



STATE OF WASHINGTON

## UTILITIES AND TRANSPORTATION COMMISSION

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*Sent via email and FedEx*

October 16, 2019

Mr. Pat Darras  
Vice President, Engineering & Ops Services  
Cascade Natural Gas Corporation  
8113 W. Grandridge Blvd  
Kennewick, WA 99336

Dear Mr. Darras:

**RE: 2019 Natural Gas Incident Investigation NRC# 1257142 – Cascade Natural Gas Corporation – 09/01/2019 - 911 Hampton Rd, Lynden WA – (Insp. No. 8012)**

On September 4, 2019, staff from the Washington Utilities and Transportation Commission (Staff) initiated an investigation into an incident that occurred on September 1, 2019 at 911 Hampton Rd in Lynden WA. This incident was caused by a vehicle that struck a residence severing a ¾-inch steel service riser. The resulting blowing gas ignited and destroyed the residence and vehicle. Damages are estimated at approximately \$401,700.

This incident was originally called in to Staff on 09/02/2019 and CNG at that time stated it was non-reportable. On 09/03/2019 CNG realized that this event met the definition of an “incident” as defined in CFR Part 191.3. Accordingly, on 09/03/2019 notification was made to the National Response Center and to the Washington Utilities and Transportation Commission.

Our investigation indicates one probable violation as noted in the enclosed report.

**Your response needed**

Please review the attached report and respond in writing by November 18, 2019. The response should include how CNG plans to prevent a similar probable violation in the future and any procedural modifications made as a result. We are also requesting a detailed explanation of why this incident was not reported as required.

**What happens after you respond to this letter?**

The attached report presents staff’s decision on probable violations and does not constitute a finding of violation by the commission at this time.

After you respond in writing to this letter, there are several possible actions the commission, in its discretion, may take with respect to this matter. For example, the commission may:

- Issue an administrative penalty under RCW 81.04.405; or
- Issue a complaint under RCW 81.88.040, seeking monetary penalties, changes in the company's practices, or other relief authorized by law, and justified by the circumstances. Any pipeline company that violates any pipeline safety provision of any commission order, or any rule in this chapter including those rules adopted by reference, or chapter [81.88](#) RCW is subject to a civil penalty not to exceed two hundred thousand dollars for each violation for each day that the violation persists. The maximum civil penalty for a related series of violations is two million dollars; or
- Consider the matter resolved without further commission action.

We have not yet decided whether to pursue a penalty or complaint in this matter. Should the commission decide to assess a penalty or initiate a complaint, your company will have an opportunity to respond and formally present its position.

If you have any questions or if we may be of any assistance, please contact Scott Rukke at (360) 870-4923. Please refer to the subject matter described above in any future correspondence pertaining to this inspection.

Sincerely,



Sean C. Mayo  
Pipeline Safety Director

cc: Josh Sanders, Director, Operations Policy & Procedures  
Mike Schoepp, Director, Operations Services  
Ryan Privratsky, Director, System Integrity, Integrity Management  
Sam Hamilton, Manager, Compliance Operations Programs

**UTILITIES AND TRANSPORTATION COMMISSION**  
**National Response Center Incident #1257142, WA UTC Investigation #8012**  
**911 Hampton Rd, Lynden WA**

The following probable violation of WAC 480-93 was noted as a result of our investigation of NRC Incident #1257142 (initial). Our investigation included a records review and an onsite visit to the incident site.

**PROBABLE VIOLATION**

**1. WAC 480-93-200(1)(d), Reporting Requirements.**

*(1) Each gas pipeline company must give notice to the commission by telephone using the emergency notification line (see WAC 480-93-005(8)) within two hours of discovering an incident or hazardous condition arising out of its operations that results in:*

*(d) The unintentional ignition of gas;*

**Findings:**

On 09/01/2019 Cascade Natural Gas (CNG) responded to a report of a gas leak and structure fire located at 911 Hampton Rd in Lynden WA. The fire and leak were caused by a vehicle that hit a house and severed the service riser at the meter set. The leaking gas ignited burning the residence and car. The ignition source is unknown but assumed to be the vehicle. The damaged facility consisted of a two stage regulated high pressure service line with the first stage regulator and fracture disc located at the property line and the second stage (house) regulator located at the meter set. The service line was ¾-inch steel operating at approximately 27 psig. The service line was severed between the service shut off valve and house regulator on the high pressure side (27 psig) of the meter set assembly.

When CNG's first responder arrived at 1:05 AM, the gas was already shut off by the Lynden Fire Department. Shut off time was reported as 12:30 AM. CNG's first responder was unable to access the riser due to the crashed vehicle and flames so the service was locked off at the first stage regulator shut off valve. CNG personnel returned the next morning on 09/02/2019 and capped the riser, removed the remainder of the meter and conducted a leak survey.

This incident was reported to the National Response Center on 09/03/2019 at 1:25 PM and to the Commission on 09/03/2019 at 1:29 PM.

CNG did not notify the Commission within two hours of an incident involving the unintentional ignition of gas as required by WAC 480-93-200(1)(d).

# UTC Incident Investigation Form

<b>Notification ID:</b>	3562	<b>Investigation ID:</b>	8012
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<b>Inspector Name:</b>	Scott Rukke 360-870-4923 Scott.Rukke@utc.wa.gov
<b>Date Report Submitted to Chief Engineer:</b>	October 10, 2019
<b>Date Report Reviewed &amp; Approved by Chief Engineer:</b>	October 14, 2019

<b>Operator:</b>	Cascade Natural Gas Co.
<b>District/Unit:</b>	Bellingham
<b>Locations:</b>	911 Hampton Rd, Lynden, WA
<b>Incident Date:</b>	September 1, 2019

<b>Description:</b>	<p>The damaged facility was a Cascade Natural Gas Company (CNG) owned and operated residential service and meter set assembly (MSA) served from a high pressure main. The service line, known as a high pressure service Set (HPSS) by CNG, consisted of an above ground first stage regulator, shut off valve and fracture disk located at the property line which reduced pressure from approximately 250 PSIG to 27 PSIG. It then supplied a ¾" steel service that extended to the wall of the residence where a secondary regulator reduced pressure to approximately 7-inches wc to the customers fuel line.</p> <p>Damage to CNG's facilities occurred when a vehicle lost control during a high speed police pursuit and crashed into a house shearing off the above ground ¾-inch steel service riser between the shut off valve and the second stage regulator. The service line operating pressure was approximately 27 psig. The resulting blowing gas ignited and burned a car and home located at 911 Hampton Rd. The ignition source is assumed to be the vehicle. The resulting damages are currently reported at \$401,700. Since damages exceeded \$50,000, this incident is reportable under CFR Title 49, Part 191.5.</p> <p>National Response Center (NRC) incident reports were filed by CNG on 9/3/2019 - NRC #1257142 (initial)<sup>1</sup>, and on 9/5/2019 - NRC #1257331 (48 hr)<sup>2</sup>.</p> <p>Washington UTC incident reports were filed by CNG on 09/03/2019 (initial)<sup>3</sup> and 09/27/2019 (30 day)<sup>4</sup>.</p>
<b>Facts/Chronology of Events:</b>	

<sup>1</sup> Attachment 1, NRC Report 1257142 (initial)  
<sup>2</sup> Attachment 2, NRC Report 1257331 (48 hr)  
<sup>3</sup> Attachment 3, WA UTC Incident Report (initial)  
<sup>4</sup> Attachment 4, WA UTC Incident Report (30 day follow up)

## UTC Incident Investigation Form

**8/31/2019, 12:56 PM** - Everson WA police were pursuing a vehicle at high speed when it failed to negotiate a curve, proceeded through a grassy median, crossed a road and struck a house shearing off a ¾-inch steel service line between the meter valve and regulator. The escaping gas ignited burning the car and house. One resident was inside the house. He escaped without injury and called 911. Two occupants were inside the car when it crashed and they left the scene.

**09/01/2019, 12:08 AM** - Lynden FD called

**09/01/2019, 12:14 AM** - Lynden FD arrives on-site

**09/01/2019, 12:28 AM** - CNG dispatch notified of event

**09/01/2019, 12:29 AM** - CNG dispatches a service technician

**09/01/2019, 12:38 AM** - CNG service technician responds

**09/01/2019, 1:05 AM** - CNG service technician arrived on site and secured the service line with a clamshell lock at the property line regulator shut off valve. The meter set could not be accessed due to the car and fire. CNG service tech leaves the site.

**09/02/2019, 8:10 AM** - CNG service technician returns to the site once the car is removed and the fire is extinguished and conducts an underground leak survey. No leaks were detected. CNG removed the meter, tagged it and brought it to the Bellingham office for storage.

**09/02/2019, 9:20 AM** - CNG calls the WA UTC Pipeline Incident Notification Line and states that the call is a "courtesy" call and the incident is not reportable and is still being investigated. UTC Staff requests that if any further information is obtained or if deemed reportable to call back. (Jeremy Ogden CNG, Scott Rukke WA UTC)

**09/03/2019, 1:25 PM** - CNG determines that the event was reportable and that it exceeded \$50,000 in damages and reports it to the National Response Center.

**09/03/2019, 1:29 PM** - CNG calls the WA UTC Pipeline Incident Notification Line to report the incident, states that it is also being reported to the NRC. CNG has few details of the incident they are able to provide. (Sam Hamilton CNG, Scott Rukke WA UTC)

**09/03/2019, 1:39 PM** - UTC Staff call CNG to get more details and arrange an onsite visit with CNG personnel. (Sam Hamilton CNG, Scott Rukke WA UTC)

**09/03/2019, 3:34 PM** - CNG calls the WA UTC Pipeline Incident Notification Line reports it as a 2 stage meter set with high pressure gas running to the structure. States it was broke on the high pressure side. An onsite meeting is also confirmed for 09/04/2019 at 9:00 AM. (Sam Hamilton CNG, Scott Rukke WA UTC)

**09/03/2019, 3:41 PM** - CNG calls the WA UTC Pipeline Incident Notification Line and changes the report to state it was damaged on the low pressure downstream side of the regulator.

**09/04/2019, 9:00 AM** - UTC Staff Darren Tinnerstat and Scott Rukke arrived on site and meet with CNG Compliance Representative Colby Lundstrom. We reviewed and photographed the site. During our inspection the MSA meter bar was observed in the debris. CNG was asked to retrieve it which they did. Upon observation it was apparent that the riser was separated at the threads on a ¾" pipe nipple between the regulator and service valve. This would have been on the high pressure side (27 psig) of the

# UTC Incident Investigation Form

MSA and not the low pressure side (7-inches wc) as was reported by CNG. The meter bar was photographed, bagged and brought to CNG's Bellingham office for storage. UTC and CNG staff visited the Lynden FD and did a records request regarding their response to this incident<sup>5</sup>. We also made a records request to the Everson PD<sup>6</sup>, Whatcom County Sheriff's Department<sup>7</sup> and Lynden PD<sup>8</sup> for records regarding this incident. We met with CNG staff in their Bellingham office, inspected the meter that was removed by CNG on 9/1/2019 and discussed CNG's response, reporting and procedures for responding to and reporting incidents. CNG provided us with a copy of their reporting procedures (OPS 9, revised July 22, 2019)<sup>9</sup>, the responding employees Operator Qualification Record<sup>10</sup>, and a copy of their leak response record<sup>11</sup>.  
**09/27/2019, 12:34 PM** - CNG submits a 30 day report to the WA UTC.

## Causes/Contributing Factors:

This incident was caused by vehicular damage (PHMSA Cause Code D Other Outside Force, Vehicle) that occurred during a high speed pursuit. CNG could not have reasonably prevented this incident from occurring.

An excess flow valve (EFV) on the service line may have prevented the resulting blowing gas and ignition but was not required to be installed on an existing service line unless it was at some point disconnected from the main. In this case the service line was pre-code.

## Regulatory Analysis/ Violations:

CNG could not have reasonably prevented this incident from occurring. The estimated speed of travel of the vehicle was close to 100 mph and when the vehicle left the roadway it had to travel approximately 200' over a grassy highway median, across another road and through the front yard before striking the house and meter set assembly. Meter protection would have been ineffective. The meter set location was in compliance.

CNG was issued a notice of probable violation for not reporting this incident within 2 hours as required by the Washington Administrative Code (WAC) 480-93-200(1)(d).

*(1) Each gas pipeline company must give notice to the commission by telephone using the emergency notification line (see WAC [480-93-005\(8\)](#)) within two hours of discovering an incident or hazardous condition arising out of its operations that results in:*

*(d) The unintentional ignition of gas;*

<sup>5</sup> Attachment #5 Everson Police Report

<sup>6</sup> Attachment #6, Lynden Fire Department

<sup>7</sup> Attachment #7, Whatcom County Sheriff's Department

<sup>8</sup> Unavailable

<sup>9</sup> CNG Procedure OPS 9, July 22, 2019

<sup>10</sup> OQ Record

<sup>11</sup> Leak Response Record

# UTC Incident Investigation Form

## Follow up/ Recommendations:

Issue a Notice of Probable Violation to CNG for not reporting this incident in within 2 hours as required by WAC 480-93-200(1)(d).

Consider adding in a code requirement to install EFV's on High Pressure Meter Sets at the first stage regulator.

Require CNG to review and modify incident reporting and investigation procedures where necessary.

## Photos:

Vehicle path



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Accident scene



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First stage regulator at P/L



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Meter set location with arrow to riser



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Damaged meter loop. Red arrow denotes break.



Broken threads in the regulator body.



# UTC Incident Investigation Form

**Attachments:**

1. NRC Report 1257142, initial
2. NRC Report 1257331, 48 hr
3. WA UTC Incident Notification, initial
4. WA UTC Incident Notification 30 day report
5. Everson Police Report
6. Lynden Fire Department
7. Whatcom County Sheriff's Report
8. Unavailable
9. CNG Procedure OPS 9, July 22, 2019
10. OQ Records
11. CNG Leak Response Record for 911 Hampton Rd
12. UTC Employee Job Hazard Assessment