Washington Utilities and Transportation Commission
Intrastate Gas Distribution System
Inspection Guide and Report

Pipeline Company Name AVISTA UTILITIES Docket# UG-020218

Pipeline Company Contact MIKE FAULKENBERRY Company ID# 83

Address East 1411 Mission Facility Insp. # 1791

City Spokane WA, 99220

Telephone Fax

Pipeline Inspection Facility (Unit):

Name SPOKANE/RITZVILLE

Address Same as above

City Spokane, WA 99220

Telephone Fax

Operator Representatives

Name and Title MIKE FAULKENBERRY, MANAGER ENGINEERING
LINDA BURGER, ENGINEER
BILL BAKER, ENGINEER

WUTC Representatives

Name and Title SCOTT RUKKE, PIPELINE SAFETY ENGINEER
WAYNE WIENHOLZ, PIPELINE SAFETY ENGINEER

Inspection Dates FEBRUARY THRU APRIL, 2002

Date of Last Inspection

Amendments 192-87 REV. 4/01

Gas System History

Age (Range)

1956 TO PRESENT

Size (Range)

½" THRU 24"

Material Type

PE AND STEEL

Specifications

Miles of Main

Not available

Number of Services

70,000 Washington State total

Number of Leaks (Mains and Services)

Not available

Leaks Scheduled for Repair

3

Gas Transportation Company

WILLIAMS / PGE

Reporting Requirements

1. Annual Gas Distribution reports filed with WUTC as required? (WAC 480-93-010 & 200 & 191.11)

YES

2. Telephonic notice of incidents and written reports filed with WUTC as required? (191.5, 192.615 & WAC 480-93-200 & 210)

YES

3. Written reports filed with WUTC as required? (191.11, 480-93-010, 183, & 200)

NO, SEE NON COMPLIANCE #4 **WAC 480-93-183 Pipeline and System Pressure Reporting** *All gas companies shall establish a maximum operating pressure for a pipeline or system, in accordance with this chapter, and notify the commission of the following pressure related changes:*

i. When a pipeline or system pressure exceeds the established maximum operating pressure, the commission shall be notified within six hours, to be followed by written explanation within thirty days.

Findings:

Spokane/Ritzville District:

Staff reviewed system pressure "exception reports" for the Spokane district and found the following systems that exceeded the established Maximum Allowable Operating Pressure (MAOP). Avista did not make Commission notification as required.

a. Spokane West Gate #3. Records indicate that the MAOP is 366 psig and that a pressure of 367.3 psig was reached on May 9, 2001.

b. Mead City Gate. Records indicate that the MAOP is 174 psig and that a pressure of 179.2 psig was reached on May 8, 2001.

c. Mead City Gate. Records indicate that the MAOP is 174 and that a pressure of 175.2 was reached on May 4, 2001.

4. Pipeline and system pressure reports filed with WUTC as required? (WAC 480-93-183 200, & 210)

   a. Which exceed the established MOP?

NO, SEE NON COMPLIANCE #4 **WAC 480-93-183 Pipeline and System Pressure Reporting** *All gas companies shall establish a maximum operating pressure for a pipeline or system, in accordance with this chapter, and notify the commission of the following pressure related changes:*

ii. When a pipeline or system pressure exceeds the established maximum operating pressure, the commission shall be notified within six hours, to be followed by written explanation within thirty days.

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b. Mead City Gate. Records indicate that the MAOP is 174 psig and that a pressure of 179.2 psig was reached on May 8, 2001.

c. Mead City Gate. Records indicate that the MAOP is 174 and that a pressure of 175.2 was reached on May 4, 2001.

b. When raising pressure above 250 psig?

YES

c. When raising pressure above 500 psig?

YES

d. For low-pressure systems, when pressure drops below a safe operating condition?

N/A

e. When a pipeline (250 psig or more) is taken out of service?

N/A

5. Procedures available for Continuing Surveillance? (192.613)

YES

a. Has appropriate action been taken concerning changes in:

i. class location?

N/A

ii. failures?

N/A

iii. leakage history?

N/A

iv. corrosion?

N/A

b. Cathodic protection and other unusual conditions?

N/A

6. Procedure available for Odorization? (192.625)

YES

a. Chemical properties or brand name?

BUTYL MERCAPTAN

b. Odorization method?

WICK, POSITIVE DISPLACEMENT

c. Operator conducted periodic sampling?

YES

d. Is the gas odorized to 1/5 LEL?

NO, SEE NON COMPLIANCE #1

WAC 480-93-015 Odorization of Gas *All gas being transported by pipeline in this state, and all gas consumed by an end use customer, shall be odorized in accordance with 49 CFR, Part 192.625, unless waiver is approved in advance of such transportation, in writing, by the commission.*

Findings:

Spokane/Ritzville District:

This finding is based on an Avista adopted Lower Explosive Limit (LEL) of five percent gas in air. Odorization records indicated that for the month of May 2001, Avista did not have readily detectable odorization at the required levels. Records for the seven test sites in the Spokane area indicated that the systems were odorized to a level that was not readily detectible until a concentration of gas in air of 1.3 percent. This does not meet the minimum requirement that the systems be odorized at a readily detectible level of approximately one percent gas in air (based on an LEL of five percent). No documentation was provided indicating Avista personnel recognized the inadequate levels of odorization or that any corrective actions were taken.

7. Procedures available for Patrolling? (192.721, WAC 480-93-115 & WAC 480-93-120)

YES

a. Have patrolling areas been identified?

YES

b. Have mains located in business districts been patrolled at intervals not exceeding 4½ months but at least 4 times each calendar year where anticipated physical movement or external loading could cause failure or leakage?

YES

c. Have mains located outside business districts been patrolled at intervals not exceeding 7½ months but at least twice each calendar year where anticipated physical movement or external loading could cause failure or leakage?

YES

8. Procedures available for Valve maintenance? (192.747)

YES

a. Have valves which might be required during an emergency been checked and serviced at intervals not exceeding 15 months, but at least once each calendar year?

YES

9. Procedures available for Vault maintenance? (192.749)

N/A

a. Have vaults 200 cubic feet or more been inspected at interval not exceeding 15 months, but at least once each calendar year?

N/A

b. Does the inspection include repairing gas leaks, vents, and vault covers?

N/A

10. Procedures for Leakage Surveys? (192.723 WAC 480-93-186, WAC 480-93-187 & WAC 480-93-188)

YES

a. Have business district areas been identified and defined?

YES

b. Have gas detector surveys been conducted in the business districts at intervals not exceeding 15 months, but at least once each calendar year? (192.723(b)(1))

YES

c. Have leakage surveys of the distribution system outside of the principal business areas been conducted as frequently as necessary, but at intervals not exceeding five years? (192.723(b(2))

YES

e. Have leakage surveys of cast iron, wrought iron, ductile iron, or non-cathodically protected steel pipe been conducted at intervals not exceeding eight months, but at least twice each calendar year? (WAC 480-93-188(e))

YES

d. Has the operator provided for calibration and maintenance of leak detection instruments? (WAC 480-93-188)

YES

11. Procedures for Leak Repairs? (192.703 & WAC 480-93-18601)

YES

a. Have leaks been classified Grade 1, Grade 2, or Grade 3?

YES

b. Have Grade 1 leaks been repaired or eliminated or continuous action taken as required?

NO, SEE NON COMPLIANCE #6,7,8 **WAC 480-93-186(1)(c) Leakage Classification and Action Criteria**

(1) Gas leak classification and repair.

(c) Follow-up inspections. The adequacy of leak repairs shall be checked by acceptable methods while the excavation is open. The perimeter of the leak area shall be checked with a CGI. In the case of repair of a Grade 1 leak, where there is residual gas in the ground, a follow-up inspection shall be made as soon as practical but in no case later than one month following the repair. In the case of Grade 2 or Grade 3 leaks, which have been repaired, the need for a follow-up inspection shall be determined by qualified personnel employed or retained by the gas company.

REPEAT VIOLATION

Findings:

Spokane/Ritzville District:
Documentation indicates that the following grade 1 leaks did not have follow up inspections made within the 30-day limit:

a. **7026 S. Crestview, Spokane, 9/20/01.** Avista's documentation indicates residual gas was left in the ground after a leak repair, which requires a follow up inspection within 30 days. Documentation indicates that a follow up inspection was not conducted until 1/15/02.

b. **8324 E. Sinto, Spokane, 4/27/01** Avista's documentation indicates residual gas was left in the ground after a leak repair which requires a follow up inspection within 30 days. No documentation was provided which indicated that a 30-day follow up was conducted.

c. **N. 13615 River Bluff Ln, 10/11/01.** Avista's documentation indicates residual gas was left in the ground after a leak repair, which requires a follow up inspection within 30 days. Documentation indicates that a follow up was not conducted until 12/20/01.

d. **7909 N. Rye, 10/15/01**. The "leak/odor investigation" section of Avista's leak documentation indicates that 55% residual gas was left after repair but the "re-inspection required" section of the leak document is not marked. A follow up recheck was not conducted until 12/26/01.

Our inspection report dated March 27, 2001, docket number UG-001851, previously identified this violation.

WAC 480-93-186(b) Leakage Classification and Action Criteria

eak grades. Based on an evaluation of the location and/or magnitude of a leak, one of the following leak grades shall be assigned, thereby establishing the leak repair priority. A gas company may utilize an alphabetical grade classification, i.e. Grade A for Grade 1, Grade B for Grade 2, and Grade C for Grade 3 if it has historically utilized such a grading designation.

Grade 1 - Grade 1 means a leak that represents an existing or probable hazard to persons or property and requiring immediate repair or continuous action until conditions are no longer hazardous.

*Grade 2 - Grade 2 means a leak recognized as being non-hazardous at the time of detection but

c. Have Grade 2 leaks been repaired or cleared within 15 or 21 months?

YES

d. Have Grade 2 leaks been reevaluated at least once every 6 months?

YES

e. Have Grade 3 leaks been reevaluated within 15 months?

YES

12. Does the leak report meet the minimum requirements of the code? (WAC 480-93-187)

YES

13. Has the Maximum Allowable Operating Pressure (MAOP) been established for the pipeline? (192.619, 192.621, 192.623, & WAC 480-93-183)

YES

14. Any pipelines operating over 500 psig?

NO

15. Are they operated within 500 feet of any building, residential zone, recreation area or a public highway? (WAC-480-020)

N/A

16. Any pipelines operating between 251 and 499 psig?

YES

17. Are they operated within 100 feet of any building, or recreational area? (WAC 480-93-030)

YES

18. Procedures for Inspecting and Testing Regulating Stations? (192.739 & 743)

YES

a. Have regulating stations been inspected at intervals not exceeding 15 months, but at least once each calendar year?

YES

b. In good mechanical condition?

YES

c. Adequate from the standpoint of capacity and reliability of operation?

YES

d. Set to function at the correct pressure?

YES

e. Properly installed and protected from dirt, liquids or other conditions that might prevent proper operation?

YES

19. Procedures for Testing Relief Valves? (192.743)

YES

a. Have relief devices (RV) been tested at intervals not exceeding 15 months, but at least once each calendar year?

YES

b. Does RV have sufficient capacity?

YES

c. Have RV been set at the proper set point?

YES

20. Procedures for checking the downstream pressure after service regulator? (192.197)

YES

21. Tele-metering or Recording Gauges (192.741)

YES

a. Is there a pipeline system supplied by more than one district regulating station?

YES

b. Are tele-metering or recording gauges installed?

SPOKANE HAS 6 SYSTEMS FOUND AFTER THE PULLMAN CLARKSTON INSPECTION WHICH DO NOT HAVE GAUGES INSTALLED. AVISTA IS IN THE PROCESS OF INSTALLING GAUGES.

c. Are there any indications of abnormally high or low pressure?

YES

d. Are unsatisfactory operating conditions being corrected?

YES

22. Line Markers (192.707, WAC 480-93-120 & WAC 480-93-124)

YES

a. Are line markers installed in class 1 and 2 locations at each crossing of a public road and railroad?

YES

b. Are line markers installed at above ground pipe areas accessible to the public?

YES

c. Do the line markers include the current name, telephone number, and the word Warning, Caution, or Danger?

YES

23. Procedures for Damage Prevention (192.614, WAC 480-93-190, & RCW Title 19.122)

YES

a. Written damage prevention program available?

YES

b. Member of a one-call system? If so provide I.D. number. (WAC 480-93-190 & 192.614)

YES

c. Does the operator have available a current list of Excavators? (192.614©(1))

YES

d. Provide notification concerning the program to the public and excavators? (192.614©(2))

YES

e. Provide means for receiving and recording notification of pending excavations? (192.614©(3))

YES

f. Provide for markings within two business days?

YES

g. Provide for follow up inspections of the pipeline where there is reason to believe the pipeline could be damaged? (192.614©(6)

YES

h. Provide for action to protect pipeline when an excavator is using drilling or boring equipment?

YES

24. Program for Public Education? (192.616)

YES

a. Does the operator have a comprehensive public education program that includes customers, the public, appropriate government and excavators, that teaches them how to recognize and report a gas pipeline emergency?

YES

b. Does the program reach all areas in which the operator has pipeline facilities?

YES

c. Is the program conducted in English and other languages (commonly understood by a significant number and concentration of the non-English speaking population in the operator's area)?

YES

25. Procedures for Abandonment and Inactivation of Facilities? (192.727)

YES

a. Disconnecting abandon pipe from the supply of gas?

YES

i. Purge the pipe of gas?

YES

ii. Seal all open ends?

YES

b. Lock or prevent the service valve from being opened on all discontinued services?

YES

26. Procedures for Purging the Pipeline? (192.629)

YES

a. Provide for purging of the pipeline of air or gas?

YES

27. Procedures for tapping pipelines under pressure? (192.627)

YES

a. Provided training of personnel to make hot taps?

YES

28. Procedures to prevent accidental ignition? (192.751)

YES

a. Removal of ignition sources?

YES

b. Provide fire extinguisher?

YES

c. Prevent welding or cutting on pipelines containing combustible mixtures?

YES

d. Post warning signs?

YES

29. Procedures for Failure Investigation? (192.617 & 480-93-200)

YES

a. Do the procedures established require analyzing accidents & failures, including laboratory analysis where appropriate, to determine the cause and to minimize a recurrence?

YES

30. Test requirements & procedures for Reinstating Service Lines? (192.725)

YES

a. Does the operator test reinstated service lines in the same manner as new lines?

YES

b. Are the procedures adequate?

YES

31. Does the operator have a procedure to move or lower a gas pipeline?(WAC 480-93-175)

YES

32. Testing new segments of pipeline (192.503)

YES

a. New replacement pipe and components tested?

YES

b. Is pipe that is used to repair or replace segments of existing pipeline pressure tested?

YES

33. Are materials marked as required? (192.63)

YES

34. Does the operator monitor contractors who are undertaking activities on the operator's behalf? (192.605(b)(8))

YES

Transmission Pipeline

35. Does the operator patrol surface condition on and adjacent to line R/W by: (192.705)

walking ☐ driving ☐ flying ☐ other ☐

a. Does the operator follow up on problems noted?

b. Are records adequate?

36. Is the maximum interval between patrols in accordance with the following: (192.705)

	Maximum Interval between patrols	
Class location of line	At highways & RR Crossings	At all other places
1,2.....	7½ months, but at least twice each calendar year.	15 months, but at least once each calendar year.
3.....	4½ months, but at least four times each calendar year.	7½ months, but at least twice each calendar year.
4.....	4½ months, but at least four times each calendar year.	4½ months, but at least four times each calendar year.

37. Procedures for leakage surveys of transmission lines available? (192.706 & WAC 480-93-188)

38. Is gas being transported without odor? (192.706)

a. Is the operator in compliance with WAC 480-93-015?

b. Are leak surveys using a gas detector conducted in class 3 locations, at intervals not exceeding 7½ months, but at least twice each calendar year?

c. Are leak surveys using a gas detector conducted in class 4 locations, at intervals not exceeding 4½ months, but at least four times each calendar year?

39. Have leak surveys been conducted at intervals not exceeding 15 months, but at least once each calendar year? (192.706)

40. What types of leakage surveys are conducted?

41. Is each Transmission valve that might be required during an emergency inspected and tested once a calendar year not exceeding 15 months (192.745)

Corrosion Control - Cathodic Protected Pipelines

42. Have corrosion control procedures been established to implement the requirements of subpart I? (192.453)

YES

43. Are these procedures under the responsibility of a qualified person? (192.453)

YES

44. Are buried pipeline cathodically protected? (192.455)

NO, SEE NON COMPLIANCE #2

WAC 480-93-110 Corrosion Control *Every gas company must ensure that all of its metallic gas pipelines, except cast iron and ductile iron, are protected by a recognized method or combination of methods of cathodic protection.*

REPEAT VIOLATION

Findings:

vista has an undetermined number of short sections of steel main and isolated steel service risers that do not have adequate cathodic protection applied. The following were found to have inadequate or no levels of cathodic protection applied:

Spokane/Ritzville District:

a. 2901 N. Argonne, Suite 5, Spokane. Reading of –0.59 volt.
b. 6606 N. Division, Spokane. Reading of –0.54 volt.

Goldendale/Stevenson:

a. 320 Columbus St., Goldendale. Reading of –0.40 volt.
b. 908 Columbus St., Goldendale. Reading of –0.43 volt.
c. 125 Brooks St., Goldendale. Reading of –0.77 volt.
d. 127 Brooks St., Goldendale. Reading of –0.38 volt.
e. 608 Golden St., Goldendale. Reading of –0.12 volt.
f. 610 Golden St., Goldendale. Reading of –0.56 volt.
g. 525 Collins, Goldendale. Reading of –0.43 volt.
h. NW Manufacturing, Cascade Ave, Stevenson. Reading of –0.49 volt.
i. Two-inch steel wrapped main on Mill St Bridge over Little Klickitat River. Reading of –0.52 volt.
j. Three quarter inch main in the 600 block of Golden St., Goldendale. Readings taken from services.

Our inspection report dated March 27, 2001, docket number UG-001851, previously identified this violation.

45. Which criteria for cathodic protection is used by the operator? (192.463)

-0.85V

46. Does the criteria for cathodic protection meet one of the requirements of Part 192 Appendix D? (192.463)

YES

47. Are buried pipelines electrically isolated from other underground structures? (192.467)

UNKNOWN, NOT PERFORMING TESTS AS REQUIRED ON CASINGS WITHOUT TEST POINTS, SEE NON COMPLIANCE #11 **Part 192.467(d) Casing of Pipelines** *Inspection and electrical tests must be made to assure that electrical isolation is adequate.*

indings:

pokane/Ritzville District:
vista's records indicate that the following casings do not have contact points for testing of electrical isolation between casing and carrier pipe. Avista is currently leak surveying these casings. Leak surveys are not an edequate method of assuring electrical isolation between casings and carrier pipe.

a. **Division & Cataldo, Spokane**
b. **Trent & Sherman, Spokane**
c. **Rebecca & Freeway, Spokane**
d. **Geiger Blvd & Garden Springs, Fairchild to Spokane**
e. **Darden Springs & 100' E of Geiger, Fairchild to Spokane**
f. **Lenedeke & 8th (W casing), Fairchild to Spokane**
g. **Trent & Tracks at Airport, Spokane Valley**
h. **Trent & Rolling Mill Rd, Spokane Valley**
i. **Trent & 14015 E, Spokane Valley**
j. **Harvard & Wellesley, Spokane Valley**
k. **Tracks & 5 SE (1/2 mile E of U or Bruce Rd), Ritzville**

48. Are casings inspected for electrical shorts annually? (192.467 & WAC 480-93-115)

NO SEE NON-COMPLIANCE #11 **Part 192.467(d) Casing of Pipelines** *Inspection and electrical tests must be made to assure that electrical isolation is adequate.*

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l. Division & Cataldo, Spokane
m. Trent & Sherman, Spokane
n. Rebecca & Freeway, Spokane
o. Geiger Blvd & Garden Springs, Fairchild to Spokane
p. Darden Springs & 100' E of Geiger, Fairchild to Spokane
q. Lenedeke & 8th (W casing), Fairchild to Spokane
r. Trent & Tracks at Airport, Spokane Valley
s. Trent & Rolling Mill Rd, Spokane Valley
t. Trent & 14015 E, Spokane Valley
u. Harvard & Wellesley, Spokane Valley
v. Tracks & 5 SE (1/2 mile E of U or Bruce Rd), Ritzville

a. Are measures taken to mitigate corrosion inside shorted casings:

i. Clear the short?

NO

ii. Fill the casing with insulating material?

NO

iii. Monitored for leaks every 90 days? (WAC 480-93-115)

YES

iv. Other. Describe

49. Are insulating devices isolated from areas where a combustible atmosphere may be anticipated? (192.467)

YES

50. Protection provided to the pipelines against damage due to fault currents where pipelines

are located in close proximity to electrical transmission tower footings? (192.467)

N/A

51. Are sufficient test stations available to insure adequacy of cathodic protection? (192.469)

YES

52. Has each pipeline that is cathodically protected been tested at least once each calendar year, but with intervals not exceeding 15 months? (192.465)

YES

53. Has each cathodic protection rectifier been inspected at least six times each calendar year, but with intervals not exceeding 2½ months? (192.465)

YES

54. Are there any separately protected or isolated pipelines less than 100 feet? (192.465)

YES, SEE NON COMPLIANCE #2

WAC 480-93-110 Corrosion Control *Every gas company must ensure that all of its metallic gas pipelines, except cast iron and ductile iron, are protected by a recognized method or combination of methods of cathodic protection.*

REPEAT VIOLATION

Findings:

vista has an undetermined number of short sections of steel main and isolated steel service risers that do not have adequate cathodic protection applied. The following were found to have inadequate or no levels of cathodic protection applied:

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i. Two-inch steel wrapped main on Mill St Bridge over Little Klickitat River. Reading of –0.52 volt.
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Our inspection report dated March 27, 2001, docket number UG-001851, previously identified this violation.

55. Are 10% of the separately protected or isolated lines monitored each calendar year with a different 10% checked each subsequent year, so that the entire system is tested in each 10-year period? (192.465)

NO, AVISTA HAS AN UNDETERMINED NUMBER OF ISOLATED STEEL SECTIONS AND IS CURRENTLY COMPILING A LIST TO PLACE ON THE 10% SURVEY.

56. When any pipeline is exposed, is the exposed pipe examined for evidence of corrosion and coating deterioration? (192.459)

YES

57. Are records kept?

YES

Corrosion Control - Non-cathodically Protected Pipelines

58. Are effectively coated steel mains and service lines install before August 1, 1971 cathodically protected? (192.457)

N/A

59. Has the operator proven that a corrosive environment does not exist? (192.457 & WAC 480-93-111)

N/A

60. Does the operator have bare pipelines?

NO

a. Are they cathodically protected?

N/A

b. Are unprotected bare pipelines reevaluated at intervals not exceeding 3 years? (192.465(e))

N/A

c. Have corrosion leaks been found? (WAC 480-93-112)

N/A

e. Has the operator investigated further to determine the extent of the corrosion? (WAC 480-93-112)

N/A

f. Is cathodic protection provided in areas of active corrosion? (192.457 & WAC 93-112)

N/A

Internal Corrosion Control

61. Is corrosive gas being transported by pipeline? (192.475)

NO

62. Whenever a pipe segment is removed from a pipeline, has it been examined for evidence of internal corrosion? (192.475)

YES

63. Have coupons been utilized and checked two times each calendar year, but with intervals not exceeding 7 1/2 months? (192.477)

N/A

Atmospheric Corrosion Control

64. Have above ground facilities installed after 7/31/71, been cleaned and coated? (192.479)

YES

65. Have above ground facilities, installed before 8/1/71, been investigated for corrosion and if it exists, are the facility cleaned and coated? (192.479)

YES

66. Has the operator reevaluated piping exposed to the atmosphere at intervals not to exceed 3 years for onshore piping and where necessary, taken remedial action? (192.481)

UNKNOWN, SEE NON COMPLIANCE #12 **Part 192.491(c) Corrosion Control Records** *Each operator shall maintain a record of each test, survey, or inspection required by this subpart in sufficient detail to demonstrate the adequacy of corrosion control measures or that a corrosive condition does not exist. These records must be retained for at least 5 years, except that records related to §§192.465(a) and (e) and 192.475(b) must be retained for as long as the pipeline remains in service.*

Findings:

Spokane/Ritzville District:
Ritzville was unable to provide records that an atmospheric corrosion-monitoring program was in place at the time of this inspection.

Remedial Measures

67. Does the operator have remedial action requirements? (192.483)

YES

68. Were prompt remedial action taken to correct deficiencies indicated by the monitoring? (WAC 480-93-110)

NO, SEE NON COMPLIANCE #3

a. Shorted casings (90 days - WAC & 192.465)

NO, SEE NON COMPLIANCE #3 **WAC 480-93-110 Corrosion Control**

"…Every gas company shall record and retain all cathodic protection test readings taken and complete remedial action within ninety days to correct any cathodic protection deficiencies known and indicated by the company's record.

REPEAT VIOLATION

Findings:

Spokane/Ritzville District:
Documentation indicates the following carrier pipe Cathodic Protection (CP) readings did not meet the minimum level of –0.85 volt and were not corrected within 90 days:

a. **Erie & Front, Spokane. 10-25-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.75 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
b. **Freya & Track at Riverside, Spokane. 10-25-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.6 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
c. **Greene & Tracks at Ralph, Spokane. 10-25-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.47 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
d. **Lenedeke & 8TH (E casing), Fairchild to Spokane. 10-18-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.78 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
e. **Starr Rd & Trent, Spokane Valley. 10-02-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.64 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
f. **Starr Rd & Tracks S of Trent, Spokane Valley. 10-02-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.64 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
g. **Btwn Freeway & Appleway at 22425 E, Spokane Valley. 10-02-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.76 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
h. **Dyer & north tracks N of Sprague, Spokane Valley. 10-04-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.7 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
i. **Dyer & south tracks N of Sprague, Spokane Valley. 10-04-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.72 volt, which doesn't meet the

b. Rectifier (2½ months - 192.465)

N/A

c. Low p/s readings (case by case, before 90 days WAC-93-110)

4. NO, SEE NON COMPLIANCE #3 **WAC 480-93-110 Corrosion Control**
"…Every gas company shall record and retain all cathodic protection test readings taken and complete remedial action within ninety days to correct any cathodic protection deficiencies known and indicated by the company's record.

REPEAT VIOLATION

Findings:

Spokane/Ritzville District:
Documentation indicates the following carrier pipe Cathodic Protection (CP) readings did not meet the minimum level of –0.85 volt and were not corrected within 90 days:

k. **Erie & Front, Spokane. 10-25-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.75 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
l. **Freya & Track at Riverside, Spokane. 10-25-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.6 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
m. **Greene & Tracks at Ralph, Spokane. 10-25-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.47 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
n. **Lenedeke & 8TH (E casing), Fairchild to Spokane. 10-18-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.78 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
o. **Starr Rd & Trent, Spokane Valley. 10-02-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.64 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
p. **Starr Rd & Tracks S of Trent, Spokane Valley. 10-02-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.64 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
q. **Btwn Freeway & Appleway at 22425 E, Spokane Valley. 10-02-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.76 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
r. **Dyer & north tracks N of Sprague, Spokane Valley. 10-04-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.7 volt, which doesn't meet the Avista adopted criteria of –0.85 volt. Avista was unable to provide documentation indicating that the low CP reading was corrected within the 90-day requirement.
s. **Dyer & south tracks N of Sprague, Spokane Valley. 10-04-2001 surveys.** Records indicate that the carrier pipe had a reading of -0.72 volt, which doesn't meet the

69. Does new and replacement steel pipe have a protective coating that meets the requirements of Section 192.461?

YES

70. Is replacement steel pipe cathodically protected within 90 days? (WAC-93-110)

YES

Corrosion Control Records

71. Does the operator maintain records or maps showing the location of cathodically protected pipe and facilities for as long as the pipeline remains in service? (192.491)

YES

72. Does the operator retain records of each test, survey, and inspections for at least 5 years? (192.491)

5. NO, SEE NON COMPLIANCE #12 **Part 192.491(c) Corrosion Control Records** *Each operator shall maintain a record of each test, survey, or inspection required by this subpart in sufficient detail to demonstrate the adequacy of corrosion control measures or that a corrosive condition does not exist. These records must be retained for at least 5 years, except that records related to §§192.465(a) and (e) and 192.475(b) must be retained for as long as the pipeline remains in service.*

Findings:

Spokane/Ritzville District:

Ritzville was unable to provide records that an atmospheric corrosion-monitoring program was in place at the time of this inspection

Joining Of Pipeline Materials (Welding)

73. Qualified written procedures available? (192.225)

YES

74. Are destructive tests qualifying each procedure available? (192.225)

YES

75. Were the type and number of butt weld test specimens in compliance with the following required schedule? (192.225(b))

YES

Table 2 -- Type and Number of Test Specimens for Procedure Qualification Test						
	Number of Specimens					
Outside Diameter of Pipe	Tensile	Nick	Root	Face	Side	

Inches	Millimeters						
Wall Thickness ≤ 1/2 Inch (12.7 Millimeters							
<2 3/8	<60.3	0[b]	2	2	0	0	4[a]
2 3/8 - 4 ½	60.3 - 114.3	0[b]	2	2	0	0	4
>4 1/2 – 12 ¾	>114.3 - 323.8	2	2	2	2	0	8
>12 ¾	>323.8	4	4	4	4	0	16
Wall Thickness > 1/2 Inch (12.7 Millimeters)							
≤4 ½	≤114.3	0[b]	2	0	0	2	4
>4 1/2 – 12 ¾	>114.3- 323.8	2	2	0	0	2	4
>12 ¾	>323.8	4	4	0	0	8	16

76. Are fillet welding procedures available? (192.225)

YES

77. Were at least 4 nick break test performed to qualify the fillet procedures? 192.225)

YES

78. Are the welders qualified? (192.227 & 192.229)

YES

79. Are welds inspected and tested as required by (192.241)?

YES

Plastic Jointing

80. Is plastic pipe used? (192.63)

YES

81. Type plastic used?

MED DENSITY PE

82. Proper marking?

YES

83. Manufacturer?

PLEXCO

84. Type joint used?

FUSION, ELECTRO, COMPRESSION, SADDLE

85. Written procedures established for joining? (192.273)

YES

86. Have joint procedures been qualified? (192.283)
YES

87. Have the individuals been qualified to make joints? (192.285)
YES

88. Are the individuals qualified to inspect joints? (192.287)
YES

Operation and Maintenance

89. A written Operating and Maintenance Plan available and include the following: (192.603, 605, & 480-93-180)
YES

a. Instructions for employees covering O&M procedures (Subpart M if applicable) during normal operations and repairs?
YES

b. Is the manual reviewed and updated at intervals not exceeding 15 months, but at least once each calendar year?
YES

c. Instructions for the repair of the pipeline?
YES

d. Instruction for controlling corrosion?
YES

e. Making construction records, maps and operating history available to appropriate operating personnel?
YES

f. Gathering of data needed for reporting incidents under part 191 and WAC rules in a timely and effective manner?
YES

g. Starting up and shutting down any part of the pipeline in a manner designed to assure operation within the MAOP?
YES

h. Periodically reviewing the work done by operator personnel to determine the

effectiveness and adequacy of the procedures used in normal operation and maintenance and modifying the procedure when deficiencies are found?

YES

i. Are precautions in excavated trenches listed that will protect personnel from hazards of unsafe accumulation of gas?

YES

90. Are breathing apparatus, rescue harness, and lines available?

YES

91. Is systematic and routine testing and inspection of pipe-type or bottle-type holders included?

N/A

a. Provide for detecting external corrosion before the strength of the container has been impaired?

N/A

b. Periodic sampling and testing of gas in storage to determine the dew point of vapors contained in the stored gas which, if condensed, might cause internal corrosion or interfere with the safe operation of the storage plant?

N/A

c. Periodic inspection and testing of pressure limiting equipment to determine that it is in a safe operating condition and has adequate capacity?

N/A

92. The following procedures were not found in the O&M plan:

N/A

93. Has the operator established procedures to require notification to customers that the operator does not maintain customer piping and is subject to potential hazards of corrosion and leaks?

YES

94. Has the operator notified each customer (not later than August 14, 1996, or 90 days after the customer first receives gas at a particular location) of potential hazards as listed in the rule? (192.16)

YES

95. Has the operator established procedures to require notification to customers that the installation of an excess flow valve is available to customers that have a new natural gas

service line installed or a service line replaced, provided that the customer bears the cost of the installation? (192.383)

YES

i. Did the operator notify the appropriate customers in writing by February 3, 1999?

6. UNKNOWN SEE NON COMPLIANCE #10 Part 192.383(b) Excess Flow Valves Customer Notification

Which customers must receive notification. Notification is required on each newly installed service line or replaced service line that operates continuously throughout the year at a pressure not less than 68.9 kPa (10 psig) and that serves a single residence. On these lines an operator of a natural gas distribution system must notify the service line customer once in writing.

Findings:

Spokane/Ritzville District:
Avista's Spokane office was unable to provide records of the required notification for new construction plat customers.

ii. Has the operator kept records to verify notification?

NO, NO RECORDS WERE AVAILABLE FOR NEW CONSTRUCTION PLAT SERVICE CUSTOMERS

iii. Does the excess flow valve meet the performance standards prescribed under Section 192.381?

YES

Emergency Plan

96. Does the operator have a written emergency plan? (192.615)

YES

97. Does the plan include the following:

a. Instructions for the handling of notices of events that require immediate response by the operator? (192.615(a))

YES

b. Means of communicating with appropriate public officials regarding possible emergency? (192.615(a)(2))

YES

c. Prompt response to each of the following emergencies: (192.615(a)(3))

i. Gas detected inside or near a building?

YES

ii. Fire near a pipeline?

YES

iii. Explosion near a pipeline?

YES

iv. Natural disaster?

YES

d. Does the plan provide a description of the types of personnel, equipment, tools, & material that may be required at the scene of each type of emergency? (192.615(a)(4))

YES

e. Provisions directed towards protecting people first, then property? (192.615(a)(5))

YES

f. How & where to perform emergency shutdown or pressure reductions? (192.615(a)(6))

YES

g. Investigating & rendering safe any actual or potential hazard to life or property? (192.615(a)(7))

YES

h. Does the investigator include procedures and action to protect life in the event that there are multiple leaks and migration of gas into nearby buildings? (66 FR 28027 5/21/01)

YES

i. Check for gas accumulation in nearby building?

YES

ii. Take steps to promptly stop the flow of gas?

YES

i. Directions for notifying additional public officials required at the emergency scene and coordinating activities with these officials? (192.615(a)(8))

YES

j. Instructions for safely restoring service outages? (192.615(a)(9))

YES

k. Provisions for investigating accidents and failures as soon after the emergency as possible? (192.615(a)(10))

YES

98. Has the operator made provisions for:

a. Furnishing applicable portion of the emergency plan to supervisory personnel who are responsible for emergency action? (192.615(b)(1))

YES

b. Training appropriate employees as to the requirements of the emergency plan? (192.615(b)(2))

YES

c. Reviewing activities following actual or simulated emergencies to determine if they were effective? (192.615(b)(3))

YES

d. Establishing mutual liaison with fire, police, & other public officials, such that each is aware of the other's resources and capabilities in dealing with gas emergencies? (192.615(c))

YES