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May 13, 2021

Robert Burrough
Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration
840 Bear Tavern Road, Suite 300,
West Trenton, NJ 0862

RE: Notice of Amendment No. CPF 1-2021-014-NOA

Dear Mr. Robert Burrough,

Over the duration starting on October 19, 2020 and finishing on November 4, 2020 a representative from Pipeline and Hazardous Material Safety Administration, conducted a scheduled inspection of the records & procedures for the period of 2017-2020 and performed observation functions on site at the Station 240 LNG Plant located in Carlstadt, NJ. On 04/14/2021 Williams received a Notice of Amendment (NOA) pertaining to this inspection.

Williams is committed to operating safely and in compliance with all applicable health, safety, and environmental laws and regulations and maintains a continuous improvement mindset towards these efforts. As evidence of our commitment, we reviewed the facts and circumstances regarding the inspection findings provided in the NOA and have implemented actions to remedy any potential apparent inadequacies.

Each of the items identified from the NOA is quoted below followed by Williams' response providing additional or clarifying information or describing the corrective action taken to address the findings from PHMSA, as applicable.

1. § 193.2717 Training, fire protection.

(a) …

(b) A written plan of continuing instruction, including plant fire drills, must be conducted at intervals of not more than 2 years to keep personnel current on the knowledge and skills they gained in the instruction under paragraph (a) of this section.

"Transco's procedures for training were inadequate. Specifically, Transco's 53.00.04.2-Emergency Plans and Preparedness Manual Review & Training and 53.00.04.1-Conduct Fire Drill (Fire Protection Procedures) failed to include details on fire protection training for operation, maintenance, and supervisory personnel…

…in accordance with § 193.2717(b). Transco must revise its procedures to include requirements for these personnel to participate in refresher fire protection training, including fire drills."

Williams Response:

The codified requirement of §193.2717(b) is to keep personnel current on the knowledge and skills they gained in the instruction under §193.2717(a).

The procedure titled, "Station 240 LNG - Conduct Fire Drill – 2Y"[1] does include provisions requiring fire drills in contrast to the deficiency cited by PHMSA; however, Transco agrees in principle with the cited procedural deficiency specific to refresher training.

Williams internal policy is for its personnel to only fight incipient stage fires as it does not have an industrial fire brigade and relies upon local Emergency Responders to perform these functions, as discussed during clarification questioning.

Williams has updated the procedures titled, "Station 240 LNG - Conduct Fire Drill – 2Y" & "Station 240 LNG - Training - Fire Protection – Initial Training and 2Y Refresher"[2] to add additional details and address the remaining concerns cited by PHMSA.

These two procedures are enclosed with this response.

2. § 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…

"Transco's maintenance procedures were inadequate. Specifically, Transco's 53.00.18- LNG Tank Inspections (Tank Inspection Procedure) failed to provide details for inspecting or testing liquefied natural gas storage tanks in accordance with § 193.2623(b).

During the inspection, the PHMSA inspector requested Transco's procedures regarding inspecting liquefied natural gas storage tanks, and Transco provided its Tank Inspection Procedure. Section C of the Tank Inspection Procedure discussed frequencies and limited details for performing certain inspection or testing activities relative to foundation and tank movement, inner tank leakage and effectiveness of insulation. However, it lacked detailed procedures addressing how these liquefied natural gas storage tank inspections or tests are actually performed, particularly regarding inner tank leakage, frost heave, and effectiveness of insulation."

1 Formerly titled "53.00.04.1 – Conduct Fire Drill".

2 Procedure formerly titled "53.00.27 – UPM2029366 – 11126 Training – Fire Protection – Initial Training and 2 Yr Refresher."

Williams Response:

During the Inspection, the procedure titled, "Station 240 LNG - LNG Tank Inspection 1Y, Conditional"[3] was reviewed and the respective records from the inspections defined within the procedure were also reviewed.

Regarding inner tank leakage and effectiveness of insulation, the procedure references the 5-year LNG Tank Inspection, for which the 2019 report was reviewed by PHMSA. Transco agrees that its procedures needed to be updated to better align with the cited regulatory provision. However, it is worth noting some additional items discussed on this topic during the inspection.

Page 22 of this report summarizes how this process is performed via a thermographic study of the two LNG tanks and describes the inspection methodology applicable for both inner tank leakage and effectiveness of insulation. Additionally, Operators perform observations for cold spots on the LNG tank exteriors as part of the operator rounds. Any indications of frost accumulation on the exterior of the LNG tanks is an indication of potential inner tank leakage or ineffective insulation.

Regarding frost heave, Station 240 LNG tanks are built on raised foundations. This tank design does not experience the same risk from frost heave as other cryogenic tanks that have foundations that are in contact with the earth and can cause cryogenic temperatures to penetrate the foundation and freeze the earth below them.

The procedure titled, "Station 240 LNG - LNG Tank Inspection 1Y, Conditional" has been updated to provide details addressing the concerns cited by PHMSA.

This procedure has been enclosed with this response.

3. § 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…

"Transco's maintenance procedures were inadequate. Specifically, Transco's 07.47.501.OG Atmospheric Special Consideration Plan, dated 10/24/19 (SC AC Plan) failed to state the required inspection frequencies for atmospheric corrosion inspections, in accordance with § 193.2635(d).

Section 193.2635(d) states that "Each component that is protected from atmospheric corrosion must be inspected at intervals not exceeding 3 years.

…

Transco's procedures were contradictory to one another in that they required different inspection frequencies for the inspection of atmospheric corrosion. Specifically, the SC AC Plan discussed a 9-year frequency for inspecting certain piping, while the OG AC Procedure specified a 3-year interval for onshore LNG facilities. Additionally, the 9-year inspection frequency of Transco's special consideration piping failed to meet the 3-year inspection interval requirement for components protected from atmospheric corrosion.

3 Procedure formerly titled, "53.00.18 – UPM2029183 – 471 – LNG Tank Inspections – 1 YR, 5 YR, Varying".

When the PHMSA inspector asked Transco about the 9-year inspection interval for special consideration piping, Transco re-iterated that this piping was inspected per its procedure, at the required 9-year frequency.

Therefore, Transco failed to state in its maintenance procedures the required inspection frequencies for inspection of atmospheric corrosion in accordance with § 193.2635(d), as required by § 193.2605(b). Transco must revise its maintenance procedures to require consistent frequencies for atmospheric corrosion inspections at intervals complying with § 193.2635(d).”

Williams Response:

Williams believes that the corrosion control process is compliant with applicable regulatory requirements and therefore attempted to communicate this through the engagement with the PHMSA Inspector via teleconference after the Preliminary Findings were issued on 12/01/2020. The issue summary for this item did not specify the 9-year interval as the primary concern but the teleconference was requested by Williams to seek additional information and the Inspector provided this clarification.

The regulatory basis for the 9-year program of scheduled maintenance is substantiated via §193.2625(b)(2). Section §193.2625 offers two methods which can be utilized for meeting the minimum corrosion control requirements. Section §193.2625(b) is provided below for reference:

> “§193.2625 Corrosion protection.
>
> …
>
> (b) Components whose integrity or reliability could be adversely affected by corrosion must be either—
>
> (1) Protected from corrosion in accordance with §193.2627 through §193.2635, as applicable; or
>
> (2) Inspected and replaced under a program of scheduled maintenance in accordance with procedures established under §193.2605.”

The first method provided via §193.2625(b)(1) prescribes the corrosion control requirements codified in sections §193.2627 through §193.2635. Williams utilizes this methodology for atmospheric corrosion inspection of components not covered under a §193.2625(b)(2) program of scheduled maintenance. These 3-year atmospheric corrosion inspection records were reviewed during the inspection.

The second method is provided via §193.2625(b)(2) which requires components whose integrity or reliability could be adversely affected by corrosion to be inspected and replaced under a program of scheduled maintenance in accordance with procedures established under §193.2605.

PHMSA’s alleged deficiency is believed to be based upon a misunderstanding of the regulatory basis for the 9-year program of scheduled maintenance for components under thermal insulation, which is based upon the option provided via §193.2625(b)(2). Through choosing this option for its components under thermal insulation, Williams inspects and replaces components upon a program

of scheduled maintenance. This program consists of a 9-year integrity assessment to determine the state of the components covered and whether mitigative action or replacement is required.

This process is described in the procedure titled, "53.00.21_M_476_Station 240 – Corrosion – Atmospheric Inspection" which references the procedure titled, "07.47.007-OG – Onshore Atmospheric Corrosion Inspection" which subsequently references the procedure titled, "07.47.501-OG – Atmospheric Special Consideration Plan".

Williams realized through investigation of this Item #3 that the regulatory justification for this program of scheduled maintenance is not immediately intuitive to a 3rd party reviewer who is not familiar with the site-specific Station 240 Safety Program. Rigorous efforts have been made to simplify the Station 240 procedures to clearly present the basis and applicability of the 9-year program.

Due to the complexity of this effort involving the consolidation of five procedures and the need for adequate reviews and communication to impacted personnel, Williams is requesting a 60-day extension to complete and publish these updates. When complete, copies will be provided to PHMSA.

4. § 193.2503 Operating procedures.

Each operator shall follow one or more manuals of written procedures to provide safety in normal operation and in responding to an abnormal operation that would affect safety. The procedures must include provisions for:

(a) …

(c) Recognizing abnormal operating conditions.

"Transco's operating procedures were inadequate. Specifically, Transco's 53.00.03-Monitoring for Hazardous Conditions and LNG Plant Procedures Manual Station 240, dated 11/27/18, (collectively, Procedures) failed to include details for recognizing abnormal operating conditions.

During the inspection, the PHMSA inspector requested Transco's procedures regarding abnormal operating conditions. Transco provided its Procedures which mention abnormal operation conditions. The Procedures discussed tank and vaporizer abnormal operating conditions. However, the Procedures did not provide guidance on how Transco personnel recognize abnormal operating conditions, nor do they define or list abnormal operating conditions that may exist at other portions of the LNG plant.

When the PHMSA inspector requested if there were additional procedures or guidance related to abnormal operating conditions, Transco was not able to provide any additional information.

Therefore, Transco failed to include details in its operating procedures for recognizing abnormal operating conditions in accordance with § 193.2503(c). Transco must amend its Procedures to include these details."

Williams Response:

The cited language from §193.2503 requires Operators to be able to recognize and respond to Abnormal Operating Conditions. Williams has created a site-specific definition for what it considers to be AOCs within its newly published procedure titled "Station 240 LNG - Recognizing Abnormal Operating Conditions" created in response to PHMSA's cited concern. This procedure

features a summary table detailing the conditions which will be considered Abnormal Operating Conditions and the respective Operator response actions for each listed AOC.

This procedure has been enclosed with this response.

Williams believes the above corrective actions address the concerns raised by PHMSA in the NOA and furthers our continuous improvement mindset. We appreciate the feedback from the inspection and your consideration of this additional information. Should you require additional follow-up or have any recommendations, please contact Matthew Becker, 918-346-1189, matthew.becker@williams.com.

Sincerely,

Tyson Green

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Cc: Amy Shank, Director of Pipeline Integrity
Eric Raymond, Director of Operations
Nathan Carlson, Sr. Operations Manager

Attachments:

Station 240 LNG - Conduct Fire Drill – 2Y
Station 240 LNG - Training - Fire Protection – Initial Training and 2Y Refresher
Station 240 LNG - LNG Tank Inspection 1Y, Conditional
Station 240 LNG - Recognizing Abnormal Operating Conditions