



July 1, 2004

Carole J. Washburn, Secretary
Washington Utilities and Transportation Commission
P.O. Box 47250
Olympia, WA 98504-7250

Dear Secretary Washburn:

Enclosed is a "PSE - Incident Report - Telephone Notification" form on which we have provided details of an incident that occurred on June 22, 2004 in Seattle. The incident resulted in personal injury requiring hospitalization.

On the morning of June 22nd, during purging operations relating to a gas main replacement project, an employee of a contractor performing work for Puget Sound Energy, suffered burns to the face and hands when purge gas ignited. The burns necessitated in-patient hospitalization for treatment and observation.

PSE procedures, "Preventing Accidental Ignition" and "Purging", were not followed.

Puget Sound Energy first became aware of this incident at 15:10 hours on June 22, 2004. The incident was reported to the Washington Utilities and Transportation Commission at 15:30 hours. Mr. Joe Subsits received the call.

Because the reporting requirements of 49 CFR 191.5 were met, this incident was also reported to the National Response Center at 16:20 hours the same day. A copy of the Federal report is enclosed.

Sincerely,


Douglas Damm
Standards Program Manager

encl.

RECEIVED
RECORDS MANAGEMENT
04 JUL -6 AM 10:34
STATE OF WASH
UTIL AND TRANSP
DO NOT REPLY

RMS
1A



INCIDENT REPORT - TELEPHONE NOTIFICATION

INCIDENT DATE 6-22-04		STATUTORY REPORTING REQUIREMENT WAC 480-930-200(1)(a)		INCIDENT CATEGORY Personal injury requiring hospitalization	
FIRST NOTICE TO PSE 15:10		FIRST PSE ARRIVAL No PSE on site	EMERGENCY CONTROLLED No emergency		TIME OF REPAIR No repair req'd
REPORT RECEIVED BY Harry Shapiro - PSE		REPORTED BY Pilchuck Contractors			
ADDRESS OF INCIDENT 35 Av W and W. Smith St.				CITY Seattle	
DESCRIPTION OF INCIDENT AND RESPONSE - During purging operation on main replacement, PSE service provider crew failed to adequately communicate steps involved in purge procedure. Squeeze was released before purge stack was installed. When gas began to blow in excavation, employee jumped in to shut down blowing gas by squeezing it off. Ignition occurred and employee was injured, requiring hospitalization.					
INJURY: PSE -		OTHER - 1		FATALITY: PSE -	
NAME Mike Johnson		ADDRESS Unknown (not a PSE employee)		CITY	
PHONE		INJURY (DESCRIBE) Burns (extent unconfirmed)			
NAME		ADDRESS		CITY	
PHONE		INJURY (DESCRIBE)			
ENVIRONMENTAL IMPACT: None					
PROPERTY DAMAGE: None					
PSE FACILITY: MAIN: TRANS SUPPLY DIST X OP PRESS <45 psig MAOP 45 psig SERVICE: STUB n/a EXTN n/a PIPE SIZE: 2" DEPTH: Exposed MATERIAL: Polyethylene MSA SIZE: n/a CUSTOMER OUTAGE: # of 0 TIME OFF: n/a TIME RELIGHT BEGAN: n/a					
OTHER PSE FACILITY INVOLVED: None					
MEDIA / AGENCY COVERAGE: None					
ESTIMATED INCIDENT COST: PSE: 0		OTHER: 0			
REPORTED TO:					
#1 AGENCY: WUTC		NAME: Joe Subsits			
BY: Joe Ewing		DATE: 6-22-04		TIME 15:30	
#2 AGENCY: National Response Center		NAME: On-duty staff			
BY: Joe Ewing		DATE: 6-22-04		TIME 16:20	

DRUG / ALCOHOL TESTING INITIATED?	YES	X	NO	(Conducted by PSE contractor)
OPERATOR QUALIFICATION REVIEW REQUIRED?	YES	X	NO	(Conducted by PSE contractor)
SEE ATTACHMENT FOR ADDITIONAL INFORMATION:	YES		NO	X
30 DAY FOLLOW UP ENGINEERING REPORT REQUIRED?	YES		NO	X

COPY

July 1, 2004

Information Systems Manager
Office of Pipeline Safety
Research and Special Programs Administration
U.S. Department of Transportation
Room 8417
400 Seventh Street SW
Washington, DC 20590

Enclosed is RSPA Form F7100.1, "Incident Report – Gas Distribution System", on which we have provided details of an incident that occurred on June 22, 2004 in Seattle, Washington. The incident resulted in personal injury necessitating in-patient hospitalization.

During purging operations relating to a gas main replacement project, an employee of a contractor performing work for Puget Sound Energy, suffered burns to the face and hands when purge gas ignited. The burns necessitated in-patient hospitalization for treatment and observation.

Puget Sound Energy first became aware of this incident at 15:10 hours on June 22, 2004. The incident was reported to the Washington Utilities and Transportation Commission at 15:30 hours followed by notice to the National Response Center at 16:20 hours the same day.

Sincerely,



Douglas Damm
Standards Program Manager
Puget Sound Energy

encl.

cc: Washington Utilities and Transportation Commission ✓



COPY

INCIDENT REPORT - GAS DISTRIBUTION SYSTEM

Report Date _____
No. _____
(DOT Use Only)

INSTRUCTIONS

Important: Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the Office Of Pipeline Safety Web Page at <http://ops.dot.gov>.

PART A - GENERAL REPORT INFORMATION

Check: Original Report Supplemental Report Final Report

1. Operator Name and Address

- a. Operator's 5-digit Identification Number (if known) 2 / 2 / 1 / 8 / 9 /
- b. If Operator does not own the pipeline, enter Owner's 5-digit Identification Number (if known) / / / / /
- c. Name of Operator Puget Sound Energy
- d. Operator street address PO Box 90868
- e. Operator address Bellevue, King, WA 98009-0868
City, County or Parish, State and Zip Code

2. Time and date of the incident

1 / 0 / 0 / 0 / 0 / 6 / 2 / 2 / 0 / 4 /
hr. month day year

3. Location of incident

- a. 35 Av W. & W. Smith St.
Street or nearest street or road
- b. Seattle, King
City and County or Parish
- c. WA 98199
State and Zip Code
- d. Latitude: 47.64836 Longitude: 122.39558
(if not available, see instructions for how to provide specific location)
- e. Class location description
 Class 1 Class 2 Class 3 Class 4
- f. Incident on Federal Land Yes No

4. Type of leak or rupture

- Leak: Pinhole Connection Failure (complete sec. F5)
 Puncture, diameter or cross section (inches) _____
- Rupture (if applicable):
 Circumferential - Separation
 Longitudinal
- Tear/Crack, length (inches) _____
- Propagation Length, total, both sides (feet) _____
- N/A
- Other: Purge gas

5. Consequences (check and complete all that apply)

- a. Fatality Total number of people: / / / /
Employees: / / / General Public: / / /
Non-employee Contractors: / / /
- b. Injury requiring inpatient hospitalization
Total number of people: / / / /
Employees: / / / General Public: / / /
Non-employee Contractors: / / / /
- c. Property damage/loss (estimated) Total \$ 0
Gas loss \$ NA Operator damage \$ 0
Public/private property damage \$ 0
- d. Gas ignited explosion
 no explosion
- e. Gas did not ignite explosion
 no explosion
- f. Evacuation (general public only) / / / 0 / people
Reason for Evacuation:
 Emergency worker or public official ordered, precautionary
 Threat to the public Company policy

6. Elapsed time until area was made safe: NA

 / / hr. / / min.

7. Telephone Report

7 / 2 / 5 / 7 / 4 / 2 / 0 / 6 / 2 / 2 / 0 / 4 /
NRC Report Number month day year

8. a. Estimated pressure at point and time of incident:

<45 PSIG

b. Max. allowable operating pressure (MAOP): 45 PSIG

c. MAOP established by:

- (1) Test Pressure _____ psig
- (2) 49 CFR § 192.619 (a)(3)

PART B - PREPARER AND AUTHORIZED SIGNATURE

Douglas Damm, Standards Development Representative

(type or print) Preparer's Name and Title

doug.damm@pse.com

Preparer's E-mail Address

Authorized Signature

Douglas Damm, Standards Development Rep.

(type or print) Name and Title

7-1-04

Date

426.462.3721

Area Code and Telephone Number

425.462.3770

Area Code and Facsimile Number

425.462.3721

Area Code and Telephone Number

PART C - ORIGIN OF THE INCIDENT

1. Incident occurred on

- Main Meter Set
- Service Line Other: _____
- Pressure Limiting and Regulating Facility

2. Failure occurred on **(No failure)**

- Body of pipe Pipe Seam
- Joint
- Component
- Other: _____

3. Material involved (pipe, fitting, or other component) **(No failure)**

- Steel
 - Cast/Wrought Iron
 - Polyethylene Plastic (complete all items that apply in a-c)
 - Other Plastic (complete all items that apply in a-c)
- Plastic failure was: a. ductile b. brittle c. joint failure
- Other material: _____

4. Year the pipe or component which failed was installed: / / /

PART D - MATERIAL SPECIFICATION (if applicable)

N/A

- 1. Nominal Pipe Size (NPS) / / / in.
- 2. Wall thickness / / / in.
- 3. Specification _____ SMYS / / / / /
- 4. Seam type _____
- 5. Valve type _____
- 6. Pipe or valve manufactured by _____ in year / / /

PART E - ENVIRONMENT

- 1. Area of incident In open ditch
 - Under pavement Above ground
 - Under ground Under water
 - Inside/under building Other: _____
2. Depth of cover: _____ inches

PART F - APPARENT CAUSE

Important: There are 25 numbered causes in this section. Check the box to the left of the **primary** cause of the incident. Check one circle in each of the supplemental items to the right of or below the cause you indicate. See the instructions for this form for guidance.

F1 - CORROSION N/A

If either F1 (1) External Corrosion, or F1 (2) Internal Corrosion is checked, complete all subparts a - e.

1. External Corrosion

- a. Pipe Coating b. Visual Examination c. Cause of Corrosion
- Bare Localized Pitting Galvanic Stray Current
- Coated General Corrosion Improper Cathodic Protection
- Other: _____ Microbiological
- Other: _____

2. Internal Corrosion

- d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering incident?
- No Yes, Year Protection Started: / / /
- e. Was pipe previously damaged in the area of corrosion?
- No Yes, How long prior to incident: / / years / / months

F2 - NATURAL FORCES N/A

- 3. Earth Movement ⇒ Earthquake Subsidence Landslide Other: _____
- 4. Lightning
- 5. Heavy Rains/Floods ⇒ Washouts Flotation Mudslide Scouring Other: _____
- 6. Temperature ⇒ Thermal stress Frost heave Frozen components Other: _____
- 7. High Winds

F3 - EXCAVATION N/A

- 8. Operator Excavation Damage (including their contractors) / Not Third Party
- 9. Third Party Excavation Damage (complete a-d)
- a. Excavator group
- General Public Government Excavator other than Operator/subcontractor
- b. Type: Road Work Pipeline Water Electric Sewer Phone/Cable/Fiber Landowner Railroad
- Building Construction Other: _____
- c. Did operator get prior notification of excavation activity?
- No Yes: Date received: / / mo. / / day / / yr.
- Notification received from: One Call System Excavator General Contractor Landowner
- d. Was pipeline marked?
- No Yes (If Yes, check applicable items i - iv)
- i. Temporary markings: Flags Stakes Paint
- ii. Permanent markings: Yes No
- iii. Marks were (check one) Accurate Not Accurate
- iv. Were marks made within required time? Yes No

F4 - OTHER OUTSIDE FORCE DAMAGE N/A

- 10. Fire/Explosion as primary cause of failure ⇒ Fire/Explosion cause: Man made Natural Describe in Part G.
- 11. Car, truck or other vehicle not relating to excavation activity damaging pipe
- 12. Rupture of Previously Damaged Pipe
- 13. Vandalism

F5 - MATERIAL OR WELDS N/A

Material

14. Body of Pipe ⇒ Dent Gouge Wrinkle Bend Arc Burn Other: _____
15. Component ⇒ Valve Fitting Vessel Extruded Outlet Other: _____
16. Joint ⇒ Gasket O-Ring Threads Fusion Other: _____

Weld

17. Butt ⇒ Pipe Fabrication Other: _____
18. Fillet ⇒ Branch Hot Tap Fitting Repair Sleeve Other: _____
19. Pipe Seam ⇒ LF ERW DSAW Seamless Flash Weld Other: _____
- HF ERW SAW Spiral Other: _____

Complete a-g if you indicate **any** cause in part F5.

- a. Type of failure:
- Construction Defect ⇒ Poor Workmanship Procedure not followed Poor Construction Procedures
- Material Defect
- b. Was failure due to pipe damage sustained in transportation to the construction or fabrication site? Yes No
- c. Was part which leaked pressure tested before incident occurred? Yes, complete d-g, if known No
- d. Date of test: ___/___/___ mo. ___/___/___ day ___/___/___ yr.
- e. Time held at test pressure: ___/___/___ hr.
- f. Estimated test pressure at point of incident: _____ PSIG

F6 - EQUIPMENT OR OPERATIONS

20. Malfunction of Control/Relief Equipment ⇒ Valve Instrumentation Pressure Regulator Other: _____
21. Threads Stripped, Broken Pipe Coupling ⇒ Nipples Valve Threads Mechanical Couplings Other: _____
22. Ruptured or Leaking Seal/Pump Packing

23. Incorrect Operation

- a. Type: Inadequate Procedures Inadequate Safety Practices Failure to Follow Procedures Other: _____
- b. Number of employees involved in incident who failed post-incident drug test: ___/___/___ / 0 / Alcohol test: ___/___/___ / 0 /
- c. Was person involved in incident qualified per OQ rule? Yes No d. Hours on duty for person involved: ___/3/___

F7 - OTHER N/A

24. Miscellaneous, describe: _____
25. Unknown
- Investigation Complete Still Under Investigation (submit a supplemental report when investigation is complete)

PART C - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT (Attach additional sheets as necessary)

During a purging operation related to a main replacement project, an employee of a Puget Sound Energy contractor suffered burns when the purge gas ignited. The incident occurred when the valve controlling injection of the purge gas was opened before a vent stack could be installed that would have directed the purge gas upward and out of the excavation. This was caused by a lack of communication between two contractor employees who were not in visual contact.

Since no control valve had been installed at the downstream (open) end of the pipe section being purged, the employee stationed there attempted to squeeze the polyethylene pipe to control the gas flow but ignition occurred when he contacted the pipe. PSE procedures, "Preventing Accidental Ignition" and "Purging", were not followed.