas pipeline company must clear the shorted condition where practical.

(d) Whenever a short exists between a line pipe and casing, the gas pipeline company must perform a leak survey within ninety days of discovery and at least twice annually thereafter, but not to exceed seven and one-half months between leak surveys until the shorted condition is eliminated.

Finding(s):

During the field portion of the inspection, a casing did not meet the operator's minimum isolation criteria of 200mV from the carrier pipe to casing during a field cathodic protection test. The operator did create a work order to document this finding and perform follow up testing. Documentation of what was completed to resolve this condition and any follow up leak survey records is necessary.

1. **WAC 480-93-124 Pipeline markers.**

(1) Each gas pipeline company must place pipeline markers at the following locations:

(f) Over mains located in Class 1 and 2 locations;

Finding(s):

The operator's manual states that markers are not required for gas lines that fall within the Urban Growth Area (UGA) because they are considered Class 3 or 4 locations and do not require pipeline marking per 192.707(b)(2). This practice may result in pipelines that should be properly marked but are not if they fall within the UGA and are Class 1 or 2 locations. The operator did provide a map containing the UGA and with their pipeline system on it for review, but it did not contain class location information. No specific instances were found during the inspection where markers were required to be placed in a Class 1 or 2 location.

Primary Operator contacts and/or participants

Ryan Truair - Sr. Manager of Compliance

Samantha Rookstool - Code Compliance Specialist

Bob Anderson - Construction Supervisor

Greg Bronson - Cathodic Protection Manager

Jaimie Lemke - Code Compliance Specialist

Margaret Locke - Compliance Engineer

Operator executive contact and mailing address for any official correspondence

Jon G. Huddleston

Vice President of Engineering and Utility Operations

Northwest Natural

250 Southwest Taylor Street

Portland, Oregon 97204

Scope (Assets)

Short # Label	Long Label	Asset Type	Asset IDs	Excluded Topics	Planned	Required	Total Inspected	Required % Complete
1. 90888 (78)	Northwest Natural-CLARK	unit	90888	Storage Fields Bottle/Pipe - Holders Offshore GOM OCS Cast or Ductile Iron Copper Pipe	144	144	144	100.0%

Short # Label	Long Label	Asset Type	Asset IDs	Excluded Topics	Planned	Required	Inspected	Total	Required % Complete
				Aluminum/Amphoteric Abandoned					

1. Percent completion excludes unanswered questions planned as "always observe".

Plans

Plan # Assets	Focus Directives	Involved Groups/Subgroups	Qst Type(s)	Extent Notes
1. 90888 (78)	Baseline Records (Form 2), Baseline Pipeline Field Inspection (Form 2)	PRO, PRR, FR, GDIM, MMLPGIM, MISCTOPICS, GENERIC	P, R, O, S	Detail
2. 90888 (78)	n/a	MISCTOPICS.PROT9	P, R, O, S	Detail

Plan Implementations

# Activity Name	SMAR T Act#	Start Date End Date	Focus Directive s	Involved Groups/Subgroup s	Asset s	Qst Type(s)	Planned	Required	Total Inspected	Required % Complete
1 Field and Records	--	03/01/202 1 03/23/202 1	n/a	all planned questions	all assets	all types	144	144	144	100.0%

1. Since questions may be implemented in multiple activities, but answered only once, questions may be represented more than once in this table.
2. Percent completion excludes unanswered questions planned as "always observe".

Forms

This inspection has no Form data entry.

Results (all values, 144 results)

149 (instead of 144) results are listed due to re-presentation of questions in more than one sub-group.

PRR.REPORT: Reporting

1. Question Result, ID, References **Sat, RPT.RR.IMMEDREPORT.R, 191.5(a) (191.7(a), 191.7(d))**
 Question Text *Do records indicate immediate notifications of incidents were made in accordance with 191.5?*
 Assets Covered **90888 (78)**
 Result Notes **2020 (14) State, 2019 (17), and 2018 (17) per NWN.**
2. Question Result, ID, References **NA, RPT.RR.INCIDENTREPORT.R, 191.9(a)**
 Question Text *Do records indicate reportable incidents were identified and reports were submitted to DOT on Form 7100.1 within the required time frame?*
 Assets Covered **90888 (78)**
 Result Notes **No Federal reportables in this inspection time period.**
3. Question Result, ID, References **NA, RPT.RR.INCIDENTREPORTSUPP.R, 191.9(b)**

Question Text *Do records indicate accurate supplemental incident reports were filed and within the required timeframe?*

Assets Covered 90888 (78)

Result Notes None in this inspection time period.

4. Question Result, ID, References Sat, RPT.RR.ANNUALREPORT.R, 191.11(a)

Question Text *Have complete and accurate Annual Reports been submitted?*

Assets Covered 90888 (78)

Result Notes The last three years were reviewed.

5. Question Result, ID, References Sat, RPT.RR.UTCANNUALREPORTS.R,

Question Text *Have complete and accurate annual reports been submitted to the commission?*

Assets Covered 90888 (78)

Result Notes Annual reports have been sent to the Commission and will be reviewed during the Annual Review inspection later this year.

6. Question Result, ID, References Sat, RPT.RR.MISDATAREPORTS.R,

Question Text *Has the operator submitted a copy of DOT Drug and Alcohol Testing MIS Data Collection Form to the commission when required?*

Assets Covered 90888 (78)

Result Notes The operator does submit the MIS report to the UTC when requested.

7. Question Result, ID, References Sat, GDIM.RR.MECHANICALFITTINGDATAIMPL.R, 192.1009 (191.12) (also presented in: GDIM.IMPL)

Question Text *Have accurate records been maintained documenting mechanical fitting failures that resulted in hazardous leaks?*

Assets Covered 90888 (78)

Result Notes None for reporting year 2019. 2018 and 2017 were submitted.

8. Question Result, ID, References NA, RPT.RR.SRCR.R, 191.23(a) (191.23(b), 191.25(a), 191.25(c))

Question Text *Do records indicate safety-related condition reports were filed as required?*

Assets Covered 90888 (78)

Result Notes No such event occurred, or condition existed, in the scope of inspection review.

9. Question Result, ID, References NA, RPT.RR.MAOPINCREASENOTIFY.R,

Question Text *Do records indicate submittal of a written plan of procedures to the commission at least forty-five days before uprating to a MAOP greater than 60 psig?*

Assets Covered 90888 (78)

Result Notes No such event occurred, or condition existed, in the scope of inspection review.

10. Question Result, ID, References Sat, RPT.RR.THIRTYDAYRPT.R,

Question Text *Has the operator submitted a written report within 30 days following each reportable incident?*

Assets Covered 90888 (78)

Result Notes NWN has submitted 30 day follow-up reports and there have been no issues of missing reports.

11. Question Result, ID, References Sat, MO.GO.CUSTNOTIFY.R, 192.16(d) (192.16(a), 192.16(b), 192.16(c))

Question Text *Do records indicate the customer notification process satisfies the requirements of 192.16?*

Assets Covered 90888 (78)

Result Notes There is a "house line" maintenance brochure that is sent out. NWN compliance staff checked if "paperless" e-pay folks get it as well. They indicated the customer is emailed a link.

12. Question Result, ID, References Sat, RPT.RR.DAILYCONSTRUCTIONRPT.R,

Question Text *Do records indicate daily construction and repair activities were emailed to the commission no later than 10 AM each day work is scheduled?*

Assets Covered 90888 (78)

Result Notes NWN uses automation to email daily reports each day at about 0930.

13. Question Result, ID, References Sat, RPT.RR.PIPELINEMAPPING.R,

Question Text *Has the operator provided accurate maps (or updates) of all pipelines operating over 250 psig to specifications developed by the commission sufficient to meet the needs of first responders?*

Assets Covered 90888 (78)

Result Notes NWN has been sending these as needed.

PRR.CORROSION: Corrosion Control

14. Question Result, ID, References Sat, TQ.QU.CORROSION.R, 192.453 (192.807(a), 192.807(b))

Question Text *Do records indicate qualification of personnel implementing pipeline corrosion control methods?*

Assets Covered 90888 (78)

Result Notes OQ cards were pulled for John Mours(2018-23)and David Maynard. (2018-21) These are field technicians.

The corrosion supervisor is a CP1. Greg Bronson. The cert was showed from 2019 and Dec 1, 2022 for the expiration.

15. Question Result, ID, References Sat, TD.CP.RECORDS.R, 192.491(a)

Question Text *Do records indicate the location of all items listed in 192.491(a)?*

Assets Covered 90888 (78)

Result Notes If an annual survey has an anode the location is noted. There are spots where anodes are installed. Locations of rectifiers, and deep wells are also maintained.

16. Question Result, ID, References Sat, TD.CP.MONITOR.CURRENTTEST.R, 192.491(c) (192.465(b))

Question Text *Do records document details of electrical checks of sources of rectifiers or other impressed current sources?*

Assets Covered 90888 (78)

Result Notes There was typographical "column shift" in the report during the inspection records review. The operator was able to explain the amperage data shift related to that error and it was resolved.

17. Question Result, ID, References Sat, TD.CP.EXPOSED.EXPOSEINSPECT.R, 192.491(c) (192.459)

Question Text *Do records adequately document that exposed buried piping was examined for corrosion?*

Assets Covered 90888 (78)

Result Notes Records reviewed from 1/1/2018 to 1/15/2021. Pipe Inspection report is used for external and internal. There were 432 pages with about 2 per page. We reviewed the 4th Plain Fairmont Rd As-built.

18. Question Result, ID, References Sat, TD.CP.MONITOR.TEST.R, 192.491(c) (192.465(a))

Question Text *Do records adequately document cathodic protection monitoring tests have occurred as required?*

Assets Covered 90888 (78)

Result Notes Records were provided and reviewed. No critical or non-critical bonds are in the system.

19. Question Result, ID, References NA, TD.CP.MONITOR.REVCURRENTTEST.R, 192.491(c) (192.465(c))

Question Text *Do records document details of electrical checks interference bonds, diodes, and reverse current switches?*

Assets Covered 90888 (78)

Result Notes No such event occurred, or condition existed, in the scope of inspection review.

20. Question Result, ID, References Sat, TD.CP.MONITOR.DEFICIENCY.R, 192.491(c) (192.465(d))

Question Text *Do records adequately document actions taken to correct any identified deficiencies in corrosion control?*

Assets Covered 90888 (78)

Result Notes A couple low readings over the inspection time period, but they were promptly resolved.

21. Question Result, ID, References NA, TD.CP.UNPROTECT.R, 192.491(c) (192.465(e))

Question Text *Do records adequately document that exposed buried piping was examined for corrosion and deteriorated coating?*

Assets Covered 90888 (78)

Result Notes No such relevant facilities/equipment existed in the scope of inspection review.

22. Question Result, ID, References NA, FS.FG.CASINGTESTLEAD.R,

Question Text *Do records indicate that all casings without vents installed after September 5, 1992 had separate test lead wires installed?*

Assets Covered 90888 (78)

Result Notes No such relevant facilities/equipment existed in the scope of inspection review.

23. Question Result, ID, References Sat, FS.FG.CASINGSEALS.R,

Question Text *Do records indicate that mains and service lines installed in casing or conduit are sealed at the ends as required?*

Assets Covered 90888 (78)

Result Notes The QA team verified during installs. UTC staff also checks for sealing of inserted lines. There have been no variances in the inspection time periods.

24. Question Result, ID, References Sat, TD.CP.ELECSOLATE.R, 192.491(c) (192.467(a), 192.467(b), 192.467(c), 192.467(d), 192.467(e))

Question Text *Do records adequately document electrical isolation of each buried or submerged pipeline from other metallic structures unless they electrically interconnect and cathodically protect the pipeline and the other structures as a single unit?*

Assets Covered 90888 (78)

Result Notes Casings are checked for isolation. Flanges not specifically during annual checks unless needed.

25. Question Result, ID, References Sat, TD.CP.CASINGINSPECT.R,

Question Text *Do records indicate that annual casing inspections have been performed to ensure electrical isolation from the pipeline?*

Assets Covered 90888 (78)

Result Notes Three years of data reviewed.

26. Question Result, ID, References Sat, TD.CP.MONITOR.TESTSTATION.R, 192.469

Question Text *Do records identify the location of test stations and show a sufficient number of test stations?*

Assets Covered 90888 (78)

Result Notes They have numerous test stations that they use for annual sites. They have thousands of sites.

27. Question Result, ID, References Sat, TD.CP.MONITOR.TESTLEAD.R, 192.491(c) (192.471(a), 192.471(b), 192.471(c))

Question Text *Do records document that pipelines with cathodic protection have electrical test leads installed in accordance with requirements of Subpart I?*

Assets Covered 90888 (78)

Result Notes Test leads are stored in MapFrame. I reviewed some records of test lead installs.

28. Question Result, ID, References NA, TD.CP.MONITOR.INTFRCURRENT.R, 192.491(c) (192.473(a))

Question Text *Do records document an effective program is in place to minimize detrimental effects of interference currents and that detrimental effects of interference currents from CP systems on other underground metallic structures are minimized?*

Assets Covered 90888 (78)

Result Notes No such event occurred, or condition existed, in the scope of inspection review. The SP contains steps to take, but none in this unit.

29. Question Result, ID, References NA, TD.ICP.CORRGAS.R, 192.491(c) (192.475(a))

Question Text *Do the records demonstrate that the corrosive effect of the gas in the pipeline has been investigated and if determined to be corrosive, steps be taken to minimize internal corrosion?*

Assets Covered 90888 (78)

Result Notes No such event occurred, or condition existed, in the scope of inspection review.

30. Question Result, ID, References Sat, TD.ICP.EXAMINE.R, 192.491(c) (192.475(a), 192.475(b))

Question Text *Do records document examination of removed pipe for evidence of internal corrosion?*

Assets Covered 90888 (78)

Result Notes Records were reviewed for a cut-out.

31. Question Result, ID, References NA, TD.ICP.CORRGASACTION.R, 192.491(c) (192.477)

Question Text *Do records document the actions taken when corrosive gas is being transported by pipeline?*

Assets Covered 90888 (78)

Result Notes No such event occurred, or condition existed, in the scope of inspection review.

32. Question Result, ID, References Sat, TD.ATM.ATMCORRODEINSP.R, 192.491(c) (192.481(a), 192.481(b), 192.481(c))

Question Text *Do records document inspection of aboveground pipe for atmospheric corrosion?*

Assets Covered 90888 (78)

Result Notes Pressure limiting stations, bridge, service surveys. Done every 3 years.

14421 NE 22ND AVE , VANCOUVER WA 98686 Level 3 was determined to be a level 1.

3214 NE 108TH, VANCOUVER WA 98686 Level 3 corrosion was determined to be N/A due to the conduit being no gas carrying. CFS referral.

2323 W MILL PLAIN BLVD , VANCOUVER WA 98660 Mitigated corrosion on 7/18/2019.

12004 NE 95TH ST #840 , VANCOUVER WA 98682 11/28/2018 This was done by a CFS tech.

715 NE 5TH AVE , CAMAS WA 98607 5/2/2018 Found and remediated. This was an odor call.

17146 SE 23RD DR #28 , VANCOUVER WA 98683 Level 2 found 01/02/2018 - replaced reg set and set flow at 6.5" W/C on 6/26/2018

17200 SE 26TH DR #52 , VANCOUVER WA 98683 Corrosion Level 2 found 01/02/2018 painted 06/27/2018

17200 SE 26TH DR #33 , VANCOUVER WA 98683 Corrosion Level 2 found 01/02/2018 replaced reg set and set flow at 6.5" W/C on 08/28/2018

17200 SE 26TH DR UNIT 49 , VANCOUVER WA 98683 Corrosion Level 2 01/02/2018 painted reg body 06/27/2018

17200 SE 26TH DR UNIT 50 , VANCOUVER WA 98683 Corrosion Level 2 01/02/2018 painted reg body 06/27/2018

33. Question Result, ID, References Sat, TD.COAT.NEWPIPE.R, 192.491(c) (192.455(a), 192.461(a), 192.461(b), 192.483(a))

Question Text *Do records document that each buried or submerged pipeline installed after July 31, 1971 has been externally coated with a suitable coating material?*

Assets Covered 90888 (78)

Result Notes It is in the procedure. Records are maintained in inspection report for steel pipe when it is received. A record from 10/4/2020 was selected and reviewed.

34. Question Result, ID, References Sat, TD.ICP.REPAIR.R, 192.485(a) (192.485(b))

Question Text Do records document the repair or replacement of pipe that has been internally corroded to an extent that there is not sufficient remaining strength in the pipe wall?

Assets Covered 90888 (78)

Result Notes Exposed pipe condition report 4th Plain North of Fairmont showed that the entire leg was replaced with PE.

35. Question Result, ID, References NA, TD.ICP.EVALUATE.R, 192.491(c) (192.485(c))

Question Text Do records document adequate evaluation of internally corroded pipe?

Assets Covered 90888 (78)

Result Notes It is checked on the exposed pipe condition report if there is a cut-out. However, no such event occurred, or condition existed, in the scope of inspection review.

PRR.PT: Pressure Test

36. Question Result, ID, References Sat, DC.PTLOWPRESS.PRESSTESTLOWSTRESS.R, 192.517(a) (192.507(a), 192.507(b), 192.507(c))

Question Text Do records indicate that pressure testing is conducted in accordance with 192.507?

Assets Covered 90888 (78)

Result Notes 1.

- a. Gas pipeline company's name, Northwest Natural
 - b. Employee's name, John Rose 12-21-20
 - c. Test medium used, Water
 - d. Test pressure, 600 Min 1100
 - e. Test duration, 8 hours
 - f. Line pipe size and length, 6" 0.28 WT 3950 Feet
 - g. Dates and time, and 12/21/20 0900-1700
 - h. Test results. "Pass" listed Pressure Test information
2. When multiple pressure test are performed on a single installation, the company must maintain a record of each test.
3. Pressure testing equipment must be tested for accuracy or calibrated in accordance with the manufacturer's recommendations. This includes equipment such as:
- a. Pressure charts,
 - b. Pressure gauges, and Crystal 007541 and 013346 Recorder ID 242-125210
 - c. Dead weights.

37. Question Result, ID, References Sat, DC.PTLOWPRESS.PRESSTEST100PSIG.R, 192.517(b) (192.509(a), 192.509(b))

Question Text Do records indicate that pressure testing is conducted in accordance with 192.509(a)?

Assets Covered 90888 (78)

Result Notes This information was reviewed in the previous question.

38. Question Result, ID, References Sat, DC.PT.SERVICELINE.R, 192.517(b) (192.511(a), 192.511(b), 192.511(c))

Question Text Do records indicate that pressure testing is conducted in accordance with 192.511?

Assets Covered 90888 (78)

Result Notes 1.

- a. Gas pipeline company's name, NWN
- b. Employee's name, Rusty Grable
- c. Test medium used, Nitrogen
- d. Test pressure, 816
- e. Test duration, 60
- f. Line pipe size and length 1" 8 feet
- g. Dates and time, and 1/15/2018 1100
- h. **Test results. No indication. This is being addressed in the following question as a probable violation.**

2. When multiple pressure test are performed on a single installation, the company must maintain a record of each test.
3. Pressure testing equipment must be tested for accuracy or calibrated in accordance with the manufacturer's recommendations. This includes equipment such as:
 - a. Pressure charts,
 - b. Pressure gauges, and #475091
 - c. Dead weights.

39. Question Result, ID, References **Unsat, DC.PT.PRESSTESTPLASTIC.R, 192.517(b) (192.513(a), 192.513(b), 192.513(c), 192.513(d))**

Question Text *Do records indicate that pressure testing is conducted in accordance with 192.513?*

Assets Covered **90888 (78)**

Result Issue Summary **The operator did not have records of the information required by WAC 480-93-170(7).**

Standard Issues **A1 (Significant impact/widespread occurrence) : 480-93-170(7) : Issue not covered in standard items. See Issue Summary text for details.**

A1 (Significant impact/widespread occurrence) : 192.517(b) : No record/documentation.

Result Notes **NWN's pressure test documentation for service installations has no place on the form to store the required information for test medium used or the test results.**

Pressure test records were verified and indicated all necessary information as required by WAC 480-93-170(7) for larger construction projects that I reviewed. However, pressure test records for service line installations did not contain a location on the form to store test medium used or if the test passed or failed in all cases.

The items missing are bolded below:

WAC 480-93-170 Tests and reports for gas pipelines.

(7) Each gas pipeline company must keep records of all pressure tests performed for the life of the pipeline and must document the following information:

(a) Gas pipeline company's name;

(b) Employee's name;

(c) Test medium used;

(d) Test pressure;

(e) Test duration;

(f) Line pipe size and length;

(g) Dates and times; and

(h) Test results.

Here is a sample of a test that was reviewed during the inspection.

- a. Gas pipeline company's name, NWN
- b. Employee's name, #029530
- c. **Test medium used,**
- d. Test pressure, 116 psig
- e. Test duration, 10 min
- f. Line pipe size and length, 63' 1"
- g. Dates and time, and 2/07/2020
- h. **Test results**

Pressure gauge #1028 was used

PRR.UPRATE: Uprating

40. Question Result, ID, References **NA, MO.GOUPRATE.MAOPINCREASE.R, 192.553(a) (192.553(b), 192.553(c))**

Question Text *Do records indicate that increases in MAOP of pipeline were determined in accordance with 192.553?*

Assets Covered 90888 (78)

Result Notes No such event occurred, or condition existed, in the scope of inspection review.

41. Question Result, ID, References NA, MO.GOUPRATE.MAOPINCREASELIMIT.R, 192.553(b) (192.553(c), 192.553(d), 192.557(a))

Question Text Do records indicate that increases in MAOP are limited in accordance with 192.619 and 192.621?

Assets Covered 90888 (78)

Result Notes No such event occurred, or condition existed, in the scope of inspection review.

42. Question Result, ID, References NA, MO.GOUPRATE.MAOPINCREASEPREP.R, 192.553(b) (192.553(c), 192.553(a), 192.557(b), 192.557(c))

Question Text Do records indicate that increases in MAOP were preceded by the actions specified in 192.557?

Assets Covered 90888 (78)

Result Notes No such event occurred, or condition existed, in the scope of inspection review.

PRR.OM: Operations And Maintenance

43. Question Result, ID, References Sat, MO.GO.OMANNUALREVIEW.R, 192.605(a)

Question Text Have annual reviews of the written procedures or processes in the manual been conducted as required?

Assets Covered 90888 (78)

Result Notes I reviewed the signatures for the 2019 SP.

44. Question Result, ID, References Sat, MO.GO.OMHISTORY.R, 192.605(a) (192.605(b)(3))

Question Text Are construction records, maps and operating history available to appropriate operating personnel?

Assets Covered 90888 (78)

Result Notes These are available in Map frame. I reviewed several records to verify that they were updated within six months of completion of construction activity.

112 S Main St 2/7/2020 2/18/2020

1610 NW 9TH AVE, CAMAS WA 98607 6/22/020 7/16/2020

4026 S HAY FIELD CIR, RIDGEFIELD WA 98642 6/17/2020 6/29/2020

45. Question Result, ID, References Sat, MO.GO.OMEFFECTREVIEW.R, 192.605(a) (192.605(b)(8))

Question Text Do records indicate periodic review of the work done by operator personnel to determine the effectiveness, and adequacy of the processes used in normal operations and maintenance and modifying the processes when deficiencies are found?

Assets Covered 90888 (78)

Result Notes Work is reviewed and documented on a QA report.

46. Question Result, ID, References Sat, MO.GO.ABNORMAL.ABNORMALREVIEW.R, 192.605(a) (192.605(c)(4))

Question Text Do records indicate periodic review of work done by operator personnel to determine the effectiveness of the abnormal operation processes and corrective action taken where deficiencies are found?

Assets Covered 90888 (78)

Result Notes A damage was QAed. 2018_ER_Damage Report.

47. Question Result, ID, References NC, PD.OC.PDPROGRAM.R, 192.614(c)

Question Text Does the damage prevention program meet minimum requirements specified in 192.614(c)?

Assets Covered 90888 (78)

Result Notes We will be performing a PA DP inspection later this year.

48. Question Result, ID, [NA, MO.GOCLASS.CLASSLOCATESTUDY.R, 192.605\(b\)\(1\) \(192.609\(a\), 192.609\(b\), 192.609\(c\), 192.609\(d\), 192.609\(e\), 192.609\(f\)\)](#)
 Question Text *Do records indicate performance of the required study whenever the population along a pipeline increased or there was an indication that the pipe hoop stress was not commensurate with the present class location?*
 Assets Covered [90888 \(78\)](#)
 Result Notes [No such relevant facilities/equipment existed in the scope of inspection review.](#)
49. Question Result, ID, [Sat, EP.ERG.POSTEVTREVIEW.R, 192.605\(a\) \(192.615\(b\)\(1\), 192.615\(b\)\(3\)\)](#)
 Question Text *Do records indicate review of employee activities to determine whether the procedures were effectively followed in each emergency?*
 Assets Covered [90888 \(78\)](#)
 Result Notes [There is a QA report. Although it is not specifically related to Clark County, they have a system wide report.](#)
50. Question Result, ID, [Sat, EP.ERG.TRAINING.R, 192.605\(a\) \(192.615\(b\)\(2\)\)](#)
 Question Text *Has the operator trained the appropriate operating personnel on emergency procedures and verified that the training was effective in accordance with its procedures?*
 Assets Covered [90888 \(78\)](#)
 Result Notes [Clark County Emergency Response training records were reviewed. The operator had conducted refresher intervals at 3 years. They have changed it to every 4 years.](#)
51. Question Result, ID, [NC, EP.ERG.LIAISON.R, 192.605\(a\) \(192.615\(c\)\(1\), 192.615\(c\)\(2\), 192.615\(c\)\(3\), 192.615\(c\)\(4\), 192.616\(c\), ADB-05-03\)](#) (also presented in: [MISCTOPICS.PUBAWARE](#))
 Question Text *Do records indicate liaisons established and maintained with appropriate fire, police and other public officials and utility owners in accordance with procedures?*
 Assets Covered [90888 \(78\)](#)
 Result Notes [This will be reviewed in the upcoming PA audit in April 2021.](#)
52. Question Result, ID, [NC, PD.PA.LANGUAGE.R, 192.616\(g\) \(API RP 1162 Section 2.3.1\)](#) (also presented in: [MISCTOPICS.PUBAWARE](#))
 Question Text *Were materials and messages developed and delivered in other languages commonly understood by a significant number and concentration of non-English speaking populations in the operator's areas?*
 Assets Covered [90888 \(78\)](#)
 Result Notes [This will be reviewed in the upcoming PA audit in April 2021.](#)
53. Question Result, ID, [NC, PD.PA.EVALEFFECTIVENESS.R, 192.616\(c\) \(API RP 1162 Section 8.4\)](#) (also presented in: [MISCTOPICS.PUBAWARE](#))
 Question Text *Have effectiveness evaluation(s) of the program been performed for all stakeholder groups in all notification areas along all systems covered by the program?*
 Assets Covered [90888 \(78\)](#)
 Result Notes [This will be reviewed in the upcoming PA audit in April 2021.](#)
54. Question Result, ID, [NA, PD.PA.MSTRMETER.R, 192.616\(j\) \(192.616\(h\), API RP 1162 Section 2.7 \(Step 12\), API RP 1162 Section 8.5\)](#) (also presented in: [MISCTOPICS.PUBAWARE](#))
 Question Text *Do records indicate the public awareness program for a master meter or petroleum gas system operator has met the requirements of Part 192?*
 Assets Covered [90888 \(78\)](#)
 Result Notes [No such event occurred, or condition existed, in the scope of inspection review.](#)
55. Question Result, ID, [NA, EP.ERG.INCIDENTANALYSIS.R, 192.605\(a\) \(192.617\)](#)
 Question Text *Do records indicate actions initiated to analyze accidents and failures, including the collection of appropriate samples for laboratory examination to determine the causes of the failure and minimize the possibility of recurrence, in accordance with its procedures?*
 Assets Covered [90888 \(78\)](#)
 Result Notes [No such event occurred, or condition existed, in the scope of inspection review.](#)
56. Question Result, ID, [Sat, MO.GOMAOP.MAOPDETERMINE.R, 192.619\(a\) \(192.619\(b\), 192.621\(a\), 192.621\(b\), 192.623\(a\), 192.623\(b\)\)](#)

- Question Text *Do records indicate determination of the MAOP of pipeline segments in accordance with 192.619 and limiting of the operating pressure as required?*
- Assets Covered 90888 (78)
- Result Notes MAOP determination records were reviewed for several jobs. NWN does not use the "high 5" method to determine MAOP.
57. Question Result, ID, References Sat, MO.GOODOR.ODORIZE.R, 192.709(c) (192.625(a), 192.625(b), 192.625(c), 192.625(d), 192.625(e), 192.625(f))
- Question Text *Do records indicate appropriate odorization of its combustible gases in accordance with its processes and conduct of the required testing to verify odorant levels met requirements?*
- Assets Covered 90888 (78)
- Result Notes I reviewed 2018-2021. All reads looked good.
58. Question Result, ID, References NA, MO.RW.TRANSPATROL.R, 192.709(c) (192.705(a), 192.705(b), 192.705(c))
- Question Text *Do records indicate that transmission line ROW surface conditions have been patrolled as required?*
- Assets Covered 90888 (78)
- Result Notes No such relevant facilities/equipment existed in the scope of inspection review.
59. Question Result, ID, References NA, MO.RW.TRANSLEAKAGE.R, 192.709(c) (192.706, 192.706(a), 192.706(b))
- Question Text *Do records indicate transmission leakage surveys conducted as required?*
- Assets Covered 90888 (78)
- Result Notes No such relevant facilities/equipment existed in the scope of inspection review.
60. Question Result, ID, References Sat, MO.RW.DISTPATROL.R, 192.603(b) (192.721(a), 192.721(b))
- Question Text *Do records indicate distribution patrolling was conducted as required?*
- Assets Covered 90888 (78)
- Result Notes No slides or bridge patrols where movement is an issue. No blasting or landslides. NWN completed the most recent leakage self-audit on 7/15/2020.
61. Question Result, ID, References Sat, MO.RW.LEAKFOLLOW.R,
- Question Text *Do records indicate that a follow-up inspection was performed not more than thirty days following a repair where residual gas remained in the ground?*
- Assets Covered 90888 (78)
- Result Notes I reviewed several records for residual gas over the inspection time period.
62. Question Result, ID, References NA, MO.RW.DOWNGRADELEAKREPAIR.R,
- Question Text *Do records indicate that leaks that have been downgraded are repaired within twenty-one months?*
- Assets Covered 90888 (78)
- Result Notes No such event occurred, or condition existed, in the scope of inspection review. None in Washington.
63. Question Result, ID, References Sat, MO.RW.LEAKREPAIRTIME.R,
- Question Text *Do records indicate that leaks were repaired and re-evaluated in the timeframes specified in WAC 480-93-18601?*
- Assets Covered 90888 (78)
- Result Notes C Leaks reviewed for annual rechecks. Some B leaks that were repaired were reviewed. Active B leaks right now are 3 or 4.
64. Question Result, ID, References Sat, MO.RW.LEAKRECORDS.R,
- Question Text *Have gas leak records been prepared and maintained as required?*
- Assets Covered 90888 (78)
- Result Notes I reviewed a "B" leak field report at 6304 North Pacific Hwy 99. 1/2021 NWN rechecked. It is still active.

65.
Question
Result, ID, References
Unsat, MO.RW.DISTPATROLLEAKAGE.R, 192.603(b) (192.723(a), 192.723(b))

Question Text *Do records indicate distribution leakage surveys were conducted as required?*

Assets Covered 90888 (78)

Result Issue Requirement

Summary *WAC 480-93-188(3) Each gas pipeline company must conduct gas leak surveys according to the following minimum frequencies:*

(a) Business districts - At least once annually, but not to exceed fifteen months between surveys. All mains in the right of way adjoining a business district must be included in the survey;

Definition

WAC 480-93-005(3) "Business district" means an area where the public regularly congregates or where the majority of the buildings on either side of the street are regularly utilized, for financial, commercial, industrial, religious, educational, health, or recreational purposes.

This is the third time this issue is being addressed with this operator in Washington State. Business district leak surveys are not being conducted in all areas that they are required to be performed. The attached graphic shows the plats the operator is leak surveying annually and a sample of areas that have facilities that may meet the requirements of a business district as defined in WAC 480-93-005(3).

Standard Issues A1 (Significant impact/widespread occurrence) : WAC 480-93-188(3) : Issue not covered in standard items. See Issue Summary text for details.

A1 (Significant impact/widespread occurrence) : 192.723(b) : Records indicate requirement not completed at required intervals.

Result Notes Requirement

WAC 480-93-188(3) Gas Leak Surveys

Each gas pipeline company must conduct gas leak surveys according to the following minimum frequencies:

(a) Business districts - At least once annually, but not to exceed fifteen months between surveys. All mains in the right of way adjoining a business district must be included in the survey;

Definition

WAC 480-93-005(3) "Business district" means an area where the public regularly congregates or where the majority of the buildings on either side of the street are regularly utilized, for financial, commercial, industrial, religious, educational, health, or recreational purposes.

Business district leak surveys are not being conducted in all areas that they are required to be performed. The attached graphic shows the plats the operator is leak surveying annually and a sample of areas that have facilities that may meet the requirements of a business district as defined in WAC 480-93-005(3).

For areas outside the business districts, records were reviewed are contained in the documents portion of the UTC Quick Base record. Please review the yellow highlighted records for plats reviewed. The operator mentioned there is a QA test that the operator uses for leak surveys where discs are left and need to be recovered by the contractor.

Notes for records review of leak surveys conducted outside the business districts.

Main Survey 1-007-040 (Name and Date Different) It was a data entry error. Service Survey followup for records not provided during the first record request. 1-004-034 (2 cycles reviewed) - 2/16/2017 and 3/13/2020. Additionally a Couldn't Gain Access (CGA) was reviewed for W/O #11626284 that was completed on 3/9/2017. A leak survey audit was last completed per the operator last summer. "NWN completed the most recent leakage self-audit on 7/15/2020." (3/19/2021 email SR-NWN)

66. Question Result, ID, References **NA, MO.RW.CASINGLEAKSURVEY.R,**
Question Text *Do records indicate shorted casings were leak surveyed as required?*
Assets Covered **90888 (78)**
Result Notes **No such relevant facilities/equipment existed in the scope of inspection review.**
67. Question Result, ID, References **Sat, MO.RW.MARKERSURVEY.R,**
Question Text *Do records indicate that pipeline marker surveys were completed in the timeframe specified by WAC 480-93-124?*
Assets Covered **90888 (78)**
Result Notes **I reviewed Washington Completed Pipeline Marker Inspections - **Crossings** Vancouver Resource Center 1/1/2011 thru 1/15/2021 and the Washington Completed Pipeline Marker Inspections - **Plats** Vancouver Resource Center 1/1/2011 thru 1/15/2021. The bridge markers are completed annually during the bridge inspections. The bridge inspections were also reviewed under a separate inspection item.**
68. Question Result, ID, References **Sat, MO.RW.MARKERREPLACE.R,**
Question Text *Do records indicate that damaged or missing markers were replaced within forty-five days of discovery?*
Assets Covered **90888 (78)**
Result Notes **These are listed on the plat and crossings marker inventory. No examples of a reported damaged marker exceeding the 45 day time frame.**
69. Question Result, ID, References **Sat, AR.RMP.TESTREINSTATE.R, 192.603(b) (192.725(a), 192.725(b))**
Question Text *From the review of records, did the operator properly test disconnected service lines?*
Assets Covered **90888 (78)**
Result Notes **The test standard is specified in the SPW.**
70. Question Result, ID, References **Sat, MO.GMOPP.PRESSREGTEST.R, 192.709(c) (192.739(a), 192.739(b))**
Question Text *Do records indicate inspection and testing of pressure limiting, relief devices, and pressure regulating stations?*
Assets Covered **90888 (78)**
Result Notes **Williams performs OPP of NWN facilities. Records were reviewed for Camas, Washougal, Battle Ground, Ridgefield, and La Center gates for 2018-2020.**
71. Question Result, ID, References **Sat, MO.GMOPP.PRESSREGCAP.R, 192.709(c) (192.743(a), 192.743(b), 192.743(c))**
Question Text *Do records indicate testing or review of the capacity of each pressure relief device at each pressure limiting station and pressure regulating station as required?*
Assets Covered **90888 (78)**
Result Notes **Checked 3 years of relief capacity.**
72. Question Result, ID, References **Sat, DC.METERREGSVC.REGTEST.R,**
Question Text *Do records indicate that service regulators have been installed, operated, maintained, tested during initial turn-on and tested when customers experience pressure problems?*
Assets Covered **90888 (78)**
Result Notes **Pressure problem test investigations are done for WO code is a 6000. The reason code of "P" is a pressure problem.**

2019 records reviewed in Vancouver for service orders 12181949, 12247050, 12249909, 12899045,

Atmospheric corrosion records have field reports of where they set flow 6.5" of WC.

In 2018, 1135 G St in Washougal, a meter add completion record was provided. No records of a pressure problems were available. No gauge numbers on this form. The form does state the pressure was checked.

73. Question Result, ID, References Sat, MO.GM.DISTVALVEINSPECT.R, 192.603(b) (192.747(a), 192.747(b))
Question Text *Do records indicate proper inspection of each distribution system valve that might be required in an emergency at intervals not exceeding 15 months, but at least once each calendar year, and prompt remedial action to correct any valve found inoperable?*
Assets Covered 90888 (78)
Result Notes I reviewed WUTC_NWN_Clark_County_Annual_Valves_2018-2021. No issues were noted.
74. Question Result, ID, References NA, FS.FG.VAULTINSPECT.R, 192.709(c) (192.749(a), 192.749(b), 192.749(c), 192.749(d))
Question Text *Do records document the adequacy of inspections of all vaults having an internal volume \geq 200 cubic feet (5.66 cubic meters) that house pressure regulating/limiting equipment?*
Assets Covered 90888 (78)
Result Notes No such relevant facilities/equipment existed in the scope of inspection review.
75. Question Result, ID, References Sat, MO.GM.IGNITION.R, 192.709 (192.751(a), 192.751(b), 192.751(c))
Question Text *Do records indicate personnel followed processes for minimizing the danger of accidental ignition where the presence of gas constituted a hazard of fire or explosion?*
Assets Covered 90888 (78)
Result Notes QA Inspection Reports contain this information and a sample was reviewed.
76. Question Result, ID, References Sat, DC.DPC.FLANGE.R, 192.147(a) (192.147(b), 192.147(c))
Question Text *Do records indicate flanges and flange accessories meet the requirements of 192.147?*
Assets Covered 90888 (78)
Result Notes Flange specifications are in procedures and checked during station design. Several records reviewed containing the material specifications showed ANSI 16.5 flanges being used.
77. Question Result, ID, References Sat, DC.WELDPROCEDURE.WELD.R, 192.225(a) (192.225(b))
Question Text *Do records indicate weld procedures are being qualified in accordance with 192.225?*
Assets Covered 90888 (78)
Result Notes WPA-007

B-00-103A
78. Question Result, ID, References Sat, DC.WELDPROCEDURE.ESSENTIAL.R,
Question Text *Do records indicate that essential variables were measured and documented when welders and procedures were qualified?*
Assets Covered 90888 (78)
Result Notes I reviewed the welder and procedure qualification records. They document essential variables.
79. Question Result, ID, References Sat, TQ.QUOMCONST.WELDER.R, 192.227(a) (192.227(b), 192.229(a), 192.229(b), 192.229(c), 192.229(d), 192.328(a), 192.328(b), 192.807(a), 192.807(b))
Question Text *Do records indicate adequate qualification of welders?*
Assets Covered 90888 (78)
Result Notes Arc Weld Test Report - Brain Ek Weld Test Report They have moved to a "Coaching Report "
80. Question Result, ID, References Sat, TQ.QUOMCONST.NDT.R, 192.243(b)(2) (192.807(a), 192.807(b), 192.328(a), 192.328(b))
Question Text *Do records indicate the qualification of nondestructive testing personnel?*
Assets Covered 90888 (78)
Result Notes OWL - (Acuren) Thomas May exp 1-31-2022 Dye-pen, RT Level II 12-31-2022

(Visual acuity examination done yearly)

81. Question Result, ID, References **NA, DC.CO.PLASTICJOINTPROCEDURE.R, 192.273(b) (192.283(a), 192.283(b), 192.283(c), 192.283(d))**
Question Text *Have plastic pipe joining procedures been qualified in accordance with 192.283?*
Assets Covered **90888 (78)**
Result Notes **Sp 250 - TR33 - They use manufacturers qualified procedures. No such event occurred, or condition existed, in the scope of inspection review.**
82. Question Result, ID, References **Sat, DC.CO.PLASTICJOINTQUAL.R, 192.285(d) (192.285(a), 192.285(b), 192.285(c), 192.807(a), 192.807(b))**
Question Text *Do records indicate persons making joints in plastic pipelines are qualified in accordance with 192.285?*
Assets Covered **90888 (78)**
Result Notes **Rob Meske's OQ records and Randy Boespflug's records were reviewed. We also review them in the field.**
83. Question Result, ID, References **Sat, DC.CO.PLASTICJOINTINSR.R, 192.287 (192.807(a), 192.807(b))**
Question Text *Do records indicate persons inspecting the making of plastic pipe joints have been qualified?*
Assets Covered **90888 (78)**
Result Notes **Mark Durand's qualifications were reviewed for plastic pipe inspection. AOC08 12/23/21**
84. Question Result, ID, References **Sat, DC.CO.PLASTICPIPESEP.R,**
Question Text *Do records indicate minimum separation requirements are met for plastic pipelines?*
Assets Covered **90888 (78)**
Result Notes **No variances for this time period. The separation is stored as value under the standard construction completion form.**
85. Question Result, ID, References **Sat, MO.GM.EQUIPPLASTICJOINT.R, 192.603(b) (192.756)**
Question Text *Do records indicate equipment used in joining plastic pipe was maintained in accordance with the manufacturer's recommended practices or with written procedures that have been proven by test and experience to produce acceptable joints?*
Assets Covered **90888 (78)**
Result Notes **Sam checked with tool room and provided several records demonstrating maintenance of equipment. The sample records reviewed for for a Trac (Hydraulic) machine**
86. Question Result, ID, References **NA, MO.GM.RECORDS.R, 192.605(b)(1) (192.243(f), 192.709(a), 192.709(b), 192.709(c))**
Question Text *Do records indicate that records are maintained of each pipe/"other than pipe" repair, NDT required record, and (as required by subparts L or M) patrol, survey, inspection or test?*
Assets Covered **90888 (78)**
Result Notes **No such relevant facilities/equipment existed in the scope of inspection review.**
87. Question Result, ID, References **NA, MO.GM.MOVEANDLOWER.R,**
Question Text *Do records indicate that a study was prepared before moving or lowering a steel gas pipeline as required?*
Assets Covered **90888 (78)**
Result Notes **No such event occurred, or condition existed, in the scope of inspection review.**
88. Question Result, ID, References **NA, MO.GM.MOVEANDLOWERSURVEY.R,**
Question Text *Do records indicate that a leak survey was conducted not more than thirty days after moving and/or lowering a metallic pipeline?*
Assets Covered **90888 (78)**
Result Notes **No such event occurred, or condition existed, in the scope of inspection review.**
89. Question Result, ID, References **Concern, MO.RW.MARKERSMAPSDRAW.R,**

Question Text *Are records sufficient to indicate class location and other areas where pipeline markers are required?*

Assets Covered 90888 (78)

Result Issue Summary The operator's manual states that markers are not required for gas lines that fall within the Urban Growth Area (UGA) because they are considered to be Class 3 or 4 locations and do not require pipeline marking per 192.707(b)(2) where a damage prevention program is in effect under § 192.614. This practice may result in pipelines that should be properly marked but are not if they fall within the UGA and are Class 1 or 2 locations. The operator did provide a map containing the UGA and with their pipeline system on it for review, but it did not contain class location information. No specific instances were found during the inspection where markers were required to be placed in a Class 1 or 2 location that were not so this observation is listed as an area of concern.

Result Notes The operator's practice is inconsistent with pipeline safety regulations.

SPW 705

1. SCOPE This standard practice sets forth the policy for design, location, and maintenance of pipeline markers to identify company distribution mains and transmission lines. 2. POLICY The location of company transmission lines and distribution mains must be marked as defined in this standard practice, with pipeline markers placed and maintained as close as practical to each required location to reduce the possibility of damage or interference. **All buried Distribution pipelines within the Urban Growth Boundary are considered to be Class 3 or 4 locations and do not require pipeline marking per 192.707(b)(2).** The company will have maps, drawings, or other sufficient records indicating class locations and other areas where pipeline markers are required.

FR.FIELDPIPE: Pipeline Inspection (Field)

90. Question Result, ID, References Sat, DC.MA.MARKING.O, 192.63(a) (192.63(b), 192.63(c), 192.63(d))

Question Text *Are pipe, valves, and fittings properly marked for identification?*

Assets Covered 90888 (78)

91. Question Result, ID, References Sat, DC.DPC.FLANGE.O, 192.141 (192.147(a), 192.147(b), 192.147(c))

Question Text *Do flanges and flange accessories meet the requirements of 192.147?*

Assets Covered 90888 (78)

92. Question Result, ID, References NA, DC.DPC.GDVALVEPLACEMENT.O, 192.141 (192.181(a), 192.181(b), 192.181(c))

Question Text *Are distribution line valves being installed as required of 192.181?*

Assets Covered 90888 (78)

Result Notes No such activity/condition was observed during the inspection.

93. Question Result, ID, References Sat, DC.CO.PLASTICPIPEPROC.O,

Question Text *Is plastic pipe handled, stored and installed in accordance with manufacturer's recommendations, including maximum ultraviolet exposure?*

Assets Covered 90888 (78)

Result Notes The plastic pipe is checked during DTC inspections.

94. Question Result, ID, References NA, DC.CO.PLASTICWEAKLINK.O,

Question Text *Is a weak link installed when pulling plastic pipe by mechanical means?*

Assets Covered 90888 (78)

Result Notes No such activity/condition was observed during the inspection.

95. Question Result, ID, References NA, DC.CO.PLASTICPIPESEP.O,

Question Text *Are plastic pipelines installed with the minimum separation from other utilities as required?*

Assets Covered 90888 (78)

Result Notes No such activity/condition was observed during the inspection.

96. Question Result, ID, References **NA, DC.CO.PLASTICBACKFILL.O,**
 Question Text *Is plastic pipe buried in essentially rock-free material or material recommended by the pipe manufacturer?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
97. Question Result, ID, References **NA, DC.CO.PLASTICSQUEEZING.O,**
 Question Text *Verify that the operator has limits in place for squeezing plastic pipe.*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
98. Question Result, ID, References **NA, DC.METERREGSVC.CUSTOMETERREGLOC.O, 192.351 (192.353(a), 192.353(b), 192.353(c), 192.353(d))**
 Question Text *Are meters and service regulators being located consistent with the requirements of 192.353?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
99. Question Result, ID, References **NA, DC.METERREGSVC.CUSTOMETERREGPROT.O, 192.351 (192.355(a), 192.355(b), 192.355(c))**
 Question Text *Are meters and service regulators being protected from damage consistent with the requirements of 192.355?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
100. Question Result, ID, References **NA, DC.METERREGSVC.CUSTOMETERREGINSTALL.O, 192.351 (192.357(a), 192.357(b), 192.357(c), 192.357(d))**
 Question Text *Are meters and service regulators being installed consistent with the requirements of 192.357?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
101. Question Result, ID, References **NA, DC.METERREGSVC.CUSTOMETEROPPRESS.O, 192.351 (192.359(a), 192.359(b), 192.359(c))**
 Question Text *Are customer meter operating pressures consistent with the requirements of 192.359?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
102. Question Result, ID, References **NA, DC.METERREGSVC.SVCLINEINSTALL.O, 192.351 (192.361(a), 192.361(b), 192.361(c), 192.361(d), 192.361(e), 192.361(f), 192.361(g))**
 Question Text *Are customer service lines being installed consistent with the requirements of 192.361?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
103. Question Result, ID, References **NA, DC.METERREGSVC.SVCLINEVLVLOCATEREQT.O, 192.351 (192.363(a), 192.363(b), 192.363(c), 192.365(a), 192.365(b), 192.365(c))**
 Question Text *Are customer service line valves being installed meeting the valve and locations requirements of 192.363 and 192.365?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
104. Question Result, ID, References **NA, DC.METERREGSVC.SVCLINECONNECT.O, 192.351 (192.367(a), 192.367(b), 192.369(a), 192.369(b))**
 Question Text *Are customer service lines being installed with connections meeting the requirements of 192.367 and 192.369?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
105. Question Result, ID, References **NA, DC.METERREGSVC.SVCLINEMATERIAL.O, 192.351 (192.371, 192.373(a), 192.373(b), 192.373(c), 192.375(a), 192.375(b), 192.377)**
 Question Text *Are customer service lines being installed constructed appropriately for the types of materials used?*

Assets Covered 90888 (78)

Result Notes No such activity/condition was observed during the inspection.

106. Question Result, ID, NA, DC.METERREGSVC.NEWSVCLINENOTUSED.O, 192.351 (192.379, 192.379(a), 192.379(b),
References 192.379(c))

Question Text *Are new customer service lines not in use configured in accordance with the requirements of 192.379?*

Assets Covered 90888 (78)

Result Notes No such activity/condition was observed during the inspection.

107. Question Result, ID, NA, DC.METERREGSVC.EXCSFLOWVLVLOCATE.O, 192.351 (192.381(c), 192.381(d), 192.381(e))
References

Question Text *Are service line excess flow valves located and identified in accordance with the requirements of 192.381?*

Assets Covered 90888 (78)

Result Notes No such activity/condition was observed during the inspection.

108. Question Result, ID, NA, DC.METERREGSVC.REGTEST.O,
References

Question Text *Are service regulators operated, maintained, installed and tested during the initial turn-on in accordance with manufacturer's recommendations and WAC requirements?*

Assets Covered 90888 (78)

Result Notes No such activity/condition was observed during the inspection.

109. Question Result, ID, NA, DC.WELDPROCEDURE.ONSITE.O,
References

Question Text *Are qualified written welding procedures located onsite where welding is being performed?*

Assets Covered 90888 (78)

Result Notes No such activity/condition was observed during the inspection.

110. Question Result, ID, NA, DC.WELDPROCEDURE.ESSENTIAL.O,
References

Question Text *Does the operator document essential variables when qualifying welders and weld procedures?*

Assets Covered 90888 (78)

Result Notes No such activity/condition was observed during the inspection.

111. Question Result, ID, NA, TD.COAT.NEWPIPEINSTALL.O, 192.461(d)
References

Question Text *Is external protective coating being protected from damage that could result from adverse ditch conditions or supporting blocks?*

Assets Covered 90888 (78)

Result Notes No such activity/condition was observed during the inspection.

112. Question Result, ID, Sat, TD.CPMONITOR.MONITORCRITERIA.O, 192.465(a) (192.463(b), 192.463(c), 192.463(a))
References

Question Text *Are methods used for taking CP monitoring readings that allow for the application of appropriate CP monitoring criteria?*

Assets Covered 90888 (78)

Result Notes Instant-off CP readings were taken at several sites to account for IR drop during the field portion. Not all sites were able to be interrupted, but for those that were capable we did. NWN uses a 200mV Delta for the casing to carrier isolation criteria.

113. Question Result, ID, Sat, TD.CPMONITOR.CURRENTTEST.O, 192.465(b)
References

Question Text *Are impressed current sources properly maintained and are they functioning properly?*

Assets Covered 90888 (78)

Result Notes All rectifiers were functioning properly during our field visits.

114. Question Result, ID, Sat, TD.CP.ELECISOLATE.O, 192.467(a) (192.467(b), 192.467(c), 192.467(d), 192.467(e))
References

Question Text *Are measures performed to ensure electrical isolation of each buried or submerged pipeline from other metallic structures unless they electrically interconnect and cathodically protect the pipeline and the other structures as a single unit?*

Assets Covered 90888 (78)

Result Notes Isolation was checked at the Williams North Vancouver Gate Station. See attached field notes for details.

115. Question Result, ID, References Concern, TD.CP.CASINGINSPECT.O,

Question Text *Are casings electrically isolated from the pipeline?*

Assets Covered 90888 (78)

Result Issue Summary One casing did not pass the preliminary (PSP) isolation test as indicated in the field notes. NWN will need to respond with their acknowledgement of this finding and the scheduling of possibly clearing the short, leak surveys, abandonment, or other appropriate follow up measures.

Result Notes Casings were checked as part of the field portion. One casing did not pass the preliminary (PSP) isolation test and will be addressed in the inspection findings letter so the follow-up can be tracked. The location is: Hwy 99 from 86th St 250ft to the North The closest address is 8709 NE Hwy 99. Casing #124305

NWN Problem report ID 103666 NWN Work Order 3645868

-1360 mV CSE (on)Casing

-1440 mV CSE (on) Carrier

Delta reading is not enough to meet NWN's 200mV isolation standard. This will be noted as an item of concern in the inspection findings so the operator reports on when this issue has been resolved. The operator states it has been added to the special leak survey list and a work order to cut and cap the line has been created because it is an unutilized section of pipe.

116. Question Result, ID, References Sat, TD.CP.MONITOR.TESTSTATION.O, 192.469

Question Text *Do cathodically protected pipelines have a sufficient number of test stations?*

Assets Covered 90888 (78)

117. Question Result, ID, References Sat, TD.CP.MONITOR.TESTLEAD.O, 192.471(a)

Question Text *Do pipelines with cathodic protection have electrical test leads installed in accordance with requirements of Subpart I?*

Assets Covered 90888 (78)

118. Question Result, ID, References NA, TD.CP.MONITOR.INTFCURRENT.O, 192.473(a)

Question Text *Are areas of potential stray current identified, and if found, the detrimental effects of stray currents minimized?*

Assets Covered 90888 (78)

Result Notes No such event occurred, or condition existed, in the scope of inspection review.

119. Question Result, ID, References NA, TD.CP.ADJACENTMETAL.O, 192.473(b)

Question Text *Are impressed current type cathodic protection systems and galvanic anode systems installed so as to minimize any adverse effect on existing adjacent underground metallic structures?*

Assets Covered 90888 (78)

Result Notes No such activity/condition was observed during the inspection. Witnessing installation of CP systems was not covered during this inspection. Rectifiers and associated ground beds appeared to be some distance to other underground structures and this topic was discussed with the CP technicians and supervisor during the inspection.

120. Question Result, ID, References NA, TD.ICP.CORRGASPRVNT.O, 192.475(a)

Question Text *If the transportation of corrosive gas is not allowed, is the transportation of corrosive gas prevented?*

Assets Covered 90888 (78)

Result Notes No such event occurred, or condition existed, in the scope of inspection review.

121. Question Result, ID, References **NA, TD.ICP.CORRGASACTION.O, 192.477**
 Question Text *Are adequate actions taken when corrosive gas is being transported by pipeline?*
 Assets Covered **90888 (78)**
 Result Notes **No such event occurred, or condition existed, in the scope of inspection review.**
122. Question Result, ID, References **Sat, TD.ATM.ATMCORRODEINSP.O, 192.481(b) (192.481(c), 192.479(a), 192.479(b), 192.479(c))**
 Question Text *Is pipe that is exposed to atmospheric corrosion protected?*
 Assets Covered **90888 (78)**
123. Question Result, ID, References **NA, AR.RCOM.REMEDIATIONOM.O, 192.487(a) (192.487(b))**
 Question Text *Is anomaly remediation and documentation of remediation adequate for all segments?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
124. Question Result, ID, References **Sat, MO.GOODOR.ODORIZE.O, 192.625(a) (192.625(c), 192.625(d), 192.625(e), 192.625(f))**
 Question Text *Is sampling of combustible gases adequate using an instrument capable of determining the percentage of gas in air at which it becomes readily detectable?*
 Assets Covered **90888 (78)**
 Result Notes **Please review attached field notes for sampling readings from the field inspection.**
125. Question Result, ID, References **NA, MO.GO.PURGE.O, 192.629(a) (192.629(b))**
 Question Text *Are lines being purged in accordance with 192.629?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
126. Question Result, ID, References **Sat, MO.RW.ROWMARKER.O, 192.707(a) (192.707(b), 192.707(d), CGA Best Practices, v4.0, Practice 2-5, CGA Best Practices, v4.0, Practice 4-20)**
 Question Text *Are line markers placed and maintained as required?*
 Assets Covered **90888 (78)**
 Result Notes **Markers observed during the field portion of this inspection, where sites were visited, were sufficient.**
127. Question Result, ID, References **Sat, MO.RW.ROWMARKERABOVE.O, 192.707(c) (CGA Best Practices, v4.0, Practice 2-5, CGA Best Practices, v4.0, Practice 4-20)**
 Question Text *Are line markers placed and maintained as required for above ground pipelines?*
 Assets Covered **90888 (78)**
 Result Notes **A bridge marker was observed to be damaged during the field portion and it was immediately replaced by the operator before leaving the site.**
128. Question Result, ID, References **NA, MO.GMOPP.PRESSREGTEST.O, 192.739(a) (192.739(b))**
 Question Text *Are field or bench tests or inspections of regulating stations, pressure limiting stations or relief devices adequate?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
129. Question Result, ID, References **NA, MO.GMOPP.PRESSREGMETER.O, 192.741(a) (192.741(b), 192.741(c))**
 Question Text *Are telemetering or recording gauges properly utilized as required for distribution systems?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
130. Question Result, ID, References **Sat, MO.GMOPP.MULTIPRESSREG.O,**
 Question Text *Are regulator stations installed in a manner to provide protection between regulator stages?*
 Assets Covered **90888 (78)**

131. Question Result, ID, References **Sat, MO.GM.DISTVALVEINSPECT.O, 192.747(a) (192.747(b))**
 Question Text *Is proper inspection being performed for each distribution system valve that might be required in an emergency, and prompt remedial action to correct any valves found inoperable?*
 Assets Covered **90888 (78)**
 Result Notes **Several valve operation and maintenance checks were conducted during this inspection.**
132. Question Result, ID, References **Sat, FS.FG.CASING.O,**
 Question Text *Are all casings bare steel and do they have test leads installed on new casings without vents?*
 Assets Covered **90888 (78)**
133. Question Result, ID, References **NA, FS.FG.CASESEAL.O,**
 Question Text *Does the operator seal both ends of casings/conduits for mains and transmission lines and seal the end nearest the building for service lines?*
 Assets Covered **90888 (78)**
 Result Notes **The operator was not observed sealing ends of casings or conduits. No such activity/condition was observed during the inspection.**
134. Question Result, ID, References **NA, FS.FG.VAULTINSPECT.O, 192.749(a) (192.749(b), 192.749(c), 192.749(d))**
 Question Text *Are inspections of selected vaults with internal volume \geq 200 cubic feet (5.66 cubic meters) housing pressure regulating/limiting equipment adequate?*
 Assets Covered **90888 (78)**
 Result Notes **No such relevant facilities/equipment existed in the scope of inspection review. No vaults of this capacity in Washington State.**
135. Question Result, ID, References **NA, AR.RMP.IGNITION.O, 192.751(a) (192.751(b), 192.751(c))**
 Question Text *Perform observations of selected locations to verify that adequate steps have been taken by the operator to minimize the potential for accidental ignition.*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
136. Question Result, ID, References **NA, MO.GM.EQUIPPLASTICJOINT.O, 192.756**
 Question Text *Is proper maintenance being performed on equipment used in joining plastic pipe in accordance with the manufacturer's recommended practices or with written procedures that have been proven by test and experience to produce acceptable joints?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
137. Question Result, ID, References **NA, MO.GM.ONSITEPROCS.O,**
 Question Text *Are procedures applicable to the work being done located onsite where the work is being done?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**
138. Question Result, ID, References **Sat, AR.PTI.EQUIPCALIB.O,**
 Question Text *Is pressure testing equipment calibrated according to calibration schedules and procedures?*
 Assets Covered **90888 (78)**
 Result Notes **Pressure testing equipment was verified before performing covered tasks during the field portion.**
139. Question Result, ID, References **NA, AR.PTI.PLASTICPRESSURETEST.O,**
 Question Text *Is plastic pipe installed and backfilled prior to pressure testing?*
 Assets Covered **90888 (78)**
 Result Notes **No such activity/condition was observed during the inspection.**

GDIM.IMPL: GDIM Implementation

140. Question Result, ID, References **Sat, GDIM.RR.MECHANICALFITTINGDATAIMPL.R, 192.1009 (191.12)** (also presented in: PRR.REPORT)
Question Text *Have accurate records been maintained documenting mechanical fitting failures that resulted in hazardous leaks?*
Assets Covered **90888 (78)**
Result Notes **None for reporting year 2019. 2018 and 2017 were submitted.**

MISCTOPICS.PROT9: OQ Field Inspection

141. Question Result, ID, References **NA, TQ.PROT9.CORRECTION.O, 192.801(a) (192.809(a))**
Question Text *Have potential issues identified by the OQ plan inspection process been corrected at the operational level?*
Assets Covered **90888 (78)**
Result Notes **No such event occurred, or condition existed, in the scope of inspection review.**
142. Question Result, ID, References **Sat, TQ.PROT9.QUALIFICATIONSTATUS.O, 192.801(a) (192.809(a))**
Question Text *Verify the individuals performing the observed covered tasks are currently qualified to perform the covered tasks.*
Assets Covered **90888 (78)**
Result Notes **Qualifications were reviewed for all field personnel prior to performing the task.**
143. Question Result, ID, References **Sat, TQ.PROT9.TASKPERFORMANCE.O, 192.801(a) (192.809(a))**
Question Text *Verify the qualified individuals performed the observed covered tasks in accordance with the operator's procedures or operator approved contractor procedures.*
Assets Covered **90888 (78)**
Result Notes **The CTs reviewed in the field were consistent with operator procedures.**
144. Question Result, ID, References **Sat, TQ.PROT9.AOCRECOG.O, 192.801(a) (192.809(a))**
Question Text *Verify the individuals performing covered tasks are cognizant of the AOCs that are applicable to the tasks observed.*
Assets Covered **90888 (78)**
Result Notes **The individuals performing the covered tasks were cognoscente of AOCs and were able to explain them well.**
145. Question Result, ID, References **Sat, TQ.PROT9.VERIFYQUAL.O, 192.801(a) (192.809(a))**
Question Text *Observe in the field (job site, local office, etc.) that the foreman/supervisor/manager has verified the qualification of the individual performing the task, that the qualification records are current, and ensure the personal identification of all individuals performing covered tasks are checked, prior to task performance.*
Assets Covered **90888 (78)**
Result Notes **Qualifications were reviewed for all field personnel prior to performing field verification tasks.**

Bridge Patrols

Keith Perkins Task DOQ-120001 exp 12/10/23

Valves

Joe Reynosa DOQ-096143 and DOQ-83101 exp 8/27/23

Trent Thompson DOQ-0967660 and DOQ-83101 exp 9/11/23

Odorant Testing

Shane Macias-Williams DOQ-70001 exp 6/25/22

Cathodic Protection

Timothy Countryman DOQ-20102 exp 7/26/21 and DOQ-20001 exp 7/26/21 DOQ-20101 exp 7/26/21

Pressure Control

Avery Wakefield DOQ-80401 exp 6/2/22 and DOQ-80001 exp 6/2/22

Michael Jamison DOQ-80401 exp 6/3/22 and DOQ-80001 exp 6/3/22

MISCTOPICS.PUBAWARE: Public Awareness Program Effectiveness

146. Question Result, ID, [NC, EP.ERG.LIAISON.R, 192.605\(a\) \(192.615\(c\)\(1\), 192.615\(c\)\(2\), 192.615\(c\)\(3\), 192.615\(c\)\(4\),](#)
References [192.616\(c\), ADB-05-03](#) (also presented in: PRR.OM)
Question Text *Do records indicate liaisons established and maintained with appropriate fire, police and other public officials and utility owners in accordance with procedures?*
Assets Covered [90888 \(78\)](#)
Result Notes [This will be reviewed in the upcoming PA audit in April 2021.](#)
147. Question Result, ID, [NC, PD.PA.LANGUAGE.R, 192.616\(g\) \(API RP 1162 Section 2.3.1\)](#) (also presented in: PRR.OM)
References
Question Text *Were materials and messages developed and delivered in other languages commonly understood by a significant number and concentration of non-English speaking populations in the operator's areas?*
Assets Covered [90888 \(78\)](#)
Result Notes [This will be reviewed in the upcoming PA audit in April 2021.](#)
148. Question Result, ID, [NC, PD.PA.EVALEFFECTIVENESS.R, 192.616\(c\) \(API RP 1162 Section 8.4\)](#) (also presented in: PRR.OM)
References
Question Text *Have effectiveness evaluation(s) of the program been performed for all stakeholder groups in all notification areas along all systems covered by the program?*
Assets Covered [90888 \(78\)](#)
Result Notes [This will be reviewed in the upcoming PA audit in April 2021.](#)
149. Question Result, ID, [NA, PD.PA.MSTRMETER.R, 192.616\(j\) \(192.616\(h\), API RP 1162 Section 2.7 \(Step 12\), API RP 1162](#)
References [Section 8.5\)](#) (also presented in: PRR.OM)
Question Text *Do records indicate the public awareness program for a master meter or petroleum gas system operator has met the requirements of Part 192?*
Assets Covered [90888 \(78\)](#)
Result Notes [No such event occurred, or condition existed, in the scope of inspection review.](#)

Report Parameters: Results: all

Except as required to be disclosed by law, any inspection documentation, including completed protocol forms, summary reports, executive summary reports, and enforcement documentation are for internal use only by federal or state pipeline safety regulators. Some inspection documentation may contain information which the operator considers to be confidential. In addition, supplemental inspection guidance and related documents in the file library are also for internal use only by federal or state pipeline safety regulators (with the exception of documents published in the federal register, such as advisory bulletins). Do not distribute or otherwise disclose such material outside of the state or federal pipeline regulatory organizations. Requests for such information from other government organizations (including, but not limited to, NTSB, GAO, IG, or Congressional Staff) should be referred to PHMSA Headquarters Management.

Inspector and Operator Information

Table with 3 columns: Inspection Link, Inspector - Lead, Inspector - Assist, Operator, Unit, Records Location - City & State, Inspection Start Date, Inspection Exit Interview Date, Engineer Submit Date.

Inspection Summary Inspection Scope and Summary

This inspection consisted of a records review for the time period of 2018-2021 and inspection of field facilities. It was conducted primarily in this application (IA), but some additional Washington State questions were completed in the UTC's inspection system.

Facilities visited and Total AFODs

Please review the attached Field Notes form for a complete list facilities visited, the inspection items covered, and the results. The facilities visited were bridges, emergency valves, casings (PSP reads), isolated steel (PSP reads), rectifiers (function and output check), regulators (set points and function check), and reliefs (set points and function check).

- 2 Records Review Days
4 MS-Teams Days
5 Field Days (on site)

Summary of Significant Findings

The following probable violation(s) and areas of concern of WAC 480-93 were noted as a result of the 2021 inspection of the Northwest Natural Clark County unit. The inspection included a random selection of records, operation and maintenance (O&M), emergency response, inventory, and field inspection of the pipeline facilities.

PROBABLE VIOLATIONS

1. WAC 480-93-188 Gas Leak Surveys

- (3) Each gas pipeline company must conduct gas leak surveys according to the following minimum frequencies:
(a) Business districts - At least once annually, but not to exceed fifteen months between surveys. All mains in the right of way adjoining a business district must be included in the survey;

Finding(s):

Business district leak surveys are not being conducted in all areas that they are required to be performed. The enclosed graphic, "Attachment 1," illustrates the plots the operator is leak surveying annually. A sample of areas that have facilities that may meet the requirements of a business district as defined in WAC 480-93-005(3) are indicated by green asterisks on the map.

2. WAC 480-93-170 Tests and Reports for Gas Pipelines

- (7) Each gas pipeline company must keep records of all pressure tests performed for the life of the pipeline and must document the following information:
(a) Gas pipeline company's name;
(b) Employee's name;
(c) Test medium used;
(d) Test pressure;
(e) Test duration;
(f) Line pipe size and length;
(g) Dates and times; and
(h) Test results.

Finding(s):

Pressure test records were verified and indicated all necessary information as required by WAC 480-93-170(7) for larger construction project records reviewed during this inspection. However, pressure test records for service line installations reviewed did not contain a location on the form to store test medium used or if the test passed or failed in all cases. The items missing were:

- (c) Test medium used;
(h) Test results.

AREAS OF CONCERN

1. WAC 480-93-110 Corrosion control

- (5) Each gas pipeline company must conduct inspections or tests for electrical isolation between metallic pipeline casings and metallic pipelines at least once annually, but not to exceed fifteen months between inspections or tests. The test or inspection must also determine whether the pipeline has adequate levels of cathodic protection at the casing to pipeline interface. These requirements do not apply to unprotected copper inserted in ferrous pipe.
(b) Whenever electrical isolation tests or inspections indicate that a possible shorted condition exists between a casing and a pipeline, the gas pipeline company must conduct a follow-up test within ninety days to determine whether an actual short exists. The gas pipeline company's procedures manual must have a level or threshold that would indicate a potential shorted condition and must also detail the method of determining whether the casing is actually shorted to the pipeline.
(c) The gas pipeline company must clear the shorted condition where practical.
(d) Whenever a short exists between a line pipe and casing, the gas pipeline company must perform a leak survey within ninety days of discovery and at least twice annually thereafter, but not to exceed seven and one-half months between leak surveys until the shorted condition is eliminated.

Finding(s):

During the field portion of the inspection, a casing did not meet the operator's minimum isolation criteria of 200mV from the carrier pipe to casing during a field cathodic protection test. The operator did create a work order to document this finding and perform follow up testing. Documentation of what was completed to resolve this condition and any follow up leak survey records is necessary.

1. **WAC 480-93-124 Pipeline markers.**

(1) Each gas pipeline company must place pipeline markers at the following locations:

(f) Over mains located in Class 1 and 2 locations;

Finding(s):

The operator's manual states that markers are not required for gas lines that fall within the Urban Growth Area (UGA) because they are considered Class 3 or 4 locations and do not require pipeline marking per 192.707(b)(2). This practice may result in pipelines that should be properly marked but are not if they fall within the UGA and are Class 1 or 2 locations. The operator did provide a map containing the UGA and with their pipeline system on it for review, but it did not contain class location information. No specific instances were found during the inspection where markers were required to be placed in a Class 1 or 2 location.

Primary Operator contacts and/or participants

Ryan Truair - Sr. Manager of Compliance

Samantha Rookstool - Code Compliance Specialist

Bob Anderson - Construction Supervisor

Greg Bronson - Cathodic Protection Manager

Jaimie Lemke - Code Compliance Specialist

Margaret Locke - Compliance Engineer

Operator executive contact and mailing address for any official correspondence

Jon G. Huddleston

Vice President of Engineering and Utility Operations

Northwest Natural

250 Southwest Taylor Street

Portland, Oregon 97204

Instructions and Ratings Definitions

INSTRUCTIONS

S - Satisfactory

U - Unsatisfactory

Area Of Concern

N/A - Not Applicable (does not apply in this inspection)

N/C - Not Checked/Evaluated (was not inspected during this inspection)

Unanswered Questions

0

INSPECTION RESULTS

Satisfactory Responses

15

Unsatisfactory Responses

0

Area of Concern Responses

0

Not Applicable Responses

1

Not Checked / Evaluated Responses

1

Unanswered Questions List

Satisfactory List

1,2,3,4,5,6,7,8,9,10,11,12,14,15,17

Unsatisfactory List

Area of Concern List

Not Applicable List

13,

Not Checked / Evaluated List

16,

**If an item is marked Form a- annual review. U, N/Form a- annual review or N/C, an explanation must be included in this report.

Records, Procedures and Reports

Question #1.

Has the operator provided accurate maps (or updates) of pipelines operating over 250PSIG to specifications developed by the commission and sufficient to meet the needs of first responders?

Statutory Reference 1. Result 1. Notes

RCW 81.88.080

Satisfactory

R

WA UTC PIPELINE MAPPING SYSTEM

Add this question as a favorite

Add a requested item for this question feedback

Has the operator provided accurate maps (or updates) of all pipelines operating over 250 psig to specifications developed by the needs of first responders? RPT.RR.PIPELINEMAPPING.R - RCW 81.88.080(1) More...

Question #2.

Do records indicate that the operator appropriately addresses discovered mapping errors, including all mapping errors that have resulted in excavation damage?

Statutory Reference 2. Result 2. Notes

WAC 480-93-018

Satisfactory

The compliance representative checked with the GIS department. There is a process where redlines, such as street name changes, unplatted services, abandoned services, attribute errors, line length, etc are made. Errors are discovered from multiple sources and then researched and resolved by the GIS dept.

Question #3.

Do records indicate that the operator's mapping corrections are made in a timely manner and in accordance with the operator's written procedures?

Statutory Reference 3. Result 3. Notes

WAC 480-93-018

Satisfactory

R

NORMAL OPERATIONS AND MAINTENANCE PROCEDURES - HISTORY

Add this question as a favorite

Are construction records, maps and operating history available to appropriate operating personnel? MO.GO.OMHISTORY.R - 480-93-018

Question #4

Do records indicate that the operator has and follows a quality assurance program for monitoring the locating and marking of facilities? Do records show that the operator conducts regular field audits of the performance of locators/contractors and takes action when necessary?

Reference:

4. Results

4. Notes

Operator Internal Performance Measures, PHMSA State Program Guidelines

Satisfactory

NWN QA's locating jobs, for example Insp# 22729.

Question #5.

Does operator include performance measures in facility locating services contracts with corresponding and meaningful incentives and penalties?

Statutory Reference 5. Result 5. Notes

WAC 480-93-007

WAC 480-93-013

Reference:

PHMSA State Program Guidelines

Satisfactory

The contract management group will monitor locate issues and will disqualify or requalify. No specific KPIs

Question #6.

Do operator contracted (or organic) locators address performance problems for persons performing locating services through mechanisms such as re-training, process change, or changes in staffing levels?

Statutory Reference **Statutory Reference** **6. Result** **6. Notes**
WAC 480-93-007 WAC 480-93-013 Satisfactory The contract management group will monitor locate issues and will disqualify or requalify. No specific KPIs. Locate errors are thoroughly reviewed.

Question #7.
Does the operator periodically review the Operator Qualification plan criteria and methods used to qualify personnel to perform locates?

Statutory Reference **Statutory Reference** **7. Result** **7. Notes**
WAC 480-93-007 WAC 480-93-013 Satisfactory Locating is a covered task item 137-02. The OQ review date was reviewed March 11,2020. CY 2021 was reviewed March 1, 2021.

Question #8.
Do records indicate that operator locating and excavation practices are in compliance with the requirements for facility owners prescribed by RCW 19.122?

Statutory Reference **Statutory Reference** **8. Result** **8. Notes**
RCW 19.122 WAC 480-93-250 Satisfactory The QA locator inspection contains these practices

Question #9.
Are locates made within the required timelines specified within RCW 19.122 (2 full business days)? Examine record sample.

Statutory Reference **Statutory Reference** **9. Result** **9. Notes**
RCW 19.122 WAC 480-93-250 Satisfactory Ticket 18026949 was reviewed. Ticket 20003682
Random record from 4/1/2019 # 19117749

Question #10.
Are locating and excavating personnel properly qualified in accordance with the operator's Operator Qualification plan and with federal and state requirements?

Statutory Reference **Statutory Reference** **10. Result** **10. Notes**
WAC 480-93-007 WAC 480-93-013 Satisfactory Locating is a covered task item 137-02. The OQ review date was reviewed March 11,2020. CY 2021 was reviewed March 1, 2021.

Question #11.
Do records indicate that the operator has and follows a procedure for leaks caused by excavation damage near buildings such that the procedure adequately addresses the possibility of multiple leaks and underground migration of gas into nearby buildings/structures?

Reference: **11. Result** **11. Notes**
PHMSA State Program Guidelines Satisfactory Leak follow ups after damage the operator performs follow-up leak surveys
Operator Internal Performance Measures

Question #12.
Do the operator's leak records indicate that the operator is conducting detailed leak investigations, evaluations, classification, and remedial action/repair prioritization steps in sufficient detail to ensure compliance with WACs 480-93-185, -186, and -18601?

Reference: **12. Result** **12. Notes**
PHMSA State Program Guidelines Satisfactory See IA questions
Operator Internal Performance Measures

Question #13
Do records indicate that shorted conditions are leak surveyed within ninety (90) days of discovery and twice annually, not to exceed 7.5 months thereafter?

Statutory Reference **13. Result** **Q13. Within Scope of this Inspection:** **13. Notes**
WAC 480-93-200 Not Applicable Answered in IA.

Question #14.
Did the operator submit a copy of DOT Drug and Alcohol Testing MIS Data Collection Form to the commission when required?

Statutory Reference **14. Result** **14. Notes**
WAC 480-93-200(13) Satisfactory
6 [WA UTC MIS REPORTS](#) [Add this question as a favorite](#) [Add a requested item for this question](#) [feedback](#)
R [Has the operator submitted a copy of DOT Drug and Alcohol Testing MIS Data Collection Form to the commission when required?](#)
[480-93-018\(1\)](#) [\(480-93-200\(13\)\)](#) [More...](#)

Question #15
Does the operator file all appropriate Annual Reports and Material/Failure Analysis reports as required by WAC 480-93-200 no thanter than March 15 for the preceding year?

Statutory Reference **15. Result** **15. Notes**
WAC 480-93-200(10)(b) Satisfactory

5
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Have complete and accurate annual reports been submitted to the commission? [RPT.RR.UTCANNUALREPORTS.R - 480-93-018\(1\) \(480-93-200\(10\)\(a\)480-93-200\(10\)\(b\)\)](#) [More...](#)
Considerations Attachments Inspector Notes
Add a Result **Sat** for 90888 (78)

5
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Considerations Attachments Inspector Notes
Add a Result **Sat** for 90888 (78)

Comments - Records, Procedures & Reports

RECORDS REVIEW SUMMARY: Comments are required for any rating other than "Satisfactory". Summarize the "Notes" blocks above, and ensure you annotate the question number for each comment.

FIELD INSPECTION OBSERVATIONS

Question #16

Are welding procedures located on site where welding is performed?

Statutory Reference	16. Results	16. Notes
WAC 480-93-080(1)(e)	Not Checked/Evaluated	

Question #17

Is the operator using testing equipment necessary to record and document essential variables during welder and procedure testing/qualifications?

Statutory Reference	17. Results	17. Notes
WAC 480-93-080(1)(c)	Satisfactory	This was covered in the IA portion of the inspection. #38 in IA.

Comments - Field Observations

FIELD OBSERVATION SUMMARY: Comments are required for any rating other than "Satisfactory". Summarize the "Notes" blocks above, and ensure you annotate the question number for each comment.