WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
2004 Standard Natural Gas Pipeline Safety Inspection Report
Puget Sound Energy – Thurston/Lewis Counties
Docket No. PG-040210

The following probable violations of Title 49 CFR Part 192, WAC 480-90 and 480-93 were noted as a result of the inspection of the Puget Sound Energy Thurston/Lewis County facilities. The inspection included a random selection of inspection of records, operation & maintenance, emergency response, inventory and field inspection of the pipeline facilities.

1. **49 CFR §192.199 Requirements for Design of Pressure Relief and Limiting Devices**

Except for rupture discs, each pressure relief or pressure-limiting device must:
(h) Except for a valve that will isolate the system under protection from its source of pressure, be designed to prevent unauthorized operation of any stop valve that will make the pressure relief valve or pressure-limiting device inoperative.

Finding:
Saint Martins College - Administrative Building: The overpressure protection isolation valve located on the pressure meter set (meters 994477 and 996512) was not locked in the open position allowing for possible unauthorized operation.

49 CFR §192.13 General
(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

Finding:
PSE did not follow its Procedures Manual, Section 4650.1010 Setting Relief Pressure, step 10, which states in part, "Open relief isolation valve and lock (open)."

2. **49 CFR §192.457 External Corrosion Control: Buried or Submerged Pipelines Installed Before August 1, 1971**

(b) Except for cast iron or ductile iron, each of the following buried or submerged pipelines installed before August 1, 1971, must be cathodically protected in accordance with this subpart in areas in which active corrosion is found:
(1) Bare or ineffectively coated transmission lines.
(2) Bare or coated pipes at compressor, regulator, and measuring stations.
(3) Bare or coated distribution line.

Finding:

Leak work order #9308610012 located at 403 Cleveland Avenue in Olympia on a bare steel gas main was repaired on April 29, 2002. A low pipe-to-soil potential (PSP) read of -.500V and isolated shallow pitting was noted on PSE's Exposed Pipe Condition Report at the time of repair. Remedial action was not taken to correct the condition.

49 CFR §192.13 General

(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

Finding:

PSE did not follow its O&M Manual Sections 2600.1000 3.5 stating, "The following buried or submerged pipelines installed before August 1, 1971 must be cathodically protected in areas in which active corrosion is found. (Areas of active corrosion shall be determined in accordance with Operating Standard 2600.1600 "Unprotected Facilities." Section 3.5.3 refers to "Bare or coated distribution lines."

3. **49 CFR §192.463 External Corrosion Control: Cathodic Protection**

(a) Each cathodic protection system required by this subpart must provide a level of cathodic protection that complies with one or more of the applicable criteria contained in Appendix D of this part. If none of these criteria is applicable, the cathodic protection system must provide a level of cathodic protection at least equal to that provided by compliance with one or more of these criteria.

Appendix D reads:

A. Steel, cast iron, and ductile iron structures.

(1) A negative (cathodic) voltage of at least 0.85 volt, with reference to a saturated copper-copper sulfate half cell. Determination of this voltage must be made with the protective current applied, and in accordance with sections II and IV of this appendix.

(2) A negative (cathodic) voltage shift of at least 300 millivolts. Determination of this voltage shift must be made with the protective current applied, and in accordance with sections II and IV of this appendix. This criterion of voltage shift applies to structures not in contact with metals of different anodic potentials.

(3) A minimum negative (cathodic) polarization voltage shift of 100 millivolts. This polarization voltage shift must be determined in accordance with sections III and IV of this appendix.

(4) A voltage at least as negative (cathodic) as that originally established at the beginning of the Tafel segment of the E-log-I curve. This voltage must be measured in accordance with section IV of this appendix.

(5) A net protective current from the electrolyte into the structure surface as measured by an earth current technique applied at predetermined current discharge (anodic) points of the structure."

Finding:

PSE did not meet 49 CFR §192 Cathodic Protection Appendix D criteria. PSE had inadequate cathodic protection at the following locations:

- The portion of steel main and the associated services starting at the intersection of Maple and Railroad St. in Centralia and ending near the service to S 212 Tower in Centralia. The PSP reads on the services varied from -.730V to -.785V.
- Leak work order # M01008359, on the bare steel gas main located at 1124 W. Walnut in Centralia was repaired on April 25, 2003. PSE's Exposed Pipe Condition Report for the repair showed that at the time of the repair, a low PSP read of -.400V and frequent deep pitting was noted. The report indicated that an anode was placed on the main but the PSP read remained at -.400V.
- 110½ S. Tower (Meter 666660, installed in 1962) had a low PSP read of -.364V on the portion of the service from the dresser fitting to the meter.
- 3811 Pacific Avenue in Lacey (Meter 473240) had a low PSP read of -.530V on the isolated steel riser.

49 CFR §192.13 General

(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

Finding:

PSE did not follow its O&M Manual Section 2600.1500 5.1 stating, "Each pipeline that is under cathodic protection shall be tested to determine whether the level of cathodic protection complies with one or more of the following criteria:

5.1.1 Voltage shall be within the range of –0.850V to –2.0V, with reference to a saturated copper-copper sulfate half-cell in contact with the electrolyte. Determination of the voltage shall be made with the protective current applied.

5.1.2 A minimum negative polarization voltage shift of 100 millivolts measured between the structure surface and a saturated copper-copper sulfate half cell in contact with the electrolyte. The polarization voltage shift must be

determined by interrupting the protective current and measuring the polarization decay. The voltage shift, which occurs immediately after the current is interrupted, shall be used as the base value for measuring polarization decay.

5.1.3 A net protective current from the electrolyte into the structure surface as measured by an earth current technique applied at predetermine current discharge points of the structure

5.1.4 Other criteria may be used with the approval of the Consulting Engineer, Corrosion Control."

PSE did not follow its Procedural Manual Section 4515.1210 Scope stating, "This procedure establishes the method for taking pipe-to-soil potential (PSP) reads using a copper: copper . . . . Acceptable readings should exceed (be more negative than) or be equal to –0.850 volts, or meet the criteria in Operating Standard 2600.1500, "Monitoring Cathodic Protection." The section identifies an unstable read as an Abnormal Operating Condition and gives instruction to ". . . If unable to get stable reading, contact the Corrosion Control Department. Do not Estimate."

4. **49 CFR §192.465 External Corrosion Control: Monitoring**

(a) Each pipeline that is under cathodic protection must be tested at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of §192.463. However, if tests at those intervals are impractical for separately protected short sections of mains or transmission line, not in excess of 100 feet (30 meters), or separately protected service line, these pipelines may be surveyed on a sampling basis. At least 10 percent of these protected structures, distributed over the entire system must be surveyed each calendar year, with a different 10 percent checked each subsequent year, so that the entire system is tested in each 10-year period.

Finding (a):

The following test sites had not been tested once each calendar year with intervals not exceeding 15 months:

- Test Site 044117 had test dates of 7/16/2003 and 11/17/2004.
- Test Site 048524 had test dates of 3/4/2003 and 10/26/2004.
- Test Site 048522 had test dates of 3/4/2003 and 10/26/2004.
- Test Site 048296 had test dates of 3/4/2003 and 8/13/2004.
- Test Site 029043 had test dates of 2/21/2002 and 3/5/2004.

In each of the above test sites, except Test Site 029043, PSE had not created a test site in the SAP software process system after the 2003 read.

Finding (b):

The following test sites had not been inspected in the required ten year time frame:

- Test Site-007113 was tested on 1/22/1986 and 4/29/1996.
- Test Site-007034 was tested on 1/07/1986 and 4/29/1996.
- Test Site-006093 was tested on 1/6/1986 and 7/11/1996.
- Test Site-006099 was tested on 1/6/1986 and 7/11/1996.
- Test Site-006156 was tested on 1/6/1986 and 7/11/1996.
- Test Site-006177 was tested on 1/6/1986 and 7/02/1996.
- Test Site-006201 was tested on 1/6/1986 and 7/02/1996.
- Test Site-006558 was tested on 3/23/1984 and 7/02/1996.
- Test Site-006653 was tested on 3/23/1984 and 1/27/1995.
- Test Site-006483 was tested on 3/23/1984 and 1/27/1995.
- Test Site-006894 was tested on 1/10/1986 and 7/02/1996.
- Test Site-006912 was tested on 1/7/1986 and 1/16/1996.
- Test Site-006934 was tested on 1/7/1986 and 4/29/1996.

49 CFR §192.13 General

(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

Finding:

PSE did not follow its O&M manual Sections 2600.1500 4.1.1 and 2600.1500 4.1.2 which states, "Cathodically protected pipelines greater than 100 feet in length shall be tested at least once each calendar year, but with intervals not exceeding 15 months." In addition, Section 2600.1500 4.1.2 states, "Separately protected mains or transmission lines, not in excess of 100 ft, or separately protected service lines may be surveyed on a sampling basis. At least ten percent of these protected structures, distributed over the entire system, shall be surveyed each calendar year, with a different ten percent checked each subsequent year, so that the entire system is tested in each ten year period."

5. **49 CFR §192.469 External Corrosion Control: Test Stations**

Each pipeline under cathodic protection required by this subpart must have sufficient test stations or other contact points for electrical measurement to determine the adequacy of cathodic protection.

Finding:

PSE had not created test sites at the following locations:

- In Centralia, at the end of the main near S 212 Tower Avenue.
- In Centralia at 110 ½ S. Tower.
- In Lacey at 3811 Pacific Ave SE.

49 CFR §192.13 General

(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

Finding:

PSE did not follow its O&M manual, Section 2600.1200 3.1 stating, "Each pipeline with cathodic protection shall have sufficient test stations or other contact points for electrical measurement to determine the adequacy of cathodic protection."

6. **49 CFR §192.481 Atmospheric Corrosion Control: Monitoring**

(a) Each operator must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows: If the pipeline is located onshore at least once every 3 calendar years, but with intervals not to exceed 39 months.

Finding (a):

PSE does not perform atmospheric corrosion inspections on service risers without meters except in mobile home parks. PSE did not conduct atmospheric corrosion inspection for service risers without meters at the following locations:

- At the Evergreen State College, Science Building.
- In Centralia, in the alley off Maple Street between Tower Street and Pearl Street.
- In Centralia, in the alley behind 401 S. Tower.
- Two service risers found at the South Sound Mall near Pacific Ave and Sleater Kinney behind the DSHS, Vocation Rehabilitation Building.

Finding (b):

PSE did not perform atmospheric corrosion checks within the three calendar years not to exceed 39 months at the following locations:

- Meter 213099 on 11/7/2001 and again on 1/11/2005.
- Meter 340027 on 8/21/2001 and again on 1/8/2005.

- Meter 530109 on 8/6/2001 and again on 1/14/2005.

49 CFR §192.13 General

(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

Finding:

PSE did not follow its O&M Section 2600.2600.1800 4.1 stating, "Each pipeline exposed to the atmosphere, including service risers, meter sets, piping at district regulators, propane tank farms, and CNG injection sites, shall be inspected for evidence of atmospheric corrosion at least once every three years, but at intervals not exceeding 39 months, unless more frequent surveys are specifically requested."

7. **49 CFR §192.723 Distribution Systems: Leakage Surveys**

(a) Each operator of a distribution system shall conduct periodic leakage surveys in accordance with this section.

Finding:

As a result of maps not being maintained, the following services were not leak surveyed:

- The services at St. Martin's College, 5800 Pacific Ave SE Lacey, near the front of the Pavilion Building at meter 949835.
- The service at St. Martin's College in Lacey, 5800 Pacific Ave SE, Lacey, near the back of the Pavilion Building at meter 366427.
- The service to the St. Martin's College Maintenance Building
- The service to the St. Martin's Administration Building.
- At the Candlewood Mobile Manor located at 4500 Martin Way the services to space 4, space 5 of the clubhouse and the laundry room were not leak surveyed.

49 CFR §192.13 General

(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

Finding:

PSE did not follow its O&M Manual Section 2625.1100 4.1, Survey Frequency Table, which indicates the required leak survey intervals.

8. **WAC 480-90-328 Meter Identification**

"Gas utilities must identify each meter by a unique series of serial numbers, letters or combination of both, placed in a conspicuous position on the meter, along with the utility's name or initials. Utilities must update the name or initials on its meters within three years of a name change."

Finding:

PSE had Washington Natural Gas labeled as the owner/operator of the meters located at the following locations:

- Rainer Mobile Home Park, 3800 Sleater Kinney Rd NE, Olympia, meter 340027.
- Rainer Mobile Home Park, 3800 Sleater Kinney Rd NE, Olympia, meter 456001.
- Mt. Green Estates Mobile Home Park, Yelm Highway between College and Ruddle, meter 445175.
- Across the alley from the Police Building in Centralia, meter 714452.
- Genghis Khan Restaurant located at 3811 Pacific Ave SE, Lacey meter 473240.

PSE took possession of Washington Natural Gas in 1996. Chapter 480-90-328 WAC requires all meters to be updated within three years of the name change.

49 CFR §192.13 General

(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

Finding:

PSE did not follow its O&M Manual Section 2600.1800 3.4, stating, "As part of the above inspection process, all meters shall be relabeled with PSE's name and/or logo. If the company name changes in the future, all meters shall be relabeled within three years."

9. **WAC 480-93-018 Maps, Drawings, and Records of Gas Facilities**

All gas companies shall prepare, maintain, and provide to the commission, upon request, copies of maps, drawings, and records of the company's gas facilities.

Finding:

PSE had not been maintained its maps and/or records at each of the following locations:

- At Candlewood Mobil Manor, located at 4500 Martin Way in Lacey, PSE did not have the services to space 4, space 5 of the clubhouse, and the laundry room mapped. This resulted in the services not being leak surveyed.
- At St. Martin's College located at 5300 Pacific Avenue SE, Lacey, PSE did not have the service to meter 366427 located near the back of the Pavilion building mapped. This resulted in the service not being leak surveyed.
- At St. Martin's College located at 5300 Pacific Avenue SE, Lacey, PSE did not have the service to Meter 949835, located near the front on the Pavilion building mapped. This resulted in the service not being leak surveyed.
- At St. Martin's College located at 5300 Pacific Avenue SE, Lacey, PSE did not have the service to Meters 994477 and 996512 on the Administration mapped. This resulted in the service not being leak surveyed.
- At St. Martin's College located at 5300 Pacific Avenue SE, Lacey, PSE did not have the service meters 222413 and 233615 on the Maintenance Building mapped. This resulted in the service not being leak surveyed.
- At Limerick St. and Wilderness Dr., Emergency Operating Valve VA-01853, was not checked within the calendar year not to exceed 15-months according to PSE's SAP system. The valve was checked on 6/13/2002 and PSE's SAP system showed it was checked again on 10/17/2003. 10/17/2003 was beyond the 15 months required timeframe. PSE's investigation showed it had actually been read on 9/9/2003. 9/9/2003 is within the 15 months. SAP system records were not maintained.
- The map and the street addresses for several PSE regulator stations were not accurate. On February 5, 2001, at Fones Road SE, between Boulevard Road SE and the North-south leg of Fones Road SE, the street name was changed to 18th Avenue SE. In a letter dated July 10, 2000, the City of Olympia notified PSE of the street name change and the addresses that would be affected. The notification was mailed to Puget Sound Energy at 3130 S 38th Street, Tacoma, WA 98409. On January 5, 2001, the City of Olympia sent a

reminder letter. PSE's customer mailing addresses had been updated but PSE maps and records had not been updated.

- The following regulator stations had mailing addresses rather than appropriate street addresses:
  Regulator Station 1036-Rt. 1 Box 468 Nevil Rd.
  Regulator Station 1037-Rt. 1 Box 564 Nevil Rd.
  Regulator Station 1147-Rt. 1 Box 659 Nevil Rd.
  Regulator Station 1315-Rt. 1 Box 558 Military Rd.
  Regulator Station 1543-Rt. 1 Box 560 Nevil Rd.
  Other Regulator stations located on Nevil Rd. and Military Rd. had appropriate street addresses. PSE records had not been maintained.
- Test site 004251 was read on 11/13/2002, not read in 2003 and not scheduled for a 2004 test. PSE's investigation showed that the service had been cut and capped. PSE's SAP system was not updated to indicate that Test Site 004251 had been removed.
- PSE record F454880 for Test Station 026792 had a low PSP read of -.600V on 10/4/2002. On 1/06/2003 remedial action was completed and the PSP read was -.975V. Remedial action was completed two days late. However, in PSE's SAP system, the information was entered as completed on 3/11/2003, making it appear that the remedial action was approximately 72 days late.
- PSE's D4 card showed a service to 402 and 402 ½ N. Tower was installed 1/11/72 and the address was later changed to 105 E Maple. Meter 866004 is at this location and had severe pitting. This service is not on PSE's plat map.
- PSE operations map 292.032 shows El Paso as the owner operator of a pipeline shown on PSE's operations maps. El Paso pipeline transferred ownership to NW Pipeline (Williams) in the 1970's.
- PSE cathodic protection maps are only updated when the critical bond program in an area is completed. Other cathodic protection maps are not updated or accurate. At the Candlewood Mobil Manor located at 4500 Martin Way, the maps in PSE's trucks, the Olympia office and the Georgetown office differ. PSE's truck maps indicate the mobile home park is on an impressed current system with the rectifier located at 45th and Boulevard. PSE's Olympia office cathodic protection maps indicate that Candlewood Mobil Manor is on galvanic system, GA 037290 and the galvanic system was affected by the impressed current system with the rectifier located at 45th and Boulevard. The maps in the Georgetown office

indicated that the Candlewood Mobil Manor was affected by the impressed current system located at Sleater Kinney and Pacific.

49 CFR §192.13 General

(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

Finding:

PSE did not follow its O&M, Sections 2500.1000, 2500.1100, 2500.1200, 2500.1300, 2500.1500, 2525.1400, and 2575.1600. Each of the above sections refers to Chapter 480-93-018 WAC and implies that PSE will prepare and maintain its maps, drawings, and records of the company's gas facilities.

10. **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 catholic protection deficiencies known and indicated by the company's records."

Finding (a):

PSE did not complete remedial action within 90 days at the following test sites:

- Test Site-044117 had a low PSP read of -.740V on 7/16/2003, remedial action was completed on 11/17/2004.
- Test Site-34918 had a low PSP read of -.360V on 8/14/2003, remedial action was completed on 2/9/2004 with a PSP read of -1.250V.
- Test Site-046077 had a low PSP read of -.590V on 5/6/2003, remedial action was completed on 9/24/2003 with a PSP read of -1.300V.
- Test Site-042251 had a low PSP read of -.830V on 4/16/2003, remedial action was completed on 9/18/2003 with a PSP read of -1.050V.
- Test Site-044162 had a low PSP read of -.750V on 7/21/2003, remedial action was taken on 11/14/2003 with a PSP read of -1.050V.
- Test Site-044160 had a low PSP read of -.690V on 7/21/2003, remedial action was completed on 11/14/2003 with a PSP read of -.915V.
- Test Site-044172 had a low PSP read of -.590V on 7/21/2003, remedial action was completed on 11/14/2003 with a PSP read of -.930V.

- Test Site-044106 had a low PSP read of -.800V on 8/14/2001, at the time of the records review, the next record in PSE's SAP system was the annual read of 7/15/2003. No remedial action was taken.
- Test Site-044106 had a low PSP read of -.680V on 7/15/2003, remedial action was taken on 11/13/2003 with a PSP read of -.965V.
- Test Site-026792 had a low PSP read of -.600V on 10/4/2002, at the time of the inspection, PSE's SAP system records indicated that remedial action was taken on 3/11/2003. PSE's investigation showed that the actual remedial action date was 1/06/2003.

Finding (b):

PSE did not complete remedial action within 90 days at the following locations:

- The bridge inspected on PSE's Continuing Surveillance Patrol Form Loc. ID# 174 at the Olympia Brewery on Capital Boulevard identified an atmospheric corrosion rating of 3 (pitting per PSE standard 4515.1220). An atmospheric corrosion rating of 3 was identified during 7 separate inspections and noted as a high priority needing attention.
- The bridge inspected on PSE's Continuing Surveillance Patrol Form Loc. ID# 319 located at the McCallister Creek bridge, at the entrance to Salmon Ln. on Olympia-Steilacoom Hwy. identified an atmospheric corrosion rating of 3 (pitting per PSE standard 4515.1220). This rating was identified during four separate inspections. The form indicated this was a high priority and needed attention.
- PSE's Third Party Damage Report 186510800 indicated a low PSP read of -.800V, on the service located at 10900 Kuhlman Rd. SE in Olympia. The service was cut and capped at the gas main. No documentation was provided to show that the condition was not corrected within the 90 days requirement.
- At Israel Rd. and Nicolas in Tumwater, Third Party Damage from report 186514898 was repaired on 5/21/2003 and a low PSP read of -.400V was recorded. On 8/30/2004, remedial action was taken.
- Leak work order #N00157251 located at 114 E 4th Avenue, in Olympia was repaired on 6/25/2004. A low PSP read of -.400V was noted at the time of repair. No documentation was provided to show that the condition was not corrected within the 90 days requirement.

- On 12/7/2001, a work order to correct atmospheric corrosion pitting located at 404 Washington Avenue SW in Yelm was issued. Work was completed on 9/12/2003.
- On 12/14/2001, a work order to correct atmospheric corrosion pitting located at 2051 Jackson Hwy. in Chehalis was issued. Work was completed on 6/16/2003.
- On 12/14/2001, a work order to correct atmospheric corrosion pitting located at 2161 Jackson Hwy. in Chehalis was issued. Work was completed on 6/16/2003.
- On 12/14/2001, a work order to correct atmospheric corrosion pitting located at 2485 Jackson Hwy. in Chehalis was issued. Work was completed on 6/16/2003.
- On 12/14/2001, a work order to correct atmospheric corrosion pitting located at 118 Ribelin Rd. in Chehalis was issued. Work was completed on 6/16/2003.
- On 12/14/2001, a work order to correct atmospheric corrosion pitting located at 2512 Jackson Hwy. in Chehalis was issued. Work was completed on 6/16/2003.
- On 12/14/2001, a work order to correct atmospheric corrosion pitting located at 2556 Jackson Hwy. in Chehalis was issued. Work was completed on 6/16/2003.
- On 12/21/2001, a work order to correct atmospheric corrosion pitting located at 1037 NW State St. in Chehalis was issued. Work was completed on 6/17/2003.
- On 12/21/2001, a work order to correct atmospheric corrosion pitting located at 1025 NW State St. in Chehalis was issued. Work was completed on 6/17/2003.
- On 12/21/2001, a work order to correct atmospheric corrosion pitting located at 1113 Woodland Avenue in Centralia was issued. Work was completed on 6/19/2003.
- On 12/21/2001, a work order to correct atmospheric corrosion pitting located at 1124 Woodland Avenue in Centralia was issued. Work was completed on 6/19/2003.
- On 12/21/2001, a work order to correct atmospheric corrosion pitting located at 1030 S. Tower St. in Centralia was issued. Work was completed on 6/19/2003.
- On 12/21/2001, a work order to correct atmospheric corrosion pitting located at 1009 Kresky Rd. in Centralia was issued. Work was completed on 6/19/2003.

- On 12/21/2001, a work order to correct atmospheric corrosion pitting located at 149 NE Hampe Way #B in Chehalis was issued. Work was completed on 6/26/2003.
- On 12/21/2001, a work order to correct atmospheric corrosion pitting located at 149 NE Hampe Way #A in Chehalis was issued. Work was completed on 6/26/2003.
- On 12/21/2001, a work order to correct atmospheric corrosion pitting located at 163 NE Hampe Way in Chehalis was issued. Work was completed on 6/26/2003.
- On 12/21/2001, a work order to correct atmospheric corrosion pitting located at 175 NE Hampe Way in Chehalis was issued. Work was completed on 6/26/2003.
- On 12/21/2001, a work order to correct atmospheric corrosion pitting located at 179 NE Hampe Way in Chehalis was issued. Work was completed on 6/26/2003.
- On 12/28/2001, a work order to correct atmospheric corrosion pitting located at 1610 Windsor Avenue #9 in Centralia was issued. Work was completed on 6/17/2003.
- On 12/28/2001, a work order to correct atmospheric corrosion pitting located at 1514 Oxford St. in Centralia was issued. Work was completed on 6/17/2003.
- On 12/28/2001, a work order to correct atmospheric corrosion pitting located at 1316 Logan St. in Centralia was issued. Work was completed on 6/17/2003.
- On 12/28/2001, a work order to correct atmospheric corrosion pitting located at 1403 Kulien Avenue in Centralia was issued. Work was completed on 6/16/2003.
- On 12/28/2001, a work order to correct atmospheric corrosion pitting located at 1202 Bayne St. in Centralia was issued. Work was completed on 6/16/2003.
- On 12/28/2001, a work order to correct atmospheric corrosion pitting located at 1220 St-Helens St. in Centralia was issued. Work was completed on 6/16/2003.
- On 12/28/2001, a work order to correct atmospheric corrosion pitting located at 1815 Hillview Rd. in Centralia was issued. Work was completed on 6/17/2003.
- On 12/28/2001, a work order to correct atmospheric corrosion pitting located at 1117 F St. in Centralia was issued. Work was completed on 6/17/2003.

- On 12/28/2001 a work order to correct atmospheric corrosion pitting located at 803 G St. in Centralia was issued. Work was completed on 6/18/2003.
- On 12/28/2001, a work order to correct atmospheric corrosion pitting located at 613 Jackson St. in Centralia was issued. Work was completed on 6/19/2003.
- On 12/14/2001, a work order to correct atmospheric corrosion pitting located at 1003 Orton St. in Centralia was issued. Work was completed on 6/19/2003.
- On 12/14/2001, a work order to correct atmospheric corrosion pitting located at 1010 M St. in Centralia was issued. Work was completed on 6/18/2003.
- On 12/14/2001, a work order to correct atmospheric corrosion pitting located at 821 K St. in Centralia was issued. Work was completed on 6/18/2003.
- On 12/14/2001, a work order to correct atmospheric corrosion pitting located at 819 K St. in Centralia was issued. Work was completed on 6/18/2003.

These are repeat violation of UG-011273 and PG-030080/PG-030128.

49 CFR §192.13 General

(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

Finding:

PSE did not follow its O&M Manual, Sections 2600.1900 5.1 and 2600.1900 5.1.1 which states, "The remedial measures set forth in this Operating Standard shall be initiated as soon as corrosion control deficiencies are discovered." In addition, Section 2600.1900 5.1.1 states, "Remedial action shall be completed within 90 days to correct any cathodic protection deficiencies known and indicated by the company's records."

PSE did not follow its Procedural Manual Section 4515.1220 Identifying Atmospheric Corrosion, which states, "Rate the condition 1, 2, or 3, according to the rating system described in the "Corrosion Rating System" section of this procedure. Record the results on a work order. AOC (Abnormal Operating Condition): If the condition of the pipe is rated 3, remedial measures shall be taken in accordance with Gas Field Procedure 4515.1330, Applying Paint to Meter Sets and Above Ground Facilities for Atmospheric Corrosion Remediation."

11. **WAC 480-93-120 Exposed Pipelines**

Proper warning signs shall be placed and other adequate protective measures taken at any point where gas pipelines and any associated equipment and facilities are exposed, and where their location presents an unusually hazardous situation. All gas pipelines attached to bridges or otherwise spanning an area shall have proper warning signs at both ends of the suspended pipeline. The gas company shall keep these signs visible and readable, and inspect all signs annually; signs, which are reported, damaged and missing shall be replaced promptly.

Finding:

PSE had signs on the meter enclosure fence at Evergreen State College naming Washington Natural Gas as the owner/operator of the facility on above ground exposed pipeline.

49 CFR §192.13 General

(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

Finding:

PSE did not follow its O&M Manual Section 2575.1100 4.1.1 and 4.1.3 and with Section 2525.2500 5.2.2, these sections states, "4.1.1 Inspection of markers or warning signs shall be included in system patrols required by Operating Standard 2625.1400, Patrolling Program and Continuing Surveillance." In addition, Section 4.1.3 states, " Inspection shall ensure all information, including company name (or initials), and emergency contact information is current. If not, it shall be corrected at the time of inspection if feasible. If it is not corrected during the inspection, a work order shall be generated." PSE O&M Manual 2525.2500 5.2.2 states, "Above ground piping within a company owned security fence shall be marked with signs placed on the fence."