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

901 Locust Street, Suite 480
Kansas City, MO 64106

NOTICE OF AMENDMENT

VIA ELECTRONIC MAIL TO: sburrows@pembina.com; hcburns@pembina.com; bbachmeier@pembina.com

June 3, 2024

Mr. Scott Burrows
President and CEO
Pembina Cochin, LLC
4000 585-8 Avenue SW
Calgary, Alberta, Canada

CPF 3-2024-029-NOA

Dear Mr. Burrows:

From July 26 to September 14, 2023, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code (U.S.C.), virtually inspected Alliance Pipeline L.P.'s (Alliance) procedures for Control Room Management (CRM) in Calgary, Alberta, Canada. On April 1, 2024, Enbridge sold the Alliance Pipeline to Pembina which included operations of the Control Room.

As a result of the inspection, PHMSA has identified the apparent inadequacies found within Alliance's plans or procedures. The items inspected and the inadequacies are described below:

1. § 192.631 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 . . . .
(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:

Alliance's procedures, “CRM-70-100,” Version 3.0, dated May 30, 2023 (CRM Plan) and “Gas Control Operations Manual GAS-MANL-0004,” Version 7.0, dated May 2, 2023 (Gas Manual), were not adequate to define the controller's role during temporary, impromptu (unplanned) changes in controller responsibilities, per § 192.631(b). The CRM Plan and the Gas Manual both provided direction on when a controller would be absent from the console for periods of time. CRM Plan section 4.3.17 covered periods of time both less than and greater than 15 minutes away from the console. Gas Manual section 11 addressed an unattended control room. section 11.1 requires the Gas Control Supervisor or Specialist to provide temporary relief for periods longer than 15 minutes. This was a different requirement than the one included in section 4.3.17 of the CRM Plan.

The Unattended Control Room process located in section 11 of the Gas Manual was not adequate to define a controller’s roles and responsibilities. The Flowchart in section 11.1.1 had two flow paths. If there are not two controllers on duty and the controller will be away for greater than 15 minutes, a supervisor will either assume control of the console or monitor the console remotely (no control through Citrix). There was no limit on this action for how long the stand-in controller could operate remotely, and there was no shift turnover or exchange of information requirement.

If there were two controllers on duty, then the procedure condition benchmark was when the controller was gone greater than 60 minutes. If the procedure answer was "YES" to this condition, then a relief controller was secured and a "mid-shift handover" conducted. A mid-shift handover was not defined by procedures as to what information was required to be exchanged. For example, during the inspection the PHMSA inspector asked whether the mid-shift turnover required something less than a regular turnover or just something between the start and the end of a shift. Alliance was not able to offer an adequate response. This process was not complete and, in practice, was possibly more integrated than the flowchart provided.

During the inspection, Alliance also described a practice that took place when a controller became incapacitated and while acting as the only controller in the control room. This practice was not defined in procedure. This may have related to the inactivity alarm, but the procedure in section 11.1 indicated that the inactivity alarm had been disabled since the start of COVID in calendar year 2020. The function of the activity alarm needs to be verified and included in the procedure if it is being utilized or disabled.

Alliance’s procedures need to be amended to include further definition of mid-shift turnover requirements, verification of the inactivity alarm and its inclusion in the procedure if required, formalization of the practice of what happens when a controller becomes incapacitated, and limitation to how long a stand-in controller can operate remotely.

2. § 192.631 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. . . .
(b) . . . .
(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:

Alliance's CRM Plan section 5 was not adequate to identify operator specific fatigue risks, per § 192.631(d). Specifically, section 5 only provided consequences of fatigue rather than the operator specific risks that can cause fatigue. The risks should be identified in the procedure and used to develop mitigation strategies.

The procedure needed to be amended to identify operator specific fatigue risks. Post-inspection, Alliance amended the procedure to identify fatigue risks. This was reviewed and determined to be adequate. No further action is required.

3. § 192.631 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. . . .
(b) . . . .
(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 by no later than January 23, 2018.

Alliance's CRM Plan section 9, subsection 4.3.13.4.4, was not adequate to identify 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, per the requirements of § 192.631(h)(6). Specifically, section 9 stated "list of personnel required to participate in CRTT (Team Training) is maintained in the Learning Management (LMS) system." CRM Plan section 11, subsection 4.2.2.12, referenced Appendix D of the CRM Plan, which listed groups that support the control room. This section detailed a task assigned to a supervisor under workload management that stated, "develop and maintain a list of internal and external resources necessary for the Control Room to meet its operational objectives, that shall include functional area, and position/job title (Appendix D)." While this is a reasonable list, it was not intended to define who collaborates with the control room for the purpose of Team Training. This definition should be included in the CRM Plan.

The procedure needed to be amended to include the groups and general job titles of individuals who operationally collaborate with control room personnel to augment the procedure and clarify who should be included in the LMS system for Team Training. This addition would ensure that, if there are groups that need to be added or deleted, the procedure review will drive the LMS list modifications.

Post-inspection, Alliance provided amendments to the procedure and a new Appendix E, to include job groups and titles of individuals who operationally collaborate with control room personnel. This was reviewed and found to be adequate. No further action is required.

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 Enforcement 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 30 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 that Alliance maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Gregory A. Ochs, Director, Central Region, Pipeline and Hazardous Materials Safety

Administration. In correspondence concerning this matter, please refer to **CPF 3-2024-029-NOA** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

GREGORY ALAN OCHS Digitally signed by GREGORY ALAN OCHS
Date: 2024.06.03 11:40:25 -05'00'

Gregory A. Ochs
Director, Central Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration

cc: Heather Christie-Burns, Pembina US, Vice President, Transmission Pipelines, hcburns@pembina.com
Bob Bachmeier, Senior Advisor Regulatory Pembina US, bbachmeier@pambina.com

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