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Perry Michael Hoffman
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April 25, 2014

Mr. Byron E. Coy, PE
Director, Eastern Region
United States Department of Transportation
Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety
Eastern Region – New Jersey District Office
820 Bear Tavern Road, Suite 103
West Trenton, NJ 08628

RE: CPF 1-2014-3001M – Columbia Gas Transmission, Notice of Amendment

Dear Mr. Coy:

This letter is provided on behalf of Columbia Gas Transmission L.L.C. (Columbia Gas) in response to the Notice of Amendment CPF 1-2014-3001M (NOA), dated February 27, 2014 and received on February 28, 2014. On March 12, 2014, Columbia Gas submitted an e-mail request for additional time to respond to the NOA. By way of a letter dated March 27, 2014, PHMSA provided Columbia Gas until April 29, 2014 to respond. Columbia Gas appreciates this additional time to respond.

The NOPV was issued following inspections conducted in November 2012 of the Columbia Gas LNG plant in Chesapeake, VA. In accordance with Section II (a) of the Response Options for Pipeline Operators in Compliance Proceedings provided with the NOA, Columbia Gas submits this letter to notify you that it has revised its plans and procedures to address the items in the NOA.

The language from the NOA is provided in bold, followed by the Columbia Gas response.

1. § 193.2509 Emergency procedures.

(a) ...

(b) To adequately handle each type of emergency identified under paragraph (a) of this section and each fire emergency, each operator must follow one or more manuals of written procedures. The procedures must provide for the following:...

(3) Coordinating with appropriate local officials in preparation of an emergency evacuation plan, which sets forth the steps required to protect the public in the event of an emergency, including catastrophic failure of an LNG storage tank.

Columbia's LNG emergency plan is inadequate in that it lacks sufficient detail for coordinating with appropriate local officials in preparation of an emergency evacuation plan. Columbia's O&M, Titled "193.2509(b), Chesapeake LNG Emergency Plan", details its meetings with local officials to review and update the Emergency Evacuation Plan. There is no frequency stated in the Emergency Plan to contact the local officials to meet this goal.

Columbia Gas Response

Columbia Gas has revised its Emergency Plan Procedure 310.014.001 for the Chesapeake LNG Facility. Section 11 of the plan has been updated to include frequencies for training and liaison with local officials. A copy of the revised Emergency Plan is included in Attachment A.

2. § 193.2513 Transfer procedures

(a) ...

(b) The transfer procedures must include provisions for personnel to: . . .

(6) Manually terminate the flow before overfilling or overpressure occurs; and,

Columbia's procedures for discharging LNG into LNG trucks are inadequate in that they fail to include provisions for manually terminating the flow before overpressure occurs. Columbia's O&M, Titled "193.2513, LNG Truck Loading Procedure (9-26-2008)", lacks any requirement for LNG truck-loading personnel to verify the maximum amount of liquid that can be safely loaded into an LNG carrier. The only checks are referred to on pages 5 and 8 where the plant operator is directed to "*ask the truck driver at what point on the inches of water gauge the trailer is full*", *Verify that there is available capacity to receive the transfer* " and "*When trailer is full, stop P-105. . .*". This guidance is inadequate without a certified statement of the gage accuracy. Columbia stated the trucks do not have tri-cock valves, nor is there a truck scale at the loading station, both of which are acceptable indicators.

Columbia Gas Response

Columbia Gas has revised its procedures 310.008.450 LNG Truck Loading Procedure – SOP 1 to include additional requirements for an LNG truck-loading personnel to verify the maximum amount of liquid that can be safely loaded into an LGN Carrier. A copy of the revised procedures is included in Attachment B.

3. § 193.2903 Security procedures.

Each operator shall prepare and follow one or more manuals of written procedures to provide security for each LNG plant. The procedures must be available at the plant in accordance with § 193.2017 and include at least: . . .

(g) Liaison with local law enforcement officials to keep them informed about current security procedures under this section.

Columbia's procedures for providing security were inadequate in that they failed to provide guidance on establishing a liaison with local law enforcement officials to keep them informed about current security procedures under this section.

Columbia's O&M Sec. 193.2903, Site Specific Security Plan (5-31-2011) sections 7.1.2, 8.5 and 12.0 lack adequate guidance on how they establish liaison with local law enforcement regarding the current security plan.

Columbia Gas Response

Columbia Gas has revised its Security Plan for the Chesapeake LNG facility. Section 7.2 of the revised plan describes liaison with local law enforcement officials. A copy of the full plan is available at the Chesapeake LNG facility. An excerpt from Section 7.2 of the revised plan follows:

7.2 Liaison with Law Enforcement Officials

Liaison with local law enforcement officials is established through the public awareness meetings and is scheduled under the company's Public Awareness Program. The meeting for the Chesapeake City emergency and law enforcement officials occurs on an annual basis. Records to confirm when contacts are made shall be documented in an electronically Public Awareness Program database, also referred to as Public Awareness Manager or PAM. This database is managed by an approved company vendor and managed by the Public Awareness Program Administrator.

Local law enforcement officials shall receive paper or electronic copies of this security plan once a year not to exceed 15 months. A letter such as the example shown in Attachment 2 will accompany this correspondence. If any significant updates occur, an updated security plan will be provided. Certified mail or other tracking services will be used to document when this correspondence is sent and received. All applicable records will be document in PAM.

4. § 193.2605 Maintenance procedures.

(a)...

(b) Each operator shall follow one or more manuals of written procedures for the maintenance of each component, including any required corrosion control. The procedure must include:

(1) The details of the inspections or tests determined under paragraph (a) of this section and their frequency of performance; and . . .

Columbia's maintenance procedures were inadequate in that they did not provide details of the inspections or tests determined under paragraph (a) of this section.

Specifically, the procedures did not provide direction on how to verify that the gas detector monitoring the atmosphere in the vicinity of the refrigerant gases is capable of activating an alarm at more than 25% LEL of the gas or vapor being monitored.

NFPA 59A9.1.2 Fire Protection Study (12-9-2005), Sec.2, Basis of design states:

. . . Flammable gas detection is based on the existing MSA Ultima catalytic units and the proposed new MSA model Ultima X IR units. The units would be calibrated to detect Methane for all locations and alarm at 25% LEL and 50% LEL. This setting provides for early detection of the heavier hydrocarbons (refrigerants) while continuing to provide monitoring for Methane. . .

- 1. In a review of Columbia's maintenance procedures, O&M Sec. 193.2602-2, Calibrate – Gas Detector, the PHMSA Inspector noted that the procedure is not specific with respect to the gas or gas combinations which may be present.**
- 2. Columbia's procedure refers to 25% LEL as a critical point, but the procedure fails to note that the LEL for different gases in the refrigerant area is different for each gas.**
- 3. Columbia's procedures must account for these differences when establishing a 25% LEL trigger for the audible and visual alarms for each of these gases.**

Columbia Gas Response

Two types of gas detectors, catalytic bead and infrared, are utilized at the Chesapeake LNG plant to detect refrigerant gases. In the summer of 2013, Columbia Gas, in coordination with the gas detection equipment manufacture, Mine Safety Appliance (MSA), conducted a study of the two types of gas detectors to determine a concentration of a single gas calibration of each type of detector that would ensure that the gas detectors would alarm at not more than 25% LEL for any of the refrigerant gases in the LNG plant. A copy of that study is included in Attachment C. Based upon the study, the procedures used to calibrate and test the gas detectors have been revised. A copy of the revised Procedure 310.036.002 Calibrate/Test – Refrigerant Catalytic Bead Gas Detector and Procedure 310.036.003 Calibrate/Test – Infrared Refrigerant Gas Detector is included in Attachment D.

Columbia believes that the actions taken fully address the issues raised in the NOA.

If you have any questions or would like additional information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Perry M. Hoffman". The signature is written in a cursive style with a large initial "P" and "H".

Perry M. Hoffman
Manager – System Integrity
Columbia Pipeline Group