

Form A- Annual Review 8286

UTC Standard Annual Review Inspection Report
 Intrastate Operators
 FORM A: Annual Review

Inspector and Operator Information

| | | | |
|-------------------------------------|----------------------------------------------|-----------------------------------------------------|--------------------|
| Inspection ID 8286 | Inspection Link 8286 | Inspector - Lead David Cullom | Inspector - Assist |
| Operator Northwest Natural | Unit NWN- HQ | Records Location - City & State Portland, Oregon | |
| Inspection Start Date 06-09-2021 | Inspection Exit Interview Date 06-09-2021 | Engineer Submit Date | |

Inspection Summary

You must include the following in your inspection summary:
 *Inspection Scope and Summary
 *Facilities visited and Total AFOD
 * Summary of Significant Findings
 * Primary Operator contacts and/or participants

***Inspection Scope and Summary**
 This inspection was an annual review of program changes and submitted data.

***Facilities visited and Total AFOD**
 This was a remote inspections and consisted of (1) AFOD.

*** Summary of Significant Findings**
 There were no probable violations or areas of concern.

*** Primary Operator contacts and/or participants**

| | | | | | |
|---------------------------|---------------------------------|----------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------|
| Margaret Locke | Regulatory Contact | Compliance Engineer | margaret.locke@nwnatural.com | (503) 610-7539 | (503) 789-0154 |
| Ryan Truair | CC Formal Correspondence | Regulatory Contact | Sr. Manager of Compliance | ryan.truair@nwnatural.com | (503) 610-7551 (503) 708-3699 |
| Samantha Rookstool | Regulatory Contact | Code Compliance Specialist | samantha.rookstool@nwnatural.com | (503) 610-7461 | (503) 803-9032 |
| Jaimie Lemke | Damage Prevention Dirt Analysis | Regulatory Contact | Code Compliance Specialist | jaimie.lemke@nwnatural.com | (503) 610-7639 (503) 799-5727 |

Instructions and Ratings Definitions

INSPECTION RESULTS: Annual Review

| | | | |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------------------------|
| Satisfactory Responses 31 | Satisfactory List 1,3,5,6,9,10,12,13,14,15,16,17,18,20,21,22,23,24,25,26,27,28,29,30,31,32,35,37,39,40, | Number of Unanswered Questions 0 | Unanswered List |
| Unsatisfactory Responses 0 | Unsatisfactory List | | |
| Area of Concern Responses 0 | Area of Concern List | | |
| Not Applicable Responses 8 | Not Applicable List 4,7,8,19,41,42,43,44 | | |
| Yes Responses 3 | Yes List 34,36,38, | No Responses 0 | No List |
| Not Checked / Evaluated Responses 0 | Not Checked / Evaluated List | | |

**If an item is marked Unsat, AOC, N/A, or N/C, an explanation must be included in the "Notes" block for that question and also summarized in the " SUMMARY OF REQUIRED COMMENTS" section at the end of this inspection form.

Crew Inspection History

Click Link for Full List of Crew Inspections

| Determination crew inspection Date | Inspector | Unit | Type of Work | Foreman Name | Contractor Name | Comments / Observations for Operator |
|------------------------------------|------------------|---------------------------|----------------|-----------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 05-12-2021 | David Cullom | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 05-12-2021 | David Cullom | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 05-10-2021 | Dennis Ritter | NWN - Clark County - 7912 | New Service | Charles White | | Will follow up with Sam on meter move. 5/14/21--Received documentation from NWN that the meter was moved out of covered garage. See attached photos. |
| 05-10-2021 | Dennis Ritter | NWN - Clark County - 7912 | | | Loy Clark | No issues noted |
| 04-02-2021 | Anthony Dorrough | NWN - Clark County - 7912 | Other | Randy Boespflug | | Staff observed crew relocating a 1-inch ST pipeline (1970-1982) to clear for man-hole placement. Also on site was Helper/Mitch Stemmerman. |
| 04-02-2021 | Anthony Dorrough | NWN - Clark County - 7912 | Other | Rusty Grable | | Staff observed crew in the process of relocating a 4-inch PE main (1991), tying into the existing main at two locations to clear for installation of a box culvert. |
| 04-02-2021 | Anthony Dorrough | NWN - Clark County - 7912 | New Service | | Loy Clark | Staff observed that the work had already been completed. |
| 03-10-2021 | Dennis Ritter | NWN - Clark County - 7912 | Service Repair | Randy Boespflug | | No issues noted |
| 03-10-2021 | Dennis Ritter | NWN - Clark County - 7912 | New Service | | Loy Clark | None |
| 03-10-2021 | Dennis Ritter | NWN - Clark County - 7912 | Main Install | | Loy Clark | None |
| 03-10-2021 | Dennis Ritter | NWN - Clark County - 7912 | New Service | | Loy Clark | None |
| 03-10-2021 | Dennis Ritter | NWN - Clark County - 7912 | New Service | | | No work started |
| 02-24-2021 | Scott Anderson | NWN - Clark County - 7912 | Main Install | | Loy Clark | |
| 02-24-2021 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 02-24-2021 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |

| Determination crew inspection Date | Inspector | Unit | Type of Work | Foreman Name | Contractor Name | Comments / Observations for Operator |
|------------------------------------|-------------------|------------------------------------|------------------|------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01-29-2021 | Anthony Dorrough | NWN - Clark County - 7912 | Relocate/Abandon | Rusty Grable | | Staff observed crew in the process of relocating a meter set inside to an outside set, tying into an existing 3/4-inch STW service (1962). 1-inch PE service was installed to the new meter location. Also on site Operator/Trent Thompson and Fitter/Ryan Kitterman. |
| 01-29-2021 | Anthony Dorrough | NWN - Clark County - 7912 | New Service | | | |
| 01-29-2021 | Anthony Dorrough | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 11-12-2020 | Derek Norwood | NWN - Clark County - 7912 | Main Extension | Nathan Bonnell | Loy Clark | |
| 11-12-2020 | Derek Norwood | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 10-29-2020 | Scott Anderson | NWN - Columbia Gorge Office - 7913 | New Service | Charles White | | |
| 10-29-2020 | Scott Anderson | NWN - Columbia Gorge Office - 7913 | Main Install | | | |
| 10-21-2020 | Derek Norwood | NWN - Clark County - 7912 | New Service | Rusty Grable | | |
| 10-21-2020 | Derek Norwood | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 10-13-2020 | Dennis Ritter | NWN - Clark County - 7912 | Main Extension | Rusty Grable | | No issues noted other than another UTC inspector was here yesterday! |
| 10-13-2020 | Dennis Ritter | NWN - Clark County - 7912 | Main Extension | Randy Boespflug | | No issues noted |
| 10-12-2020 | Anthony Dorrough | NWN - Clark County - 7912 | Other | | | Staff could not get to work site due to private gated community access. |
| 10-12-2020 | Anthony Dorrough | NWN - Clark County - 7912 | Other | Rusty Grable | | Staff observed crew in the process of installing new 2-inch PE to reinforce a pipeline system. Calibration Audit: Gas Scope# 58424 11/11/2020 Gauges 12/19/2020 Multimeter #???: 3/10/21 Halcell #HCC0420 3/10/21 PE found on truck: 2-inch 5/16/19 Also on site: Fitter/Ryan Kitterman and C1/Zach Johnson |
| 09-09-2020 | Derek Norwood | NWN - Clark County - 7912 | Main Extension | David Lee | Loy Clark | |
| 08-25-2020 | Darren Tinnerstet | NWN - Clark County - 7912 | Main Extension | Joe Dessimoz | Loy Clark | |
| 06-26-2020 | Anthony Dorrough | NWN - Clark County - 7912 | Relocate/Abandon | Charles White | | Staff observed crew in the process of relocating a 3/4-inch ST gas service, tying into an existing 2-inch St main. Also on site: C1/Lamont Wilkins, C3/Joe Reynsa, and Service Technician/Mike Newton. |
| 06-26-2020 | Anthony Dorrough | NWN - Clark County - 7912 | New Service | | | Staff observed that installation of new service and MSA had already been completed at this location, crew was not on site. |
| 06-26-2020 | Anthony Dorrough | NWN - Clark County - 7912 | New Service | Joshua Hatcher | Loy Clark | Staff observed crew in the process of installing new 1-inch service to new const. home. Also on site: Operator/Garland Rogers and Operator/Shawn Dewey. |
| 06-18-2020 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 06-18-2020 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 06-18-2020 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 06-18-2020 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 06-18-2020 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 06-18-2020 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 06-18-2020 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 05-28-2020 | David Cullom | NWN - Clark County - 7912 | New Service | | Loy Clark | Please ensure that your daily job reports are accurate. |
| 05-28-2020 | David Cullom | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 05-04-2020 | Darren Tinnerstet | NWN - Columbia Gorge Office - 7913 | Relocate/Abandon | Armando Quintero | | |
| 05-04-2020 | Darren Tinnerstet | NWN - Clark County - 7912 | Relocate/Abandon | Rusty Grable | | |
| 04-01-2020 | David Cullom | NWN - Clark County - 7912 | Valve Repair | Paul Nannini | | Great crew. Good attention to detail. |
| 03-26-2020 | Anthony Dorrough | NWN - Clark County - 7912 | Main Replacement | Paul Nannini | | Staff observed crew in the process of welding up pieces of steel main to install for a relocation. Work was started 6 days previous. Also on site were: Nate Dobson/Welder; Tim Snair/laborer and Erik McGarrity/C2. |
| 03-26-2020 | Anthony Dorrough | NWN - Clark County - 7912 | Other | | | Staff observed crew as they were completing work pot-holing over sections of 2-inch steel gas main in preparation for a future main relocation project. |
| 03-10-2020 | Derek Norwood | NWN - Clark County - 7912 | Other | Randy Boespflug | | |
| 03-10-2020 | Derek Norwood | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 03-04-2020 | Scott Anderson | NWN - Clark County - 7912 | Main Install | Darren | Loy Clark | |
| 03-04-2020 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 03-04-2020 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 03-04-2020 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 03-04-2020 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 03-04-2020 | Scott Anderson | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 02-25-2020 | Lex Vinsel | NWN - Clark County - 7912 | Main Replacement | Rusty Grable | | Contacted Samantha Rookstool at NWN for coating procedures for work performed fri 21Feb20 |
| 02-24-2020 | Lex Vinsel | NWN - Clark County - 7912 | Main Repair | Rusty Grable | | 25Feb20 - NWN Samantha Rookshield returned call. One of their 'Standby' folks discovered two softball sized coating damage while observing an excavation near their High Pressure line. Requested the procedures for Coating Damage. Requested and will review procedure for Coating Damage. end lev 24Feb20 - Contacted Samantha Rookshield at NWN (503)750-7264 ext. 4366 regarding the crew list for Friday 21Feb20 truck #4640 with Work Description listed as DAMAGES-MAIN. |
| 02-12-2020 | Derek Norwood | NWN - Clark County - 7912 | New Service | Ken Schwanz | Loy Clark | |
| 02-12-2020 | Derek Norwood | NWN - Clark County - 7912 | New Service | | | |
| 02-12-2020 | Derek Norwood | NWN - Clark County - 7912 | New Service | | | |
| 02-07-2020 | David Cullom | NWN - Clark County - 7912 | | James Barrett | Loy Clark | |
| 02-07-2020 | David Cullom | NWN - Clark County - 7912 | New Service | James Barrett | Loy Clark | |
| 02-07-2020 | David Cullom | NWN - Clark County - 7912 | Main Install | | Loy Clark | |

| Determination crew inspection Date | Inspector | Unit | Type of Work | Foreman Name | Contractor Name | Comments / Observations for Operator |
|------------------------------------|----------------|------------------------------------|------------------|---------------|-----------------|--------------------------------------|
| 02-05-2020 | Scott Anderson | NWN - Columbia Gorge Office - 7913 | New Service | | | |
| 02-04-2020 | Scott Anderson | NWN - Clark County - 7912 | Main Repair | | | |
| 02-04-2020 | Scott Anderson | NWN - Clark County - 7912 | | | Loy Clark | |
| 01-09-2020 | Derek Norwood | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 01-09-2020 | Derek Norwood | NWN - Clark County - 7912 | Relocate/Abandon | | | |
| 01-09-2020 | Derek Norwood | NWN - Clark County - 7912 | Main Extension | | Loy Clark | |
| 01-09-2020 | Derek Norwood | NWN - Clark County - 7912 | Main Extension | | Loy Clark | |
| 01-02-2020 | David Cullom | NWN - Clark County - 7912 | New Service | | Loy Clark | |
| 01-02-2020 | David Cullom | NWN - Clark County - 7912 | New Service | James Barrett | | |
| 01-02-2020 | David Cullom | NWN - Clark County - 7912 | | | | |

Facility Inspection History

[Link for Full List of Facility Inspections](#)

| Date | Inspection ID | Form A Operator Name | Other Company | Inspector | Type of Inspection | Do you have inspection pictures or file attachments? |
|------------|---------------|----------------------|---------------|-------------------|--------------------|------------------------------------------------------|
| 05-12-2021 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 05-12-2021 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 05-12-2021 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 03-18-2021 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 03-18-2021 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 03-18-2021 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 03-18-2021 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 02-24-2021 | 7912 | Northwest Natural | | David Cullom | Pre-Field | Yes |
| 02-17-2021 | 7912 | Northwest Natural | | Derek Norwood | Facility | Yes |
| 02-17-2021 | 7912 | Northwest Natural | | Derek Norwood | Facility | Yes |
| 02-17-2021 | 7912 | Northwest Natural | | Derek Norwood | Facility | Yes |
| 01-21-2021 | 7912 | Northwest Natural | | David Cullom | Pre-Field | No |
| 12-14-2020 | 7912 | Northwest Natural | | Derek Norwood | Facility | |
| 12-14-2020 | 7912 | Northwest Natural | | Derek Norwood | Facility | Yes |
| 12-14-2020 | 7912 | Northwest Natural | | Derek Norwood | Facility | Yes |
| 11-30-2020 | 7912 | Northwest Natural | | David Cullom | Pre-Field | No |
| 11-04-2020 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 11-04-2020 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 11-04-2020 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 10-19-2020 | 7912 | Northwest Natural | | David Cullom | Facility | Yes |
| 10-19-2020 | 7912 | Northwest Natural | | David Cullom | Facility | No |
| 10-19-2020 | 7912 | Northwest Natural | | David Cullom | Facility | No |
| 10-19-2020 | 7912 | Northwest Natural | | David Cullom | Facility | Yes |
| 10-19-2020 | 7912 | Northwest Natural | | David Cullom | Facility | No |
| 10-19-2020 | 7912 | Northwest Natural | | David Cullom | Facility | Yes |
| 10-19-2020 | 7912 | Northwest Natural | | David Cullom | Facility | Yes |
| 10-19-2020 | 7912 | Northwest Natural | | David Cullom | Facility | Yes |
| 10-19-2020 | 7912 | Northwest Natural | | David Cullom | Facility | Yes |
| 10-19-2020 | 7912 | Northwest Natural | | David Cullom | Facility | Yes |
| 10-19-2020 | 7912 | Northwest Natural | | David Cullom | Facility | Yes |
| 08-20-2020 | 7912 | Northwest Natural | | Scott Anderson | Facility | |
| 08-12-2020 | 7913 | Northwest Natural | | Scott Rukke | Facility | Yes |
| 06-08-2020 | 7912 | Northwest Natural | | Derek Norwood | Facility | Yes |
| 06-08-2020 | 7912 | Northwest Natural | | Derek Norwood | Facility | Yes |
| 05-28-2020 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 05-28-2020 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 05-26-2020 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 05-26-2020 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |
| 05-26-2020 | 7912 | Northwest Natural | | Darren Tinnerstet | Facility | Yes |

Scheduled Inspection History

Annual Review Inspection History

| Year of Inspection | Facility - Operator | Unit Name | Inspection ID | Inspection Type | Inspection Status | Closed Date | Next Inspection Interval | SHAREPOINT |
|-------------------------------------------|---------------------|---------------------|---------------|------------------------------------------------------------------|------------------------|-------------|--------------------------|------------|
| Northwest Natural (30 Inspections) | | | | | | | | |
| 2021 | Northwest Natural | NWN- Clark | 8280 | Standard Comprehensive - GD | Waiting for Compliance | | 03-23-2024 | Documents |
| 2021 | Northwest Natural | NWN- HQ | 8281 | OM PPR GAS - Operations & Maintenance, Plans & Procedures Review | Complete | 02-22-2021 | 02-04-2025 | Documents |
| 2021 | Northwest Natural | NWN- HQ | 8282 | PA - Public Awareness | Complete | 04-26-2021 | 04-15-2025 | Documents |
| 2021 | Northwest Natural | NWN- Transmission | 8283 | TIMP - Gas Transmission Integrity Management | Pending | | | Documents |
| 2021 | Northwest Natural | NWN- HQ | 8284 | CRM - GAS | Complete | 05-26-2021 | 03-23-2025 | Documents |
| 2021 | Northwest Natural | NWN- HQ | 8285 | Pipe Replacement Plan | Pending | | | Documents |
| 2021 | Northwest Natural | NWN- HQ | 8286 | Standard - Annual Review | Complete | 06-15-2021 | 06-09-2022 | Documents |
| 2021 | Northwest Natural | NWN- Mobile LNG | 8287 | LNG | Pending | | | Documents |
| 2020 | Northwest Natural | NWN- Columbia Gorge | 8056 | Standard Comprehensive - GD | Complete | 08-24-2020 | 08-17-2023 | Documents |
| 2020 | Northwest Natural | NWN- Transmission | 8057 | Standard Comprehensive - GT | Complete | 04-21-2020 | 04-16-2023 | Documents |
| 2020 | Northwest Natural | NWN- HQ | 8058 | DIMP - Gas Distribution Integrity Management | Complete | 06-12-2020 | 06-05-2023 | Documents |
| 2020 | Northwest Natural | NWN- HQ | 8059 | Standard - Annual Review | Complete | 05-14-2020 | 05-07-2021 | Documents |
| 2019 | Northwest Natural | NWN- HQ | 7814 | OQ - Operator Qualification | Complete | 04-01-2019 | 03-13-2023 | Documents |
| 2019 | Northwest Natural | NWN- HQ | 7815 | DA - Drug & Alcohol | Complete | 04-01-2019 | 03-13-2023 | Documents |
| 2019 | Northwest Natural | NWN- HQ | 7816 | Pipe Replacement Plan | Complete | 09-26-2019 | 08-08-2021 | Documents |
| 2019 | Northwest Natural | NWN- HQ | 7817 | Standard - Annual Review | Complete | 11-19-2019 | 11-06-2020 | Documents |
| 2019 | Northwest Natural | NWN- Mobile LNG | 7805 | LNG | Complete | 04-24-2019 | 04-15-2021 | Documents |
| 2018 | Northwest Natural | NWN- Transmission | 7568 | TIMP - Gas Transmission Integrity Management | Complete | 04-20-2018 | 02-14-2021 | Documents |
| 2018 | Northwest Natural | NWN- Clark | 7580 | Standard Comprehensive - GD | Complete | 05-22-2018 | 05-04-2021 | Documents |

| Year of Inspection | Facility - Operator | Unit Name | Inspection ID | Inspection Type | Inspection Status | Closed Date | Next Inspection Interval | SHAREPOINT |
|--------------------|---------------------|---------------------|---------------|------------------------------------------------------------------|-------------------|-------------|--------------------------|------------|
| 2017 | Northwest Natural | NWN- HQ | 7239 | OM PPR GAS - Operations & Maintenance, Plans & Procedures Review | Complete | 09-08-2017 | 08-31-2021 | Documents |
| 2017 | Northwest Natural | NWN- HQ | 7248 | DIMP - Gas Distribution Integrity Management | Complete | 11-17-2017 | 11-02-2020 | Documents |
| 2017 | Northwest Natural | NWN- HQ | 7268 | PA - Public Awareness | Complete | 06-01-2017 | 04-25-2021 | Documents |
| 2017 | Northwest Natural | NWN- HQ | 7455 | Pipe Replacement Plan | Complete | 10-26-2017 | | Documents |
| 2017 | Northwest Natural | NWN- Columbia Gorge | 7241 | Standard Comprehensive - GD | Complete | 02-08-2018 | 10-26-2020 | Documents |
| 2017 | Northwest Natural | NWN- Transmission | 7240 | Standard Comprehensive - GT | Complete | 09-22-2017 | 05-11-2020 | Documents |
| 2017 | Northwest Natural | NWN- Clark | 7416 | Compliance Investigation and Follow Up | Complete | 12-14-2017 | 03-07-2017 | Documents |
| 2017 | Northwest Natural | NWN- Clark | 7588 | Design, Testing & Construction - Gas | Complete | 06-08-2018 | 11-14-2018 | Documents |
| 2016 | Northwest Natural | NWN- HQ | 6768 | CRM - GAS | Complete | 06-06-2016 | 04-27-2020 | Documents |
| 2016 | Northwest Natural | NWN- Mobile LNG | 6769 | Standard Comprehensive - GD | Complete | 06-03-2016 | 04-26-2019 | Documents |
| 2015 | Northwest Natural | NWN- Clark | 6182 | Standard Comprehensive - GD | Complete | 07-01-2015 | 04-09-2018 | Documents |

GAS System Operations History

Annual Report - Miles of Main

| Year | SYSTEM TOTAL Miles of Main | Miles of Service | SYSTEM TOTAL NO. of Services | Average Service Length |
|------|----------------------------|------------------|------------------------------|------------------------|
| 2020 | 1967.9 | 907.01 | 84,165 | 56.9 |
| 2019 | 1938.3 | 883.40 | 80,978 | 57.6 |
| 2018 | 1899 | 870.88 | 79,417 | 57.9 |
| 2017 | 1841.6 | 852.80 | 76,841 | 58.6 |
| 2016 | 1798.9 | 836.51 | 74,484 | 59.3 |
| 2015 | 1765.08 | 832.29 | 72,398 | 60.7 |

Annual Report GAS Transmission Miles

| YEAR | Total Total Miles | e. Total tool mileage inspected in calendar year using in-line inspection tools |
|------------|-------------------|---------------------------------------------------------------------------------|
| 2020 | 3.5 | 0 |
| 2019 | 3.5 | 0 |
| 2018 | 3.5 | 0 |
| 2015 | 3.4 | 0 |
| 2016 | 3.4 | 0 |
| 2017 | 3.4 | 0 |
| TOT | 20.7 | 0 |

Annual Report - Leaks

| Year | Cause of Leak Mains Total | Cause of Leak Mains Hazardous Total | Cause of Leak Services Total | Cause of Leak Services Hazardous Total | NUMBER OF KNOWN SYSTEM LEAKS AT END OF YEAR SCHEDULED FOR REPAIR |
|------|---------------------------|-------------------------------------|------------------------------|----------------------------------------|------------------------------------------------------------------|
| 2020 | 30 | 19 | 55 | 45 | 11 |
| 2019 | 38 | 33 | 43 | 37 | 2 |
| 2018 | 34 | 32 | 50 | 37 | 1 |
| 2017 | 29 | 26 | 59 | 47 | 2 |
| 2016 | 28 | 27 | 41 | 34 | 1 |
| 2015 | 35 | 29 | 57 | 45 | 4 |

Annual Report - EFV

| Operator | Year | Number of EFV's Installed This Calendar Year on Single Family Residential Services: | Estimated Number of EFV's in the system at the End of The Year: | Total Number of Services with EFV Installed During Year: | Estimated Number of Services with EFV In The System At The End of The Year: | * Total Number of Manual Service Line Shut-off Valves Installed During Year: | * Estimated Number of Services with Manual Service Line Shut-off Valves Installed in the System at End of Year: |
|------------------|------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| No reports found | | | | | | | |

HL System Operations History

HL Annual Report - Miles of Pipe by Decade

| YEAR | Operator | Commodity Group | Part I - Total Miles of Pipe by Decade | Unknown | Pre-20s | 1920-1929 | 1930-1939 | 1940-1949 | 1950-1959 | 1960-1969 | 1970-1979 | 1980-1989 | 1990-1999 | 2000-2009 |
|------------------|----------|-----------------|----------------------------------------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| No reports found | | | | | | | | | | | | | | |

HL Annual Report - HL Miles / HCAs

| YEAR | Operator | Commodity Group | Total Segment Miles that Could Affect HCAs | High Population | Other Population | Drinking Water | Ecological Resource | Comm Navigable Water |
|------------------|----------|-----------------|--------------------------------------------|-----------------|------------------|----------------|---------------------|----------------------|
| No reports found | | | | | | | | |

HL Annual Report - Breakout Tanks

| YEAR | Operator | Commodity Group | Crude Oil #5 | Refined (non HVL) #5 | HVL #5 | CO2 #5 | F | Gr |
|------------------|----------|-----------------|--------------|----------------------|--------|--------|---|----|
| No reports found | | | | | | | | |

ANNUAL REPORT: ACCURACY/TRENDS

Question #1.

Was the Annual Report reviewed for accuracy and trends? If any trends were discovered, please describe.

1. Result

Satisfactory

1. Notes

Mileage is consistent for distribution and transmission with no major changes.

Access to Complete Distribution Annual Report

| Year | SYSTEM TOTAL Miles of Main | Miles of Service | SYSTEM TOTAL NO. of Services | Average Service Length |
|------|----------------------------|------------------|------------------------------|------------------------|
| 2020 | 1967.9 | 907.01 | 84,165 | 56.9 |
| 2019 | 1938.3 | 883.40 | 80,978 | 57.6 |
| 2018 | 1899 | 870.88 | 79,417 | 57.9 |
| 2017 | 1841.6 | 852.80 | 76,841 | 58.6 |
| 2016 | 1798.9 | 836.51 | 74,484 | 59.3 |
| 2015 | 1765.08 | 832.29 | 72,398 | 60.7 |

Access to Complete Transmission Annual Report

| YEAR | Operator | Commodity Group | Total Total Miles |
|--------------------------------------|-------------------|-----------------|-------------------|
| Northwest Natural (6 Reports) | | | |
| 2020 | Northwest Natural | Natural Gas | 3.5 |
| 2019 | Northwest Natural | Natural Gas | 3.5 |
| 2018 | Northwest Natural | Natural Gas | 3.5 |
| 2015 | Northwest Natural | Natural Gas | 3.4 |
| 2016 | Northwest Natural | Natural Gas | 3.4 |
| 2017 | Northwest Natural | Natural Gas | 3.4 |

Access to Complete Hazardous Liquid Annual Report

| YEAR | Operator | Commodity Group |
|------------------|----------|-----------------|
| No reports found | | |

DAMAGE PREVENTION

Annual Report Damage Prevention data

| Year | Operator | Total Number of Excavation Damages By Apparent Root Cause: | Number of Excavation Tickets | Number of Services | Total Leaks - Excavation Damage | Total Main Leaks | Miles of Service MAIN | Number of Leaks per Mile of MAIN | Total Leaks Per 1,000 Locates | Number of Hits Per 1,000 Ticket Requests | Number of Hits Per 10,000 Services |
|------------------|----------|------------------------------------------------------------|------------------------------|--------------------|---------------------------------|------------------|-----------------------|----------------------------------|-------------------------------|------------------------------------------|------------------------------------|
| No reports found | | | | | | | | | | | |

| Year | Operator | Total Number of Excavation Damages By Apparent Root Cause: | Number of Excavation Tickets | Number of Services | Total Leaks - Excavation Damage | Total Main Leaks | Miles of Service MAIN | Number of Leaks per Mile of MAIN | Total Leaks Per 1,000 Locates | Number of Hits Per 1,000 Ticket Requests | Number of Hits Per 10,000 Services |
|------|-------------------|------------------------------------------------------------|------------------------------|--------------------|---------------------------------|------------------|-----------------------|----------------------------------|-------------------------------|------------------------------------------|------------------------------------|
| 2020 | Northwest Natural | 83 | 31,069 | 84,165 | 44 | 52 | 1967.9 | | 1.416202645724 | 2.6714731726158 | 9.8615814174538 |
| 2019 | Northwest Natural | 78 | 30,492 | 80,978 | | | | | 0 | 2.5580480125935 | 9.6322457951542 |
| 2018 | Northwest Natural | 97 | 29,965 | 79,417 | | | | | 0 | 3.2371099616219 | 12.214009594923 |
| 2017 | Northwest Natural | 104 | 28,290 | 76,839 | | | | | 0 | 3.6762106751502 | 13.534793529328 |
| 2016 | Northwest Natural | 75 | 26,259 | 74,482 | | | | | 0 | 2.856163601051 | 10.069547004645 |
| 2015 | Northwest Natural | 99 | 24,885 | 72,397 | | | | | 0 | 3.9783001808318 | 13.674599776234 |

DIRT data on mismarks for prior year

| Company - Name | NW Natural | Totals |
|------------------------------------------------------------|-------------------|-------------------|
| Damage Cause | Number of Reports | Number of Reports |
| Facility not marked due to incorrect facility records/maps | 4 | 4 |
| Facility marked inaccurately due to locator error | 1 | 1 |
| Not marked due to Locator error | 1 | 1 |
| Not marked due to Incorrect facility records/maps | 3 | 3 |
| Totals (4 groups) | 9 | 9 |

DIRT Timeliness - Prior Year Reports must be submitted within 45 days of the damage.

| Late | no | Totals |
|--------------------------------|-------------------|-------------------|
| SubmitCompanyID - UTCfinalName | Number of Reports | Number of Reports |
| Northwest Natural | 85 | 85 |
| Totals (1 groups) | 85 | 85 |

Question #2.

Review the following damage prevention items:

Q2. Is the damage prevention information in the annual report complete?
http://Yes

Q2.b. Is the annual report damages root cause information complete and accurate?
Yes

Q2.c. Does the operator have a process to evaluate the cause of "One-call notification practices not sufficient" category?
There is a root cause analysis performed on each damage.

Q2.d. Does the operator follow a process to evaluate the cause of "Locating practices not sufficient" category?
Contract management addresses any inaccurate locates with retraining, disqualification, etc.

Q2.e. Is the operator or its contractor qualified and following procedures for locating and marking facilities?
Yes. The QA program monitors for this.

Q2.f. Is the operator appropriately requalifying locators to address performance deficiencies?
This is conducted in the OQ department and contract management.

Q2.g. What is the number of damages resulting from mismarks?
7 (4 in one category and 3 in another similar one)

Q2.h. What is the number of damages resulting from not locating within the time requirements?
This is not separated out.

Q2.i. Is the operator appropriately addressing discovered mapping errors resulting in excavation damage?
Redlines and errors are submitted to the GIS department for review.

Q2.j. Are mapping corrections timely and according to written procedures?
These were reviewed in the 2021 Clark inspection and corrections were verified and were timely for those reviewed.

Q2.k. Does the operator follow a process to evaluate causes for damages listed "Excavation Practices Not Sufficient"?
This review is done on all damages.

Q2.l. Is the operator appropriately focusing damage prevention education and training to address the causes of excavation damage?
Yes. This was reviewed during the 2021 PA inspection. No issues noted.

2. Notes

NPMS SUBMISSIONS/CHANGES

Question #3.

For transmission operators, has the operator submitted information to the NPMS database, along with changes made after the original submission?

3. Result

Satisfactory

3. Notes

A review of the Clark County inspection results was reviewed to see if this was covered and that question was not part of the inspection due to it being a distribution inspection. The O&M review has the procedure in SP-007 Section 3.7.4.

The operator submitted the most recent update to the NPMS on Feb 1, 2021 and was verified by viewing the "OSAVE" email.

INCIDENT/SRC/AOC REPORTS REVIEW

Question #4

Were there any federally reportable incidents during the previous year? Are there any discernable trends to these incidents?

4. Results

Not Applicable

4. Notes

There were no federally reportable incidents in 2020.

Q4: Federally reportable incidents

| NotificationID | Operator | Company | NRC # | Assigned Engineer | Date & Time of Incident | Street Address of event/incident | Incident Address: City | Closure Date | Reporting Level |
|---------------------------------|----------|---------|-------|-------------------|-------------------------|----------------------------------|------------------------|--------------|-----------------|
| No incident notifications found | | | | | | | | | |

Question #5.

Review operator records of previous year's accidents and failures including reported third party damage and leak response. Is the operator ensuring appropriate evaluation and response as required in 192.617 (Gas) or 195.402 (HL) to determine cause of failure? Is the operator taking appropriate steps to minimize the possibility of recurrence?

5. Result

Satisfactory

5. Notes

3819 Mislocated by NWN - No additional detail on this incident in the database. I followed up with NWN compliance representatives during this inspection.

The compliance representative spoke with the NWN's Contractor Service responsible for locating regarding the damage at 8101 NE Parkway Dr in Vancouver on 2/3/21.

On 2/8/21, Locating Inc reviewed this with the locator and determined that he failed to do a sweep and double check his marks after locating the 2-inch polyethylene main. The main ran through a small center divider that had a fence going down the middle, with a small offset in the main in this divider. He was reminded of the importance of double checking the signal with the sweep.

Question #6.

Review incident reports for the previous year for accuracy and identify any trends. If any trends discovered please describe. (Please see list of incident data at end of this report)

Q6: Incident Reports

6. Result

Satisfactory

| NotificationID | Inspector | Company | Street Address of event/incident | Date & Time of Incident | Is 30-Day Report Received? | Reporting Level |
|----------------|-------------------|-------------------|----------------------------------|-------------------------|----------------------------|-----------------|
| 3871 | Darren Tinnerstet | Northwest Natural | 305 SE Chkalob Dr. | 06-08-2021 01:30 AM | <input type="checkbox"/> | |
| 3864 | Anthony Dorrrough | Northwest Natural | 10913 NE 8th Circle | 05-27-2021 12:39 PM | <input type="checkbox"/> | |
| 3859 | Lex Vinsel | Northwest Natural | 157 Jewitt Blvd. | 05-23-2021 03:52 PM | <input type="checkbox"/> | |

| NotificationID | Inspector | Company | Street Address of event/incident | Date & Time of Incident | Is 30-Day Report Received? | Reporting Level |
|----------------|-------------------|-------------------|----------------------------------|-------------------------|-------------------------------------|-----------------|
| 3857 | Lex Vinsel | Northwest Natural | 7001 NE Highway 99 | 05-20-2021 11:11 PM | <input type="checkbox"/> | State |
| 3856 | Lex Vinsel | Northwest Natural | 6811 NE 121st Ave | 05-19-2021 09:26 AM | <input type="checkbox"/> | State |
| 3867 | David Cullom | Northwest Natural | 915 N 10th PL | 05-13-2021 12:27 PM | <input checked="" type="checkbox"/> | State |
| 3834 | Lex Vinsel | Northwest Natural | 455 C Street | 03-25-2021 01:26 PM | <input checked="" type="checkbox"/> | State |
| 3831 | Scott Anderson | Northwest Natural | 264 8th St | 03-12-2021 08:05 AM | <input checked="" type="checkbox"/> | State |
| 3828 | Scott Rukke | Northwest Natural | 230 NE 37th Circle | 03-04-2021 11:55 AM | <input checked="" type="checkbox"/> | State |
| 3819 | Derek Norwood | Northwest Natural | 8101 NE Parkway Dr | 02-03-2021 01:15 PM | <input checked="" type="checkbox"/> | State |
| 3805 | Scott Anderson | Northwest Natural | 3925 NW 61st St | 01-07-2021 03:30 PM | <input checked="" type="checkbox"/> | State |
| 3801 | Derek Norwood | Northwest Natural | 65077 Lewis and Clark Hwy | 12-20-2020 11:48 PM | <input checked="" type="checkbox"/> | State |
| 3799 | Derek Norwood | Northwest Natural | 15 NW 13th Ave | 12-15-2020 09:46 AM | <input checked="" type="checkbox"/> | State |
| 3789 | Scott Anderson | Northwest Natural | 109 SW 1st St | 11-20-2020 09:35 AM | <input checked="" type="checkbox"/> | State |
| 3759 | David Cullom | Northwest Natural | 125 Palos Verdes | 10-03-2020 03:21 PM | <input checked="" type="checkbox"/> | State |
| 3740 | Derek Norwood | Northwest Natural | 4125 Pioneer St | 08-25-2020 04:38 PM | <input checked="" type="checkbox"/> | State |
| 3738 | Dennis Ritter | Northwest Natural | 3215 NE 99th Cir | 08-19-2020 11:54 AM | <input checked="" type="checkbox"/> | State |
| 3719 | Scott Rukke | Northwest Natural | 1655 C St | 07-24-2020 11:42 AM | <input checked="" type="checkbox"/> | State |
| 3791 | Anthony Dorough | Northwest Natural | 2437 NW Lacamas Drive | 07-12-2020 02:26 PM | <input checked="" type="checkbox"/> | State |
| 3707 | Lex Vinsel | Northwest Natural | 205 NE Wisconsin Street | 07-07-2020 04:43 PM | <input checked="" type="checkbox"/> | State |
| 3705 | Scott Anderson | Northwest Natural | 2311 SE 139th Ave | 06-27-2020 02:51 PM | <input checked="" type="checkbox"/> | State |
| 3684 | Scott Anderson | Northwest Natural | 5144 P St. | 06-03-2020 02:00 PM | <input checked="" type="checkbox"/> | State |
| 3682 | Scott Anderson | Northwest Natural | NE Vine St & E Jewett Blvd | 06-03-2020 08:18 AM | <input checked="" type="checkbox"/> | State |
| 3677 | Anthony Dorough | Northwest Natural | 16606 NE 95th St | 05-27-2020 10:23 AM | <input checked="" type="checkbox"/> | State |
| 3648 | Derek Norwood | Northwest Natural | 5305 NE 121st Ave | 03-20-2020 04:11 PM | <input checked="" type="checkbox"/> | State |
| 3647 | Derek Norwood | Northwest Natural | 10705 NE 99th Ave | 03-19-2020 07:50 AM | <input checked="" type="checkbox"/> | State |
| 3646 | Derek Norwood | Northwest Natural | 13700 NE Fourth Plain Blvd | 03-19-2020 02:28 AM | <input checked="" type="checkbox"/> | State |
| 3629 | Darren Tinnerstet | Northwest Natural | 15109 NE 28th. Ct. | 01-22-2020 09:20 AM | <input checked="" type="checkbox"/> | State |
| 3626 | Lex Vinsel | Northwest Natural | 407 W Main | 01-02-2020 02:04 PM | <input checked="" type="checkbox"/> | State |

6. Notes
I reviewed multiple incidents and 30 day reports for trends in the previous year and did not observe any events that were systemic related such as improper operations, construction defects, etc or repeated mislocates by NWN or their locating service providers.

Question #7.
Were there reportable or unreportable safety related conditions during the previous year? If yes please describe.

Q7: Report of SRCs

| NotificationID | Company | Safety-Related Condition | SafetyRelatedConditionChoices | Reportable? | Date & Time of Incident | Company Notified Date | Report Date |
|---------------------------------|---------|--------------------------|-------------------------------|-------------|-------------------------|-----------------------|-------------|
| No incident notifications found | | | | | | | |

7. Notes
No SRCs per our database report.

Question #8.
For transmission systems, were there any abnormal operating conditions (as described in 192.605 (c) or 195.402(d)) since the last annual review? If yes please describe.

8. Notes
None

7. Result
Not Applicable

8. Result
Not Applicable

O&M & EMERGENCY PROGRAMS

Question #9.
Is the O&M Manual up to date and were changes made in the previous year? Operator Manuals on Sharepoint

9. Result
Satisfactory

9. Notes
The 2021 O&M full inspection consisted of a Plan and Procedure Review of Northwest Natural's Standard Practices, the Field Operation Manual (FOM), and Emergency Response Procedures. The evaluation covered CFR 49 Part 191, 192, ADBs, best practices, and WAC 480-93 regulations. No probable violations or areas of concern were noted.

Question #10.
If changes to the O&M were made, are changes acceptable? **10. Result**
Satisfactory

10. Notes
There were no substantial changes made to the O&M manual.

Question #11.
Were emergency plans changed during the previous year?

11. Result
Satisfactory

11. Notes
Minor changes were made to the base plan. The plan cover sheet does not detail the changes.

Upon review with the operator the changes included:

- Reportable incident table 3.4.1
- Address for new building
- Evacuation Plan
- Backup power and emergency fueling
- Information related to threats

Question #12.
Were any changes to emergency plans satisfactory?

12. Result
Satisfactory

12. Notes
Yes they were acceptable.

INTEGRITY MANAGEMENT PROGRAMS

Question #13
Were there changes to the Integrity Management programs (TIMP, DIMP or both, as applicable)? **13. Result**
Satisfactory

13. Notes
Rev 21, 4/8/2021 (TIMP) is the most current revision submitted to the Commission. The revisions are well documented in Appendix M. The DIMP program revisions are in Appendix F.

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Question #14. | 14. Result |
| Is the DIMP/TIMP up to date? What are the results of the operator's program review (effectiveness evaluation) (DIMP every 5 years)? | Satisfactory |
| 14. Notes | |
| There is an annual checklist that encompasses effectiveness. It is the IMP DIMP Annual Review Checklist. This was done in 2016 and is set for a full effectiveness review in 2021. The document was created in 2017. | |
| Question #15 | 15. Result |
| Are IMP program changes acceptable? | Satisfactory |
| 15. Notes | |
| The new gas rule items are now contained in the TIMP Plan. | |
| Question #16 | 16. Results |
| Was appropriate assessment/ repair work conducted during the past year? (monitor progress of IMP activities) | Satisfactory |
| 16. Notes | |
| The integrity management team said there no assesments or repairs scheduled. | |
| Question #17 | 17. Results |
| Does the operator's HCA location data correspond to the positional data located in UTC GIS? | Satisfactory |
| 17. Notes | |
| There is only one small section of transmission in Washington State. It is located in Camas and it is represented in our GIS. | |
| Question #18 | 18. Results |
| What assessment work is planned for the upcoming year? | Satisfactory |
| 18. Notes | |
| No work is planned. | |
| Question #19 | 19. Results |
| Within the operator's DIMP, are low pressure systems evaluated for overpressure threats? | Not Applicable |
| 19. Notes | |
| No low pressure systems within their infrastructure. | |
| Question #20 | 20. Results |
| Did the operator develop and follow specific procedures for low pressure system construction or maintenance projects? (Note: this question is revisited in greater detail in the ADB review section) | Satisfactory |
| 20. Notes | |
| No low pressure systems within their infrastructure. | |
| Question #21 | 21. Results |
| Are plastic pipe and components that have shown a record of defects/leaks being mitigated through the DIMP plans? | Satisfactory |
| 21. Notes | |
| NWN does not have Aldyl A or HD in thier Washington system. They do have Celcon caps that are replaced as found, but are not being actively targeted under DIMP. Appendix E has leaks by material. Appendix E-6 is hazardous leaks by material. | |
| Question #22 | 22. Results |
| Has appropriate DIMP remediation work occurred during the past year? (monitor progress of DIMP activities) | Satisfactory |
| 22. Notes | |
| Table D-1 has A/A actions for inside service lines Appendix E-9 has tracking of removal of vintage plastic. | |
| Question #23 | 23. Results |
| What DIMP remediation work is anticipated for upcoming year? | Satisfactory |
| 23. Notes | |
| Future remediation is in D-1 A/A - nothing other than service lines is documented. | |

QO PROGRAM

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Question #24 | 24. Results |
| Is the OQ program up to date? Were there changes to the Operator Qualification (OQ) program in the last year? If yes, please describe. | Satisfactory |
| 24. Notes | |
| The current program manual the UTC has was revised on March 1, 2021. One change in the revision log is: 3/1/21 Section 3.5.19.0 "Updated terminology to match electronic manual publish and notification." | |
| Question #25 | 25. Results |
| Are the OQ plan updates satisfactory? | Satisfactory |
| 25. Notes | |
| Plan updates are suitable. | |
| Question #26 | 26. Results |
| Are personnel performing covered tasks (including contractors) properly qualified and requalified at intervals determined in the operator's plan? | Satisfactory |
| 26. Notes | |
| OQ covered tasks and associated records are reviewed during our Standard Comprehensive inspections. OQ records and covered tasks are also reviewed during our DTC inspections. During these inspections, contractor records are reviewed. | |

PUBLIC AWARENESS PROGRAM

| | |
|----------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Question #27 | 27. Results |
| Is the PA program up to date? And were there changes to the Public Awareness (PA) program within the last year? | Satisfactory |
| 27. Notes | |
| A full PA inspection was performed this year. Please reference that inspection. There were no areas of concern or probable violations. | |
| Question #28 | 28. Results |
| Are changes to the PA program satisfactory? | Satisfactory |
| 28. Notes | |
| A full PA inspection was performed this year. Please reference that inspection. There were no areas of concern or probable violations. | |

CONTROL ROOM PROGRAM

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Question #29 | 29. Results |
| Is the CRM program up to date? And were there changes to the Control Room Management (CRM) program within the last year? | Satisfactory |
| 29. Notes | |
| The CRM inspection was conducted in 2021 as a joint inspection with Oregon. Please review that inspection for additional detail. | |
| Question #30 | 30. Results |
| Are the CRM program changes satisfactory? | Satisfactory |
| 30. Notes | |
| Yes There were some findings in the 2021 CRM inspection that were resolved. The CRM inspection was conducted in 2021 as a joint inspection with Oregon. Please review that inspection record for additional detail. | |

SAFETY MANAGEMENT SYSTEM API 1173

Question #31

Is the operator developing and implementing an API 1173 Safety Management System?

31. Results

Satisfactory

31. Notes

There was a gap analysis was completed in January 2020. The employee establishing this program resigned in March 2020. NWN is actively recruiting for a new PSMS person. The position is in the engineering department. During this prior work, MOC was identified and root cause analysis in the gap analysis that was performed.

INSPECTOR ASSESSMENT OF INSPECTION UNITS

Question #32

Are inspection units broken down appropriately? Do you recommend any changes to inspection units?

32. Results

Satisfactory

32. Notes

No changes needed to unit size.

Q32: List of current inspection units

| Unit Name | Distribution/Transmission | Intrastate or Interstate? | GAS or LIQUID |
|------------------------------------|---------------------------|---------------------------|---------------|
| Northwest Natural (5 Units) | | | |
| NWN- HQ | Distribution | Intrastate | Gas |
| NWN- Columbia Gorge | Distribution | Intrastate | Gas |
| NWN- Clark | Distribution | Intrastate | Gas |
| NWN- Transmission | Transmission | Intrastate | Gas |
| NWN- Mobile LNG | Distribution | Intrastate | Gas |

OPERATOR'S PUBLIC WEB PAGE

Question #33

For informational purposes: Using the drop down selections available in the "Results" block, indicate whether the operator's web page contains the information listed by placing a check in the box adjacent to all items that are present.

33. Results

Q33.B Damage Prevention ; Q33.C Pipe Location Information ; Q33.D How to get additional information ; Q33.E National Pipeline Mapping System ; Q33.F On Call Requirements ; Q33.G Potential Hazards ; Q33.H Prevention Measures ; Q33.I Leak/Damage Recognition ; Q33.J ROW Encroachment ; Q33.K Pipeline Location Information ; Q33.L Integrity Management Programs ; Q33.M Emergency Preparedness

33. Notes

The location at <https://www.nwnatural.com/safety/pipeline-information> contains the required content. The videos also have additional safety information about odor detection and emergency procedures.

ADVISORY BULLETIN REVIEW

Question #34

Is there potential for damage to the operator's pipeline facilities caused by flooding, river scour, or channel migration?

ADB 2019-01

ADB 2019-01 Flood Mitigation

34. Results

YES

34. Notes

These situations are monitored in scheduled patrols.

Question #35

If "YES" to Q34, did the operator take appropriate action in accordance with the guidance contained ADB 2019-01? Discuss ADB's guidance with operator's representative, and annotate any concerns.

ADB 2019-01

ADB 2019-01: Flood Mitigation

35. Results

Satisfactory

35. Notes

The operator uses triggers such monitoring rain gauges to see if additional patrols are required.

Question #36

Is there potential for the operator's system to be damaged by earth movement or other seismic/geological activities?

ADB 2019-02

ADB 2019-02: Earth Movement/Geological Hazards

36. Results

YES

36. Notes

Most infrastructures in the Pacific Northwest have risks associated with seismic and other geologic activities.

Question #37

If "YES" to Q36, did the operator take appropriate action according to ADB 2019-02? Discuss suggested actions from ADB with operator's representative and annotate any concerns.

ADB 2019-02

ADB 2019-02: Earth Movement/Geological Hazards

37. Results

Satisfactory

37. Notes

NWN has done seismic analysis on the transmission system and it continuing to perform it system wide.

Question #38

Does the operator have any indoor meter sets or regulators in their system?

ADB 2020-01

ADB 2020-01 Inside Meter Sets

38. Results

YES

38. Notes

This is tracked in the CIS (Customer information system).

Question #39

If operator's system has indoor meter sets/regulators, did the operator review ADB 2020-0115? Discuss ADB guidance with operator's representative and annotate any concerns. Particular attention must be given to the operator's plan to conduct leak surveys, AC inspections, and other maintenance activities in locations that are difficult to access, as well as the inclusion of inside meters/regulators within the operator's DIMP plan, as applicable.

ADB 2020-01

ADB 2020-01 Inside Meter Sets

39. Results

Satisfactory

39. Notes

From the operator's DIMP Inside Service Lines Assessment and repair of inside service lines. NWN performed DIMP baseline assessment of inside service lines in 2019. A remediation of corrosion on service lines located in buildings performed in 2021.

Question #40

Does the operator have a detailed record of locations for all indoor meter sets/regulators within their system?

ADB 2020-01

ADB 2020-01 Inside Meter Sets

40. Results

Satisfactory

40. Notes

These locations are contained within CIS (Customer information system).

Question #41

Does the operator have any low pressure systems?

ADB 2020-02

ADB 2020-02 Low Pressure Systems

41. Results

Not Applicable

41. Notes

No systems of this type.

Question #42

If "YES" to Q41, did the operator review ADB 2020-0025 for Overpressure Protection of Low-Pressure Natural Gas Distribution Systems? Review ADB guidance with operator and annotate any concerns.

ADB 2020-02

ADB 2020-02 Low Pressure Systems

42. Results

Not Applicable

42. Notes

No systems of this type.

Question #43

For low pressure construction/maintenance projects, does the operator have a process for review of engineering plans and constructibility reviews that are carried out through all applicable departments? Do all applicable departments review project plans for accuracy, completeness and correctness? How are control procedures developed that could identify system threats that could result in a common failure mode? How is the operator mitigating risk in their low pressure system?

ADB 2020-02

ADB 2020-02 Low Pressure Systems

43. Results

Not Applicable

43. Notes

No systems of this type.

Question #44

Does the operator include all low-pressure system risks in their DIMP program appropriately?

ADB 2020-02

ADB 2020-02 Low Pressure Systems

44. Results

Not Applicable

44. Notes

No systems of this type.

SUMMARY OF REQUIRED COMMENTS

COMMENTS: Required for any ratings other than Satisfactory. Summarize/consolidate entries from the "Notes" blocks above. Ensure you annotate the question number for each comment. There were no probable violations or areas of concern. Additionally, the operator does not have any low pressure systems.