



Northern Natural Gas Company  
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402 398-7200

February 24, 2021

Gregory A. Ochs  
Director, Central Region  
Pipeline and Hazardous Materials Safety Administration  
901 Locust Street, Suite 480  
Kansas City, MO 64106

Re: CPF 3-2021-1001M; Notice of Amendment Response

Dear Mr. Ochs:

In accordance with the Notice of Amendment issued February 10, 2021, in the above referenced case, this letter contains Northern Natural Gas' written comments to the two outlined procedural inadequacies.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within Northern Natural's plans or procedures, as described below:

**1. § 192.605 Procedural manual for operations, maintenance, and emergencies.**

**(a) . . . .**

**(b) *Maintenance and normal operations.* The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations.**

**(1) *Operating, maintaining, and repairing the pipeline in accordance with each of the requirements of this subpart and subpart M of this part.***

Northern Natural's procedure 80.407 Gas Leak Detection Survey (Rev.26: 12/31/2015) (Procedure) fails to address the gas leak detection survey frequency for non-odorized gas lines for a feature relating to leak surveys over water. Leakage surveys locations are governed by § 192.706, which is included within subpart M of part 192. The regulation requires that operators of non-odorized gas transmission lines located in a Class 3 location perform leakage surveys at intervals not exceeding 7 ½ months, but at least twice each calendar year. Pursuant to § 192.706(b)(1), operators must have adequate procedure(s) to assure the safe operation of pipelines through compliance with the applicable requirements of subpart M of part 192. Northern Natural fails to have such a procedure.

During the field inspection, the inspector from the State of Michigan observed that an un-odorized Class 3 pipeline in the Houghton and Hancock area crosses the Portage Canal. It was communicated to the inspector that the instrumented leak survey stopped at the edge of the water. Section 192.706 requires the survey to be conducted over the entire pipeline,

and the associated procedure(s) must cover all conditions. Northern Natural's procedure 80.407 "Gas Leak Detection Survey" does not describe requirements or provide guidance related to how a leak detection survey over bodies of water is to be performed. Section 5.2.1 of the Procedure refers the operator to the Gas Leak Detection Frequency Table listed at the end of the Procedure. While there is frequency guidance for special permit un-odorized lines, un-odorized lines not covered by special permits are not addressed.

*Northern's Response:*

Northern revised operating procedure 80.407 Gas Leak Detection Survey to specify how gas leak detections are performed where the pipeline is under water. The revised procedure is being routed for approvals. See paragraph 5.9 of the attached draft procedure.

## **2. § 192.631 Control Room Management**

**(a) . . . .**

**(e) Alarm management. Each operator using a SCADA system must have a written alarm management plan to provide for effective controller response to alarms. An operator's plan must include provisions to:**

**(1) . . . .**

**(5) Monitor the content and volume of general activity being directed to and required of each controller at least once each calendar year, but at intervals not to exceed 15 months, that will assure controllers have sufficient time to analyze and react to incoming alarms;**

Northern Natural's Control Room Procedure 050.400b, Alarm Management Annual Review of General Activity, does not contain adequate provisions to monitor the content and general activity being directed to and required of each controller. Operators are required to develop procedures necessary to ensure that controllers are able to identify alarm "floods", which can involve many alarms occurring simultaneously or in a short period of time. In order to assure that controllers are not overwhelmed in their ability to recognize problems and events that may underlie the alarms, and thus delay prompt response, operators must prepare procedures that identify and define the content and general activity. Having such procedures assures that the ability of a controller to respond appropriately to a safety-related event is not compromised. A procedure required under this regulation requires a process that includes, for example, reviewing phone calls, alarms responded to, commands sent, email activity, field response, nomination review and set ups, planning, training, shift change, monitoring weather and news reports, and planning activities. Further, the process set forth in the procedure must be able to support the findings and any conclusions about maintaining or changing assigned duties.

Northern Natural's Control Room Procedure 050.400b is inadequate to assure the safe operation of its pipelines. Specifically, the procedure does not review all required activities of a controller and develop a criterion that will assure controllers have sufficient time to analyze and react to incoming alarms. Northern Natural must modify its procedure 050.400b, Alarm Management Annual Review of General Activity, to expand the activities reviewed and perform analysis to substantiate the conclusions about the activities directed

to the controller, during normal and peak hours of activity, that will assure controllers have sufficient time to analyze and react to incoming alarms.

*Northern's Response:*

Northern has revised Operating Procedure 50.400 Alarm Management to collect data and analyze the volume of activity processed by each controller at a level that does not jeopardize the safe operation of Northern facilities. If the analysis reveals deficiencies, corrective actions will be taken to ensure controllers have sufficient time to analyze and react to incoming alarms.

Should you have any further questions, please feel free to contact me directly at (402) 398-7715.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Correll", written in a cursive style.

Tom Correll  
Vice President, Pipeline Safety and Risk  
Northern Natural Gas