FAIRBANKS NATURAL GAS, LLC
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October 1, 2008
Chris Hoidal
Director, Western Region
Pipeline and Hazardous Material Safety Administration
12300 W. Dakota Ave, Suite 110
Lakewood, CO 80228

Re: Notice of Amendment
CPF 5-2008-0017M

Dear Mr. Hoidal,

This letter is written in response to the Notice of Amendment issued for the Fairbanks Natural Gas, LLC (FNG) Fairbanks Distribution System and associated and facilities in Fairbanks, Alaska. These written responses lay out how FNG has made appropriate changes to its written procedures to come into compliance with PHMSA's notice's.

Item #1
FNG has amended its SOPs to state that construction records, maps and operating history will be made available to appropriate operating personnel, and that these records will be maintained and updated as required. The revised SOPs are attached for PHMSA review to demonstrate that the notice of amendments have been addressed. If there is anything further that PHMSA would like of FNG on these issues, please feel free to contact me.
(SOP 1001)

Item #2
FNG has amended its SOPs to require that pipeline operational pressures remain within the established MAOP levels (including allowable buildup) during startup and shut down of the pipeline. The revised SOPs are attached for PHMSA review to demonstrate that the notice of amendments have been addressed. (SOP 2115)

Item #3
FNG has amended its SOPs to require the yearly testing of the pressure safety relief valve at Storage Site #2. The revised SOPs are attached for PHMSA review to demonstrate that the notice of amendments have been addressed. (SOP 7125B)

Item #4
FNG has amended its SOPs to require the yearly analysis for capacity of the pressure safety relief valves at BOTH Storage Sites #1 and #2. The revised SOPs are attached for PHMSA review to demonstrate that the notice of amendments have been addressed. (SOP 7125 &7125B)

FNG believes that the above responses adequately address the items listed in the referenced Notice of Amendment, with the supporting SOP Revisions attached for verification. If there is anything further that PHMSA would like of FNG on these issues, please feel free to contact me.

Thank you for your time and effort.
Sincerely,

Matthew J Nardini, PE
Operations Engineer
Fairbanks Natural Gas
907-357-7111 office
815-642-0719 fax

Attachments:
FNG SOP 1001
FNG SOP 2115
FNG SOP 7125
FNG SOP 7125B

FAIRBANKS NATURAL GAS, LLC

Standard Operating Procedures Manual

Title: SOP Manual Statement – Distribution and LNG Facilities

S.O.P. No.: 1001 **Revision No.: 006** **Effective Date: 10/01/08** **Page 1 of 1**

Authorizing Signature: _____ **Title: President**

General

1. These procedures were compiled to familiarize and assist employees in the planning, construction, operation, and maintenance of Fairbanks Natural Gas, LLC (FNG) Distribution and LNG Storage and Vaporization Facilities. These standards are presented to unify the procedures by which FNG operates.

2. Practices and procedures presented herein reflect the basics of operation of a gas distribution and LNG storage and vaporization systems; industry-wide governing regulations including federal, state, and local laws, and sound practices of the industry.

3. It is the responsibility of all employees to become thoroughly familiar with all of the procedures addressed herein. **This manual, along with all maps, construction records, and operating history, is available or can be made available to appropriate operating personnel, and will be updated as required by the FNG personnel designated by the President.**

4. These standards will be under constant review. The steps and procedures described by this manual shall be reviewed periodically, at least once a year, but not to exceed 15 month intervals, or as often as necessary. The review will determine the effectiveness and adequacy of the procedures used in normal operation and maintenance. If deficiencies are found, the procedures shall be updated or changed accordingly. Those suggestions should be submitted in writing to the Company President.

5. LNG facility plans and procedures will be reviewed and updated when a component is changed significantly or a new component is installed.

6. Work is to be done as specified by the Standard Operating Procedures (SOP). Work shall be done in accordance with those instructions, laws, ordinances, and codes acknowledged in this manual. Should any of the provisions of these standards be at variance with the above, the more stringent code shall be followed.

7. It is not intended that these standards address all unusual or unique situations. Conditions and requirements vary widely. Communication is necessary and key to all work required. Communications, sound judgment and common sense are to be the controlling factors in all situations.

FAIRBANKS NATURAL GAS, LLC

Standard Operating Procedures Manual

Title: Maximum Allowable Operating Pressure

S.O.P. No.: 2115 **Revision No.: 003** **Effective Date: 10/01/08**

Authorizing Signature: _____ **Title: President**

General

1. The maximum allowable operating pressure (MAOP) will be 60 psi gauge or less. FNG will consider MAOP to be 60 psi gauge.

    A. Pipeline operation pressures shall remain within the MAOP levels (Plus allowable buildup) during startup, operation, and shutdown of the pipeline.

2. Actual operating pressure will be set at 35 psi to 45 psi, but may range between 20 psi to 60 psi, depending on customer demand and LNG facility conditions.

3. FNG will pressure test all pipe segments to 150 psi. Pressure tests to 150 psi will allow distribution system MAOP to be upgraded to 100 psi, if necessary.

4. High density polyethylene (HDPE) materials and fusion procedures have been designed and tested to withstand testing and operating pressures.

5. FNG will perform a study before distribution pressure is allowed above 60 psi. Components to be studied are, but not limited to:

    A. Service regulators

    B. Distribution system regulators

    C. Distribution system safety relief valves

    D. Demand loads

    E. Class location

    F. LNG facility capabilities.

Title: Relief, ESD, Regulator and Other Control System Maintenance, Site #1

S.O.P. No.: 7125 **Revision No.: 007** **Effective Date: 10/01/08** **Page 1 of 5**

Approved by:_____ **Title: President**

General

1. All control systems must be properly adjusted to operate within design limits.

2. Control systems in service, but not normally in operation, such as relief valves, production regulators, warning, and shutdown devices, which are activated either manually or automatically to establish or maintain the performance of another component, must be inspected once each calendar year, not to exceed 15 months.

3. Control systems that are normally in operation, such as those required for a base load system, must be inspected annually, not to exceed 15 months.

4. If a control system or any of its instruments are out of service for 30 days or more, it must be inspected and tested for operational capability before returning to service.

5. Annual inspections will occur during the warmest months of summer or when the distribution system is at its lowest demand.

6. Control systems or instruments found to be out of calibration or not operating within prescribed design limits shall be repaired and/or calibrated in accordance with manufacturer's written instructions.

7. Control systems or instruments requiring major repairs that cannot be performed by in-house personnel shall be returned to the manufacturer for repair, calibration and/or replacement or otherwise instructed by manufacturer's instructions.

8. The Operations Engineer shall keep all inspections, tests, calibrations and repairs on record.

Pressure Safety Relief Valve Test Procedure

1. Relief valves must be inspected and tested yearly for verification of the valve seat lifting and pressure and reseating.

2. Distribution header pressure relief valve will be tested yearly to have enough capacity, be operable and pressure to not exceed MAOP of 60 psi gage.

3. Procedure

A. Test accuracy of the pressure gage with a dead weight tester (see operating instructions).Install relief valve to be tested on the test manifold.

B. Slowly increase the pressure to the test manifold using the nitrogen cylinder and regulator. Observe and note the pressure reading when the relief valve begins to operate and the valve lifts.

C. Slowly reduce the pressure on the test manifold and note the pressure reading when the relief valve seats.

D. Reduce pressure on the test manifold to zero and vent remaining pressure to atmosphere.

E. If the relief valve is found to be inadequate or malfunctions, replace the pressure relief valve, as necessary.

F. Record the results on approved form.

Emergency Shutdown (ESD) System Maintenance

1. Inspection and test of the (ESD) system is done in two parts.

   A. ESD valves will be visually inspected for leakage and any other signs of damage.

   B. Each valve will be tested for operation by manual shutdown by way of Plant computer and gate buttons.

2. Visually inspect ESD valves:

   A. Tank 1 valves V104, V106 and V110, pressure building, LNG production and LNG Bottom Fill, respectively.

   B. Tank 2 valves V200, V206 and V216, LNG production, pressure building and LNG Bottom Fill, respectively.

   C. Tank 3 valves V300, V306 and V316, LNG production, pressure building and Bottom Fill, respectively.

   D. Tank 4 valves V400 and V416, LNG production and Bottom Fill, respectively.

3. To test each ESD valve separately by Plant computer:

   A. Notify on-call and Dispatch personnel that tests of the ESD system are being conducted to avoid unnecessarily activating emergency operation procedures.

   B. From the Plant computer ESD panel screen, activate Tank 1 LNG production ESD button..

   C. Visually inspect the V106, Tank 1 LNG production valve, at the tank front to verify the valve has been closed.

   D. Repeat steps 3A-3C for all valves noted in 2A-2D.

   E. Record findings on approved form.

4. To test all valve ESD from Plant computer and gate ESD buttons:

   A. Notify on-call and Dispatch personnel that tests of the ESD system are being conducted to avoid unnecessarily activating emergency operation procedures.

   B. Activate main gate ESD button by pushing in.

   C. Inspect the Plant computer ESD screen to verify that all LNG production, pressure building and bottom fill valves have been closed.

   D. Visually inspect each valve at the tank to verify that each valve has been closed.

   E. Repeat steps 4A-4D for each gate ESD button.

   F. Repeat steps 4A-4D for all valve ESD button on Plant computer screen.

   G. Record findings on approved form.

5. Notify on-call personnel and Dispatch that testing has been completed.

Production Regulator Inspection and Maintenance

1. Each regulator within the storage site system used for production or to heat process equipment must be inspected and tested once each calendar year, but not to exceed 15

months. Regulators excluded from this rule are those used for secondary and non-process yard fuel operations.

2. Regulators that must be inspected and tested are:

   A. Distribution/Meter Run regulator REG600

   B. Boiloff production line backpressure regulator REG640

   C. Gas production regulator REG650

   D. Tank 1, 2 and 3 pressure building backpressure regulators, REG105, REG210, and 310, respectively.

   E. Boiler fuel gas regulator REG800

3. To inspect and test the regulators, follow these general guidelines.

   A. Visually inspect regulator in place for obvious signs of damage or irregular operation.

   B. Isolate the regulator with isolation valves.

   C. Open bypass line with appropriate valves.

   D. Bleed line gas pressure with appropriate valve.

   E. Remove regulator.

   F. Inspect and test according to manufacture's written instructions.

   G. Replace regulator or install new, as necessary.

   H. Close bypass line.

   I. Open main line and observe regulator for operation.

   J. Document as necessary on appropriate form.

4. If the regulator does not have a bypass line built into the system, the component the regulator serves must be temporarily shutdown. Follow proper energy isolation and Lockout/Tagout procedures found in SOP 1140 – Lockout/Tagout Procedures.

5. Clear Aspirator passage ways.

Instrumentation

1. Instrumentation to be inspected and tested, if possible without disrupting conduit or other electrical seals, are:

   A. Temperature, pressure and level gauges

   B. Temperature and pressure controllers

   C. Valve operators

   D. Transducers and Sensors

   E. Electrical and Pneumatic Transmitters

2. Notify on-call and Dispatch personnel that inspection and testing of control system components are being conducted to avoid unnecessarily activating emergency operation procedures in case of alarms.

3. Each component will follow a general inspection procedure, as necessary.

   A. Visually inspect and clean, as necessary. If necessary, isolate and remove equipment to inspect and test, otherwise inspect in place.

   B. Check for proper operation. Calibrate, if necessary.

   C. Lubricate where necessary.

   D. Follow manufacturer's written procedures for inspection and testing.

   E. Repair or replace equipment, if necessary.

   F. Document on appropriate form.

Title: Relief, ESD, Regulator and Other Control System Maintenance Storage Site #2

S.O.P. No.: 7125B **Revision No.: 001** **Effective Date: 10/01/08** **Page 1 of 5**

Approved By: _____ Title: President

General

1. All control systems must be properly adjusted to operate within design limits.

2. Control systems in service, but not normally in operation, such as relief valves, production regulators, warning, and shutdown devices, which are activated either manually or automatically to establish or maintain the performance of another component, must be inspected once each calendar year, not to exceed 15 months.

3. Control systems that are normally in operation, such as those required for a base load system, must be inspected annually, not to exceed 15 months.

4. If a control system or any of its instruments are out of service for 30 days or more, it must be inspected and tested for operational capability before returning to service.

5. Annual inspections will occur during the warmest months of summer or when the distribution system is at its lowest demand.

6. Control systems or instruments found to be out of calibration or not operating within prescribed design limits shall be repaired and/or calibrated in accordance with manufacturer's written instructions.

7. Control systems or instruments requiring major repairs that cannot be performed by in-house personnel shall be returned to the manufacturer for repair, calibration and/or replacement or otherwise instructed by manufacturer's instructions.

8. The Operations Engineer shall keep all inspections, tests, calibrations and repairs on record

Pressure Safety Relief Valve Test Procedure

1. Relief valves must be inspected and tested yearly for verification of the valve seat lifting and pressure and reseating.

2. Distribution header pressure relief valve will be tested yearly to have enough capacity, be operable and pressure to not exceed MAOP of 60 psi gage.

3. Procedure

   A. Test accuracy of the pressure gage with a dead weight tester (see operating instructions).

   B. Install relief valve to be tested on the test manifold.

   C. Slowly increase the pressure to the test manifold using the nitrogen cylinder and regulator. Observe and note the pressure reading when the relief valve begins to operate and the valve lifts.

   D. Slowly reduce the pressure on the test manifold and note the pressure reading when the relief valve seats.

   E. Reduce pressure on the test manifold to zero and vent remaining pressure to atmosphere.

   F. If the relief valve is found to be inadequate or malfunctions, replace the pressure relief valve, as necessary.

   G. Record the results on approved form.

Emergency Shutdown (ESD) System Maintenance

1. Inspection and test of the (ESD) system is done in two parts.

   A. ESD valves will be visually inspected for leakage and any other signs of damage.

   B. Each valve will be tested for operation by manual shutdown by way of Plant computer and gate buttons.

2. Visually inspect ESD valves:

A. Tank 1 valves -LNG Out-Vapor to Heat Exchanger, Vapor from Pumps, and Top Fill

B. Tank 2 valves -LNG Out-Vapor to Heat Exchanger, Vapor from Pumps, and Top Fill

3. To test each ESD valve separately by Plant computer:

   A. Notify on-call and Dispatch personnel that tests of the ESD system are being conducted to avoid unnecessarily activating emergency operation procedures.

   B. From the Plant computer ESD panel screen, activate Tank 1 LNG production ESD button..

   C. Repeat steps 3A-3C for all valves noted in 2A-2B.

   D. Record findings on approved form.

4. To test all valve ESD from Plant computer and gate ESD buttons:

   A. Notify on-call and Dispatch personnel that tests of the ESD system are being conducted to avoid unnecessarily activating emergency operation procedures.

   B. Activate main gate ESD button by pushing in.

   C. Inspect the Plant computer ESD screen to verify that all LNG production, pressure building and bottom fill valves have been closed.

   D. Visually inspect each valve at the tank to verify that each valve has been closed.

   E. Repeat steps 4A-4D for each gate ESD button.

   F. Repeat steps 4A-4D for all valve ESD button on Plant computer screen.

   G. Record findings on approved form.

5. Notify on-call personnel and Dispatch that testing has been completed.

Production Regulator Inspection and Maintenance

1. Each regulator within the storage site system used for production or to heat process equipment must be inspected and tested once each calendar year, but not to exceed 15

months. Regulators excluded from this rule are those used for secondary and non-process yard fuel operations.

2. Regulators that must be inspected and tested are:

   A. Boiloff production line backpressure regulator

   B. Gas production regulator

   C. Boiler fuel gas regulator REG800

   D. Control Room Regulator REG805

3. To inspect and test the regulators, follow these general guidelines.

   A. Visually inspect regulator in place for obvious signs of damage or irregular operation.

   B. Isolate the regulator with isolation valves.

   C. Open bypass line with appropriate valves.

   D. Bleed line gas pressure with appropriate valve.

   E. Remove regulator.

   F. Inspect and test according to manufacture's written instructions.

   G. Replace regulator or install new, as necessary.

   H. Close bypass line.

   I. Open main line and observe regulator for operation.

   J. Document as necessary on appropriate form.

4. If the regulator does not have a bypass line built into the system, the component the regulator serves must be temporarily shutdown. Follow proper energy isolation and Lockout/Tagout procedures found in SOP 1140 – Lockout/Tagout Procedures.

5. Clear Aspirator passage ways.

Instrumentation

1. Instrumentation to be inspected and tested, if possible without disrupting conduit or other electrical seals, are:

   A. Temperature, pressure and level gauges

   B. Temperature and pressure controllers

   C. Valve operators

   D. Transducers and Sensors

   E. Electrical and Pneumatic Transmitters

2. Notify on-call and Dispatch personnel that inspection and testing of control system components are being conducted to avoid unnecessarily activating emergency operation procedures in case of alarms.

3. Each component will follow a general inspection procedure, as necessary.

   A. Visually inspect and clean, as necessary. If necessary, isolate and remove equipment to inspect and test, otherwise inspect in place.

   B. Check for proper operation. Calibrate, if necessary.

   C. Lubricate where necessary.

   D. Follow manufacturer's written procedures for inspection and testing.

   E. Repair or replace equipment, if necessary.

   F. Document on appropriate form.