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SCOTT
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REC CM

November 30, 2006

Mr. Alan E. Rathbun
Pipeline Safety Director
Washington Utilities and Transportation Commission
1300 South Evergreen Park Drive SW
P.O. Box 47250
Olympia, Washington 98504-7250

Re: Clark County Inspection – Response to Data Requests Dated October 17 and November 6, 2006

Dear Mr. Rathbun:

The Washington Utilities and Transportation Commission Staff conducted a Natural Gas Pipeline Safety Inspection of NW Natural's Clark County District from May 1 to August 24, 2006. This letter provides additional information in response to Mr. Scott Rukke's e-mail data requests dated October 17 and November 6, 2006.

WUTC DATA REQUESTS

Data Request 1 (10/17/06 e-mail).

I saw an idle riser (no meter) at 881 E St. in Washougal on 10/12/2006. Appears to be steel, no coating on exposed portion above ground. We had discussed NWN's process for inspecting idle risers for atmospheric corrosion so I am requesting that NWN provide records of atmospheric corrosion surveys for this address. Please indicate when the meter was removed and provide records of the last 2 surveys.

NW Natural response:

As discussed with Staff during the Natural Gas Pipeline Safety Inspection of Clark County, NW Natural uses meter readers and leakage inspectors to perform atmospheric corrosion inspections on a majority of the company's above-ground facilities (meter sets) in accordance with 49 CFR 192.481. Meter readers have historically performed atmospheric corrosion inspections during system-wide surveys conducted once every three calendar years, not to exceed 39 months, and also during routine monthly meter reading activities. The two most

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recent companywide atmospheric corrosion surveys were performed by meter readers in September 2001 and September 2004. In addition, company leakage inspectors perform atmospheric corrosion inspections as an element of leakage surveys that are completed at least once every five years, not to exceed 63 months. Enclosed is documentation of the last two instrumented leakage inspections (August 14, 1997 and July 30, 2002) performed for the plat area that includes the riser at 881 E Street in Washougal (Enclosure 1).

In addition to system-wide surveys, meter readers also inspect for atmospheric corrosion when they perform a meter read, in accordance with NW Natural's Operator Qualification (OQ) program, Procedure OP-S-220-01 (Enclosure 2). Similarly, leakage inspectors are OQ qualified to inspect for atmospheric corrosion under Procedure OP-J-220-01 (Enclosure 3).

In reviewing company records, NW Natural was unable to find any reports of atmospheric corrosion at 881 E Street, Washougal. However, in response to Staff's findings, NW Natural has cut and abandoned the idle service at this location. Company records are unclear relative to the date of the meter removal.

NW Natural is in the process of developing an enhanced Atmospheric Corrosion Control Program. The Program will focus on the prevention of atmospheric corrosion, as well as improvements in assessment and mitigation. The scope will include examination of the entire process from the design, material specification, fabrication, coating and initial installation to the performance and documentation of periodic inspections, and mitigation of atmospheric corrosion found on above ground steel facilities. NW Natural intends to commence implementation of the new Program in early 2007.

Data Request 2 (11/6/06 e-mail).

I am in the process of reviewing your response to the Clark County inspection and I need clarification for your response to Item #7 (WAC 480-93-187 Gas Leak Records). You provided a record called "Daily Log for Leak Detection Equipment". This records indicates that 2 GMI instruments were used by Mike Medvec during the period specified on the form. Instrument #'s 4442 and 4175. My questions are what type of instrument is a GMI and why are the instruments provided on this form not included in the calibration records provided during the inspection? I see in your calibration procedure that you use a multi gas detector. Is this a GMI? I get confused by your use of acronyms. I do not recall reviewing records of instruments other than the Trak-It, Sensit Gold and flame paks. If there are other instruments being used I will need to review the records.

NW Natural response:

NW Natural apologizes for any confusion on this issue. The company was not aware that Staff wished to review the calibration records for the GMI instruments during the Clark County inspection. NW Natural leakage inspectors use a GMI (an acronym for Gas Measurement Instruments, Ltd.) instrument as a second leakage detection instrument. The GMI is a comprehensive combustible gas indicator (CGI) designed for measuring methane (by volume and lower explosive limit or L.E.L.) and carbon monoxide (in ppm). The GMI is different from a multi-gas monitor.

The Daily Log for Leakage Detection Equipment is used to document the serial number of leakage detection instruments used each day, and is not intended to be a calibration record for leakage detection equipment. The manufacturer, Gas Measurement Instruments, Ltd., recommends a 12-month calibration frequency for its CGI leakage detection instruments (Enclosure 4). Enclosed are the 2006 maintenance records for instrument 4442 (Enclosure 5) and 4175 (Enclosure 6). Please note that instrument 4442 is a company-assigned number with a serial number of P. 035276, and instrument 4175 is a company-assigned number with a serial number of P. 27208.

Sincerely,

Bruce L. Paskett, P.E.
Manager Code Compliance

cc: David Lykken
Scott Rukke

Enclosures (6)

dtm441

Enclosure 1

LISE LIS324M Scan Surveys By Plat and Type 10/23/06 06:56:07

Plat Id ===> 1 022 059 Basic v - view m - mod
Survey Type ***> 09 Service Options: d - delete t - top

Menu Option	Dst	Ar	Type	Date	In	Srv	Feet	Blk	Mile	Hrs	Cmp	Daily Id	Loc
	03	05	09	08/14/97	16	79	000		.0	5.5	1	161928	
	03	05	09	07/30/02	16	94	000		.0	6.0	1	204613	

NW Natural

OPERATING PROCEDURE			
Covered Task:	Inspecting Atmospheric Corrosion	Procedure Number:	OP-S-220-01 Meter Readers
Revision:	2.1	Date:	08.16.06

Signature: Melissa Rosenberry
OQ Program Administrator

SCOPE

This procedure establishes the steps to inspect for atmospheric corrosion on aboveground pipelines or facilities, and report conditions that require follow up inspection and/or maintenance.

This procedure may be performed by a non-qualified worker when directed and observed by a Qualified Worker.

CONDITIONS AND PREREQUISITES

This procedure is performed in the following situations:

- All facilities are formally inspected for atmospheric corrosion during regularly scheduled surveys.
- All facilities are informally inspected for atmospheric corrosion while performing other tasks.

ABNORMAL OPERATING CONDITIONS

- AOC-S-01 Damaged, Non-Leaking Pipeline Facility
- AOC-S-03 Escaping Gas or Fire from a Pipeline Facility
- AOC-S-06 Stray Current on a Pipeline Facility
- AOC-S-09 Unsatisfactory Customer Service Materials or Conditions

SPECIAL TOOLS AND EQUIPMENT

None

PROCEDURE

1. Visually inspect the facility to determine the level of atmospheric corrosion present.

   ⇒ See the Corrosion Criteria and Definitions in this procedure.

   1.1 Visually inspect all observable facilities.

   1.2 Feel for pipe surface anomalies on any sections of facilities that cannot be observed, if practical.

   1.3 Expose any aboveground equipment/facilities that have been covered by dirt, leaves, etc. and inspect for corrosion, if practical.

2. **If you find evidence of Major Corrosion while on your daily routes in a non-inspection cycle, enter a "Code 3" free-form comment in your hand-held computer.**

CORROSION CRITERIA AND DEFINITIONS

Code	Classification	Description
Non-Hazardous		
0	No corrosion	Surface has no or minimal signs of corrosion products.
1	Surface oxidation	Surface oxide that is smooth in appearance and discolored on greater than 50% of any individual gas-carrying pipe component.
2	Minor corrosion	Visible surface discontinuities (minor pitting, tubercles, blisters or scale*).
Potentially Hazardous		
3	Major corrosion	Visible corrosion with significant pipe-wall loss that could affect pipeline integrity.

*Pits – Localized reduction in wall thickness caused by corrosion.

Tubercles – Outward accumulation of corrosion products that appear as mounds or bumps on pipe surface.

Blisters/Scale – Outward accumulation of corrosion products that is flake-like in appearance.

END OF PROCEDURE

NW Natural

OPERATING PROCEDURE			
Covered Task:	Inspecting Atmospheric Corrosion	Procedure Number:	OP-J-220-01 Leakage Inspectors
Revision:	2.1	Date:	08.16.06

Signature: Melissa Rosenberry

OQ Program Administrator

SCOPE

This procedure establishes the steps to inspect for atmospheric corrosion on aboveground pipelines or facilities, and report conditions that require follow up inspection and/or maintenance.

This procedure applies to informal observations completed while performing other tasks.

This procedure may be performed by a non-qualified worker when directed and observed by a Qualified Worker.

CONDITIONS AND PREREQUISITES

None

ABNORMAL OPERATING CONDITIONS

- AOC-J-01 Damaged, Non-Leaking Pipeline Facilities
- AOC-J-03 Escaping Gas or Fire from a Pipeline Facility
- AOC-J-06 Stray Current on a Pipeline Facility
- AOC-J-09 Unsatisfactory Customer Service Materials or Conditions

SPECIAL TOOLS AND EQUIPMENT

None

Appendix 3 CALIBRATION VALIDITY

Calibration validity is the responsibility of the user. Under normal operating conditions a 12 months period can be expected but not guaranteed as the precise application of the product is unknown to Gas Measurement Instruments Ltd. Individual codes of practice may dictate shorter periods, e.g., one week. Gas mixtures are available from Gas Measurement Instrument Ltd. for the user to check calibration status and where any doubt exists the product should be returned to the manufacturer or his authorised agent for recalibration.

Enclosure 4

Mike Medvic

MOBILE UNIT RECORD CARD

45-9442-00

[illegible] Venerable MODEL [illegible] SERIAL NO. P.039376

DATE	INITIAL	PARTS AND LABOR
1/24/06	[illegible]	Lm-, 68, Calc 50 Min @ 20%Lh, 50% Lh, 100% Gs
5/1/06	[illegible]	Lm- 67, Calc 50 Min @ 20% Lh, 50% AL, 100% Gs

Enclosure 5

45-4175

Spare

MOBILE UNIT RECORD CARD

GMI PORTLAND MODEL G SERIAL NO. P.27203

DATE	INITIAL	PARTS AND LABOR
1/07/06	[illegible]	LPM - .63 Cal @ 50 ppm CO 20% LEL, 50% LEL, 100% Gas - [illegible]
5-15-06	JR	LPM .65 Cal 50% LEL 100% GAS 50 PPM CO Good
5/17/06	[illegible]	LPM - .60 Cal @ 50 ppm CO 20% LEL 50% LEL, 100% Gas -

Enclosure 6