Hess Corporation
3015 16th St SW, #20
Minot, ND 58703

April 1, 2020

Mr. Allan C. Beshore
Director, Central Region
Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration
901 Locust Street, Suite 462
Kansas City, MO 64106-2641

Re: CPF 3-2020-5001M Notice of Amendment - Resolution of Item 2.

Dear Mr. Beshore:

The one (1) outstanding item contained within the Notice of Amendment (NOA), CPF 3-2020-5001M dated March 2, 2020 has been addressed by Hess through the following procedure changes.

For Item 2, the NOA notes:

> "Hess's O&M Program did not include adequate in-line inspection (ILI) requirements for the qualification of ILI systems, including personnel, equipment, processes, and software utilization within the procedures. Specifically, the procedures did not require compliance with API Std 1163, Inline Inspection Systems Qualification Standard; ANSI/ASNT ILI-PQ, Inline Inspection Personnel Qualification and Certification; and NACE SP0102-2010, Inline Inspection of Pipelines."

Hess has amended Section 9 (D)(II), pg. 9-20 of the Hess ND Hazardous Liquids O&M to read:

> "The use of inline inspection tools is a practicable option available to HESS. However, at a minimum, the utilization of inline inspection must comply with the requirements and recommendations of API Std 1163, *Inline Inspection Systems Qualification Standard*; ANSI/ASNT ILI-PQ, *Inline Inspection Personnel Qualification and Certification*; and NACE SP0102-2010, *Inline Inspection of Pipelines*.
> Tethered or remote controlled tools maybe used provided they generally comply with applicable sections of NACE SP0102-2010. Selection of tools shall be on a case-by-case basis and include the following considerations (recognizing other considerations may be used in the selection process) ..."

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Hess has included similar language in its Mechanical Reliability and Integrity (MRI) Integrity Procedure - PIPELINE IN-LINE INSPECTION (ILI); Section 5.4 *ILI Assessment Methods and Tool Selection.* Photocopy excerpts from both manuals can be found in the attachments that follow.

These amendments to our procedure manuals satisfactorily address Item 2. of the NOA.

Currently, all Hess offices are shut down and most employees are working from home due to the COVID 19 pandemic. However, if you have questions, please reach me at (701) 641-9005.

Regards,

Dale Weathersby
Advisor Regulatory
Bakken - Regulatory Evaluation & Standards
Hess Corporation
701-641-9005 cell

Attach. (2)

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Attachment 1. Hess ND Hazardous Liquids O&M

Operations and Maintenance
Pipeline Integrity Management Program

9(D)(II). Inline Inspections

The use of inline inspection tools is a practicable option available to HESS. However, at a minimum, the utilization of inline inspection must comply with the requirements and recommendations of API Std 1163, *Inline Inspection Systems Qualification Standard*; ANSI/ASNT ILI-PQ, *Inline Inspection Personnel Qualification and Certification*; and NACE SP0102-2010, *Inline Inspection of Pipelines*.

Tethered or remote controlled tools maybe used provided they generally comply with applicable sections of NACE SP0102-2010. Selection of tools shall be on a case-by-case basis and include the following considerations (recognizing other considerations may be used in the selection process).

- Potential threats to the pipeline segment being investigated,
- Pipe diameter,
- Depth of cover,
- Pipeline radius-of-turn issues,
- Integrity Assessment data needs,
- Detection sensitivity,
- Sizing and location accuracy,
- Requirements for direct examination,
- History of the tool,
- Ability to inspect the full length and full circumference of the section,
- Ability to indicate the presence of multiple cause anomalies, and
- Data verification requirements.

Table 1 Anomaly Types and Tools to Detect Them (From Table 9-1 of API 1160, 3rd edition Feb. 2019) lists the anomaly and the inline Inspection tools available for conducting Integrity Assessments. This table will be updated periodically based on changes in technology and HESS' decision to use additional in-line inspection tools. The use of in-line inspection tools will be based on the tools performance history in accurately identifying potential pipe integrity issues with the minimal amount of error or "Noise".

Additional HESS specifications for in-line inspection include:

- Specific plans, work activities, services, tools, tolerances, communications, and reporting which the vendor will provide and will be held accountable,
- Requirements for the vendor's timely provision of preliminary and final reports, including notification of imminent threats to pipeline integrity,
- Definition and criteria for vendor data and analysis results, including type of defect(s) and minimum anomaly size to be reported,
- Process(es) for validating vendor data, including the appropriate number of verification digs required to obtain a representative sample for the specified defect types; the identification, collection, and dissemination of all pertinent information obtained during the verification digs, and field validation that the location data from the ILI run is adequate to locate all reported anomalies.
- Procedures for obtaining additional data and/or information from the vendor, if needed for the effective disposition of anomalies,
- Procedures for documenting and approving variances to the vendor's performance requirements, and
- Qualification of vendor's personnel.

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Attachment 2. Hess MRI Integrity Procedure - *PIPELINE IN-LINE INSPECTION (ILI)*

5.4 ILI Assessment Methods and Tool Selection

The use of inline inspection tools is a practicable option available to HESS. However, at a minimum, the utilization of inline inspection must comply with the requirements and recommendations of API Std 1163, Inline Inspection Systems Qualification Standard; ANSI/ASNT ILI-PQ, Inline Inspection Personnel Qualification and Certification; and NACE SP0102-2010, Inline Inspection of Pipelines.

Tethered or remote-controlled tools may be used provided they generally comply with applicable sections of NACE SP0102-2010. Selection of tools shall be on a case-by-case basis and include the considerations indicated below (recognizing other considerations may be used in the selection process).

NACE SP0102, Table 1 (provided in Appendix 2) provides guidance on what threat features can be detected by the different types of ILI tool technologies. Tool selection should be determined by the applicable threats and associated risks for each individual pipeline segment.

Other factors to consider for ILI tool selection include:

- Appropriateness of the Inspection Tool
  - Accuracy and detection capabilities – probability of detection, sizing, and classification. Sizing should be sufficient enough to enable evaluation and/or remaining strength calcs
  - Detection sensitivity – the minimum detectable anomaly size
  - Classification capability – the ability to differentiate defect types
  - Location accuracy – to help locate anomalies in the field
- Operational Issues
  - Mechanical characteristics of the pipe
    - Grade, wall thickness, internal diameter, elevation profile, seam types, size/ID changes, restrictions
  - Piping configurations – launcher/receiver suitability, tees, pig bars, valves, bends, etc.
  - Pipe cleanliness – can affect tool wear, data coverage, and data accuracy
  - Internal coating – can interfere with inspection, or tool could damage internal coatings
  - Fluid characteristics
    - Type of fluid (gas or liquid)
    - Presence of H2S, paraffin, NORM, pyrophoric dust, etc.
  - Acceptable ranges of flow rate, velocity, pressure, and temperature; run duration
- Reliability of the ILI tool
  - Confidence level of detection, sizing, and classifying anomalies
  - History of performance verified through excavation
  - Operational success rate and failed surveys
  - Ability to detect full length and circumference of the pipeline
  - Ability to indicate the presence of multiple-cause anomalies