

NOTICE OF AMENDMENT

VIA E-MAIL TO MR. BEN STEVENS

June 22, 2021

Mr. Ben Stevens
President
Kuparuk Transportation Company
P.O. Box 100360
Anchorage, AK 99501

CPF 5-2021-017-NOA

Dear Mr. Stevens:

From August 31 through September 4, 2020, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code (U.S.C.), performed a virtual inspection of Kuparuk Transportation Company's (Kuparuk) procedures for pipeline control room operations for the two control rooms (Alpine and Kuparuk) located in the North Slope Borough, Alaska.

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

1. § 195.446 Control room management.

(a) *General.* This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section. The procedures required by this section must be integrated, as

appropriate, with the operator's written procedures required by § 195.402. An operator must develop the procedures no later than August 1, 2011, and must implement the procedures according to the following schedule. The procedures required by paragraphs (b), (c)(5), (d)(2) and (d)(3), (f) and (g) of this section must be implemented no later than October 1, 2011. The procedures required by paragraphs (c)(1) through (4), (d)(1), (d)(4), and (e) must be implemented no later than August 1, 2012. The training procedures required by paragraph (h) must be implemented no later than August 1, 2012, except that any training required by another paragraph of this section must be implemented no later than the deadline for that paragraph.

Kuparuk document, titled NSPL-0000-PL-5404 Controller Roles and Responsibilities, defines a Control room. The definition of "controller" reads: "A qualified individual who remotely monitors and controls the safety related operations of a pipeline facility via a Supervisory Control and Data Acquisition (SCADA) system from a control room; and who has operational authority and accountability for the remote operational functions of the pipeline facility." The definition does not indicate instances where the controller is controlling part of a pipeline facility through a non-SCADA means of control.

2. § 195.446 Control room management.

(a)

(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:

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

Kuparuk document, titled NSPL-0000-PL-5405, does not define the roles, responsibilities, and qualifications of others who have authority to direct or supersede the specific technical actions of controllers, and under what circumstances that authority may be exercised. Further, the procedure does not state that others are prohibited from having the "authority to direct or supersede the specific technical actions of controllers."

3. § 195.446 Control room management.

(a) ...

(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:

(5) Implement section 5 of API RP 1168 (incorporated by reference, see § 195.3) to establish procedures for when a different controller assumes responsibility, including the content of information to be exchanged.

Kuparuk document, titled NSPL-0000-PL-5407, Controller Shift Management, fails to provide adequate clarity on what information is required to be exchanged when a different controller assumes responsibility.

4. § 195.446 Control room management.

(a) ...

(d) *Fatigue mitigation.* Each operator must implement the following methods to reduce the risk associated with controller fatigue that could inhibit a controller's ability to carry out the roles and responsibilities the operator has defined:

(1) Establish shift lengths and schedule rotations that provide controllers off-duty time sufficient to achieve eight hours of continuous sleep;

Kuparuk document, titled NSPL-0000-PL-5407, Controller Shift Management, does not address methods to mitigate travel fatigue associated with controllers commuting long distances for their first controller shift at the duty station. During the inspection operator staff stated some controllers commute from their homes in the lower-48 states.

5. § 195.446 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:

(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 exceeding 15 months, that will assure controllers have sufficient time to analyze and react to incoming alarms;

Kuparuk document, titled NSPL-0000-PL-4906 SCADA and Alarm Management, does not provide a method to quantify the amount of general activity a controller is responsible for managing during a shift. Kuparuk seems to have defined total workload to be the number of alarms received on a shift. Kuparuk discusses the workload qualitatively, but does not address quantity of general activity or provide a benchmark to measure against.

6. § 195.446 Control room management.

(a) ...

(g) *Operating experience.* Each operator must assure that lessons learned from its operating experience are incorporated, as appropriate, into its control room management procedures by performing each of the following:

(1) Review accidents that must be reported pursuant to § 195.50 and 195.52 to determine if control room actions contributed to the event and, if so, correct, where necessary, deficiencies related to:

Kuparuk document, titled NSPL-0000-PL-5407 Controller Shift Management, does not include a

requirement for determining whether controller fatigue contributed to an accident/incident, and does not direct the reader to NSPL-0000-5120 Incident Investigation.

7. § 195.446 Control room management.

(a) ...

(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:

Kuparuk document, titled NSPL-0000-PL-5404, does not have adequate details on the elements of training for its controllers, and instead refers to the Operator Qualification program procedure NSPL-0000-PL-5403. Procedure NSPL-0000-5403 does not detail the requirements for an employee to become a qualified controller.

Additionally, NSPL-0000-PL-5404 does not provide a method detailing how to conduct the annual review of the controller training program.

8. § 195.446 Control room management.

(a) ...

(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:

(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.

Kuparuk's Training Program neither discusses nor describes the team members or employees identified to take team training.

Additionally, the Team Training section of the Training Program does not incorporate "lessons learned from actual historical events and other oil-gas industry events".

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 Kuparuk Transportation Company maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Dustin Hubbard, Director, Western Region, Pipeline and Hazardous Materials Safety Administration. In correspondence concerning this matter, please refer to **CPF 5-2021-017-NOA** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Dustin Hubbard
Director, Western Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration

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

cc: PHP-60 Compliance Registry
PHP-500 J. Dunphy (#20-187751)
Mr. Erec Isaacson, President, ConocoPhillips Alaska, Inc.,
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