UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

DATE: JUL 17 2019

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Northern Natural Gas, LNG Plant, Wrenshall, Minnesota

FROM: Luke Hullinger, Environmental Engineer
AECAB (MI/WI)

THRU: Sarah Marshall, Section Chief
AECAB (MI/WI)

TO: File

BASIC INFORMATION

Facility Name: Northern Natural Gas, LNG Plant

Facility Location: 2301 Co Rd. 1, Wrenshall, Minnesota

Date of Inspection: 6/4/2019

EPA Inspector(s):
1. Luke Hullinger, Environmental Engineer
2. Marie St. Peter, Environmental Engineer
3. Constantinos Loukeris, Environmental Engineer

Other Attendees
1. Robert Hullinger, Team Leader, Northern Natural Gas
2. Dwyre Johnson, Sr. O&M Technician, Northern Natural Gas
3. Cody Ketchum, Operations Manager, Northern Natural Gas
4. Kelly Henry, Division Environmental Specialist, Northern Natural Gas

Contact Email Address: Kelly.Henry@nngco.com

Purpose of Inspection: Clean Air Act Inspection

Facility Type: Liquid Natural Gas Compressor Station

Regulations Central to Inspection: NESHAP Subpart ZZZZ

Arrival Time: 10:15 AM
Departure Time: 12:15 PM

Inspection Type:

☒ Unannounced Inspection
☐ Announced Inspection

OPENING CONFERENCE

☒ Credentials Presented
☒ CBI warning to facility provided

The following information was obtained verbally from Robert Hullinger, Dwyre Johnson, Cody Ketchum, and Kelley Henry unless otherwise noted.

Process Description:
Northern Natural Gas Company, LNG Plant is a compressor station in Wrenshall, Minnesota. The plant receives natural gas from two pipelines. The mainline comes in at 1000 lbs of pressure and the branch line come in at 700 lbs of pressure. The natural gas is purified in a molecular sieve dehydrator and then chilled to -260˚F. Next, the natural gas is stored in a storage tank pressure vessel and never exceeds 1lb of pressure. The natural gas is stored until needed and then sent back into the pipeline at 900-1100 lbs of pressure.

Staff Interview: On site there are two electrically driven 250 hp compressors for refrigerants, two electrically driven 600 hp compressors for refrigerants, and two 4000 hp for natural gas driven by natural gas. The tall flare controls the liquification process during the cool down, and the small flare controls waste gasses.

TOUR INFORMATION

EPA toured the facility: Yes

Data Collected and Observations:

Photos and/or Videos: were taken during the inspection.
Two FLIR videos were taken at the facility showing leaks from the 250 hp compressor C-501-A and the 600 hp compressor C-401-B.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

Requested documents:

- 2018 emissions report

Concerns: EPA noted the two leaking pumps and suggested the facility address them with proper maintenance.

SIGNATURES

Report Author: _____ Date: 7/17/19

Section Chief: _____ Date: 7/17/19

APPENDICES AND ATTACHMENTS

1. Appendix A – Video log

APPENDIX A: DIGITAL IMAGE LOG

1. **Inspector Name:** Luke Hullinger	2. **Date(s) of Inspection:** 6/4/2019
3. **Company/Facility Name:** Northern Natural Gas, LNG Plant	4. **Street Address, City, State:** 2301 Co Rd. 1, Wrenshall, Minnesota
5. **Number of Images:** 2	6. **Archival Record Location:** C:\Users\Lhulling\OneDrive - Environmental Protection Agency (EPA)\Northern Natural Gas\OneDrive_2_7-16-2019

Image Number	File Name	Description of Image
1	MOV_2467.mp4	250 HP Compressor leak on refrigerant seal
2	MOV_2468.mp4	600 HP Compressor leak on refrigerant seal