



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

8701 S. Gessner Rd, Suite 630
Houston, Texas 77074

NOTICE OF AMENDMENT

ELECTRONIC MAIL - RETURN RECEIPT REQUESTED

August 26, 2020

Terry K. Spencer
President and CEO
ONEOK NGL Pipeline, LLC
100 West Fifth Street
Tulsa, Oklahoma 74103

CPF 4-2020-007-NOA

Dear Mr. Spencer:

From March 23 – March 27, 2020, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code, inspected ONEOK NGL Pipeline, LLC (ONEOK) procedures and records for Control Room Management via a remote inspection. On the basis of the inspection, PHMSA has identified the apparent inadequacies found within ONEOK's plans or procedures, as described below:

1. §195.446 Control room management.

(b) *Roles and responsibilities.* Each operator must define the roles and responsibilities of a controller during normal, abnormal, and emergency operating conditions. To provide for a controller's prompt and appropriate response to operating conditions, an operator must define each of the following:

(1) . . .

(3) A controller's role during an emergency, even if the controller is not the first to detect the emergency, including the controller's responsibility to take specific actions and to communicate with others;

The ONEOK Level 2 Control Room Management Plan (CRM Plan), Version Reviewed/Revised 9/6/2019, Effective dates Calendar Year 2019 - 2020 is inadequate as it does not include a detailed process for controllers' roles and responsibilities when they move or evacuate to a backup control room nor does it reference applicable documents in a manner that is readily accessible in the event of evacuation as required by §195.446(b)(3).

During the inspection, PHMSA inspectors reviewed the following three documents provided by ONEOK: the CRM Plan; the Business Continuation Plan (BC Plan) - Control Room; and the Manual Mode Operation Procedure. The Manual Mode Operation Procedure titled “Internal Communications Plan-Manual Mode Operations/Back up Control Centers” includes instructions for controllers to start up the ancillary (basement) control room and directions to the Broken Arrow back up facility site. The BC Plan also provides similar procedures to close down the primary control room and start up the back up control room, in addition to limited guidance on actions required for communication and authorization to evacuate the control room. Furthermore, the CRM Plan references both the BC Plan and The ONEOK Pipeline Control Evacuation Plan (PCE Plan), thus providing a controller with a choice between the BC Plan or the PCE Plan, whichever is applicable, should the control room need to be evacuated. The ONEOK PCE Plan was not available for review.

While the three plans reviewed address evacuation, the overall process appears disjointed and requires reference of three different procedures to define the roles, responsibilities, directions, and processes to leave the primary control room and start up the back up control room.

ONEOK must amend its procedure(s) to provide controllers with one clear procedure to reference that covers all the requirements to evacuate the control room and transition to the back up control room.

2. §195.446 Control room management.

(b) Roles and responsibilities. Each operator must define the roles and responsibilities of a controller during normal, abnormal, and emergency operating conditions. To provide for a controller’s prompt and appropriate response to operating conditions, an operator must define each of the following:

(1) . . .

(5) The roles, responsibilities and qualifications of others who have the authority to direct or supersede the specific technical actions of controllers.

The ONEOK Level 2 CRM Plan is inadequate because it does not define the roles and responsibilities of the authorized individual(s) who can supersede the technical actions of a controller such as the conditions under which they may supersede, the required communication with a controller, and the documentation requirements when they do supersede the technical actions of the controller.

The ONEOK CRM Plan provides two references to superseding and controller. The first reference is Section 11.4 of the CRM Plan, which references Control Room Supervisors being fully trained and qualified. The plan states that Supervisors “*have access to the controllers and have the ability and authority to influence or supersede the actions of the on-duty Controller should the need arise. Anyone who is not operator-qualified and has not been fully trained to operate ONEOK pipeline system is not authorized to supersede or otherwise influence Controller actions.*” The second reference is Addendum F of the CRM Plan, which provides an

interpretation taken from PHMSA CRM FAQ B.03. This procedure does not provide any guidance about when it may be appropriate or acceptable for an authorized individual to supersede, nor does it provide guidance on how to document in the event it does occur.

ONEOK must amend its procedure to provide clear guidance and process to address the inadequacies related to superseding a controller.

3. §195.446 Control room management.

(c) *Provide adequate information.* Each operator must provide its controllers with the information, tools, processes and procedures necessary for the controllers to carry out the roles and responsibilities the operator has defined by performing each of the following:

(4) Test any backup SCADA systems at least once each calendar year, but at intervals not to exceed 15 months;

The ONEOK Level 2 CRM Plan is inadequate as it does not provide its controllers with information, tools, processes and procedures necessary for the controllers to carry out their roles and responsibilities when conducting the test of backup SCADA systems.

Section 6.5 of the CRM Plan states that “*Testing will be performed and documented by the ONEOK SCADA Group or the Pipeline Control Group.*” The ONEOK SCADA Group document describes a very thorough check of the SCADA system in conjunction with a test of the enterprise servers for business continuity. The CRM Plan delegates all responsibility for the backup test to the SCADA Group as it relates to detail of systems to be tested, date of tests, frequency of the tests, and results of test. The bullet points provided in Section 6.5 are generic requirements for testing, findings/modifications and documentation, and does not provide the minimum requirements for the performance test, criterion to determine if the test was a success and determination whether the controller’s performance was acceptable. For example, one guideline states, “*Each operator shall coordinate with SCADA to test the backup system operation.*” This needs to be expanded to provide guidance as to what must be included in the backup test.

A test of the SCADA system servers is not the only requirement. The SCADA system is more than just software and servers. It includes the consoles and the processes used to operate the control room including, system logon, phone transfers, shift change, printers, phone lists, maps, and logistics of getting to the backup site and access the facility. The testing procedure needs to provide all the steps required by the Pipeline Control Group to ensure all aspects of changing the operation to the backup system and testing of and returning operations to the main control room. It should also include alternatives for those controllers that may not have an opportunity to participate in the annual drill. A detail procedure is needed to conduct an acceptable test and should provide all the information required to complete a thorough test of switching to the backup facility and returning to the primary control room. The ONEOK Pipeline Control

Business Continuation Plan, referenced in the procedure, provides some instruction for evacuation of the control room, however, it is not complete and is not integrated into the backup test in the procedure.

ONEOK must amend its procedure to provide clear guidance to address the inadequacies related to providing controllers with information, tools, processes, and procedures necessary for performing tests on backup SCADA systems.

4. **§195.446 Control room management.**

(h) Training. Each operator must establish a controller training program and review the training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed 15 months. An operator's program must provide for training each controller to carry out the roles and responsibilities defined by the operator. In addition, the training program must include the following elements:

The ONEOK Level 2 CRM Plan does not provide adequate procedures for reviewing the training program content to identify potential improvements as required by §195.446(h).

ONEOK's Level 2 CRM Plan Section 11 does not reference the Level 4 CRM Controller Training procedure that offers a short section on *Annual Effectiveness Review of Training Program Content*. The Level 4 procedure also does not describe what is to be considered in such a review, but rather defines what the review should verify. During the inspection, ONEOK provided records related to a review of controller responses to different log entries, as well as collected controller opinions gathered through an annual survey. From this review, ONEOK explained that they concluded that the training is adequate. Additionally, the procedure does not include a review of the training program content which in their case would be a review of the milestones and training curriculum of classroom, computer-based training, and mentor on-the-job training. Consequently, ONEOK's procedure does not link how the effectiveness review translates to training content adequacy and changes needed to address inadequacies.

ONEOK must amend its procedure to address the inadequacies to ensure a thorough review of the training program content as discussed above is conducted.

5. **§195.446 Control room management.**

(h) Training. Each operator must establish a controller training program and review the training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed 15 months. An operator's program must provide for training each controller to carry out the roles and responsibilities defined by the operator. In addition, the training program must include the following elements:

(1) . . .

(6) Control room team training and exercises that include both controllers and other individuals, defined by the operator, who would reasonably be expected to operationally

collaborate with controllers (control room personnel) during normal, abnormal or emergency situations. Operators must comply with the team training requirements under this paragraph no later than January 23, 2018.

The ONEOK Level 2 CRM Plan is inadequate because it does not describe the what, when and how of the team training for controllers and those who would reasonably be expected to operationally collaborate with controllers (control room personnel) during normal, abnormal or emergency situations.

The Level 2 CRM Plan does not address the frequency of training, does not define the expected content of the training, nor does it define the expectations for conducting combined training with the “others” and controllers. Team training should include not only mock drills, but also review of lessons learned from accidents and near misses. There should also be an element that includes some type of interpersonal skill training. Interpersonal skill training can include team building exercises, topics related to behavioral styles, communication styles, leadership or conflict resolution as examples. They can also include a review of drill performance related to leadership, communication styles, problem solving or role changing as examples and how these may be the same or different under different operating conditions.

ONEOK must amend its procedure to address the inadequacies of the control room team training, especially as it relates to those that would be reasonably expected to operationally collaborate with controllers (control room personnel) during normal, abnormal, or emergency situations.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.206. Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).

Following the receipt of this Notice, you have 30 days to submit written comments, revised procedures, or a request for a hearing under §190.211. If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue an Order Directing Amendment. If your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.206). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within 60 days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

It is requested (not mandated) that ONEOK NGL Pipeline, LLC maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Mary McDaniel, Director, Southwest Region, Pipeline and Hazardous Materials Safety Administration. In correspondence concerning this matter, please refer to **CPF 4-2020-007M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Mary L. McDaniel, P.E.
Director, Southwest Region
Pipeline and Hazardous Materials Safety Administration

Enclosure: *Response Options for Pipeline Operators in Compliance Proceedings*