



January 11, 2022

Mr. Dustin Hubbard
Director, Western Region
Pipeline and Hazardous Materials Safety Administration
12300 W. Dakota Ave., Suite 110
Lakewood, CO 80228

Re: NOTICE OF AMENDMENT CPF 5-2022-049-NOA

Dear Mr. Hubbard:

MWP appreciates the professionalism and thoroughness of the PHMSA staff during the Control Room Management audit conducted February 28 through March 4, 2022. MWP welcomes input from the PHMSA team and recognizes the listed concerns. MWP views this audit process as an opportunity to further improve its Control Room Management program in harmony with our core safety values. Below is MWP's response to remediate the procedural issues identified by the Western Region inspection team.

The following table has the numbered issue identified during the inspection corresponding to the document that was modified. Each of these documents is attached with this correspondence and are confidential as they contain details of a TSA secure system.

NOA	MWP Procedure
1	CRM Plan Section 2.8.5
2	CRM Plan Section 1.5.24 & 3.2.11
3	CRM Plan Section 5.3.3 & Style Guide
4	CRM Plan 3.2.7
5	CRM Plan Section 5.7.4
6	CRM Plan Section 6.1.2.a.9

NOA Item:

1. § 192.631 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:

(1)...

(5) Establish and implement procedures for when a different controller assumes responsibility, including the content of information to be exchanged.

MWP's procedures are inadequate to assure safe operation of a pipeline facility. Specifically, CRM Plan 2.8 *Shift Changes and Handover Responsibilities* fails to require that both outgoing and incoming controllers document the transfer of operational information on the DEQP Control Hand-over Sheet. Instead, CRM Plan 2.8 requires only that a verbal review of the DEQP Control Hand-over Sheet be conducted.¹ MWP must amend its procedures to provide for the documentation of the transfer of operational information on the DEQP Control Hand-over Sheet.

Response:

CRM Plan Section 2.8.5 was updated, adding the following language (procedure included with this transmittal):

2.8.5 System accountability is transferred to the next shift when the alarms cleared box is checked and all controllers (incoming and outgoing) have signed off on the handover sheet, at the conclusion of the shift hand-over procedure.

NOA Item:

2. § 192.631 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:

(1)...

(2) Conduct a point-to-point verification between SCADA displays and related field equipment when field equipment is added or moved and when other changes that affect pipeline safety are made to field equipment or SCADA displays;

MWP's procedures are inadequate to assure safe operation of a pipeline facility. Specifically, MWP's CRM Plan Section 1 does not define the term "point." Although MWP includes definitions for the terms "safety-related" and "safety-related alarm," its procedures fail to define the term "point" – a related term that is required to operate the SCADA system. Additionally, MWP's CRM Plan Section 3.2 does not define the time period by which point-to-point verification must be completed.

MWP must amend its procedures to define the term "point" as it pertains to MWP pipeline operations, and define a time period by which point-to-point verifications must be completed when field equipment is added or moved, or when other changes that affect pipeline safety are made to field equipment or SCADA displays.

Response:

CRM Plan Sections 1.5.24 and 3.2.11 were updated, adding the following language (procedure included with this transmittal):

1.5.24. Point: Individual analog or digital data or control received in the SCADA system from a remote field device.

3.2.11. Whenever a change, which affects Pipeline safety, is made to a SCADA display, the change shall be verified using the Station Verification form between Gas Control and SCADA personnel.

The verification shall be recorded in the Verification Log. The verification shall take place prior to Controllers being authorized to use changes for control.

NOA Item:

3. § 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) Review SCADA safety-related alarm operations using a process that ensures alarms are accurate and support safe pipeline operations;

MWP's procedures are inadequate to assure safe operation of a pipeline facility. Specifically, MWP's CRM Plan Section 5.3 fails to provide for review of all SCADA safety-related alarms that the SCADA system generates. During the inspection, PHMSA learned that the MWP SCADA system allows alarms to annunciate and then clear themselves from the alarm screen without controller action. The MWP CRM Plan provides for review of only those alarms that remain unresolved at the end of each month. This method of alarm management and alarm review, however, fails to provide the company with a full understanding of how the SCADA system is operating and fails to provide the controller with full situational awareness of pipeline operations.

Additionally, the existing MWP SCADA style guide fails to include a naming convention for points and alarms. MWP must amend its procedures to provide a process that ensures alarms are accurate and support safe pipeline operations, including requiring that all alarms be acknowledged by a controller, and not auto-deleted. Further, MWP must amend its procedures by updating its style guide to include naming conventions for points and alarms.

Response:

For clarification, MWP gas controllers must acknowledge each and every alarm that comes through the SCADA system. These alarms do not annunciate and clear themselves. However, MWP modified the Monthly Review Log (MRL) to capture inhibited alarms that have returned to a normal state prior to the review being conducted.

CRM Plan Section 5.3.3 was updated, adding the following language (procedure included with this transmittal):

5.3.3. The MRL shall track all Safety-Related operational alarms and status alarms that have been taken off scan, alarms inhibited, generated False Alarms, have had a forced value, or manual value. Once a month a Senior or Lead Controller shall review the changes recorded for Safety-Related points taken off scan, alarms inhibited, False Alarms, forced values, and manual values. The MRL records the Controller who reviewed the points and the date reviewed. If needed, a note can be added to the change record for an explanation. The MRL also records when a Safety-Related operational alarm and status alarm has been changed back to the normal state; this record can be used to analyze how long a Safety-Related point was alarmed.

MWP modified the Style Guide by creating two documents, the SCADA data descriptors and SCADA alarm descriptors which include naming conventions for points and alarms. These documents are included in this transmittal.

NOA Item:

4. § 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) ...

(3) **Verify the correct safety-related alarm set-point values and alarm descriptions at least once each calendar year, but at intervals not to exceed 15 months;**

MWP's procedures are inadequate to assure safe operation of a pipeline facility. Specifically, MWP's CRM plan does not contain a written procedure for the determination of SCADA safety-related alarm set-point values or a written procedure describing how safety-related alarm descriptions are designated. Consequently, it is unclear how MWP verifies correct set-point values and alarm descriptions pursuant to the requirements set forth in § 192.631(e)(3). MWP must amend its procedures to identify the method and procedure by which safety-related alarm set-point values and safety-related alarm descriptions are established.

Response:

CRM Plan Section 3.2.7 was updated, adding the following language (procedure and documents identified are included with this transmittal):

3.2.7. Before SCADA verification, Gas Control reviews all status and limit alarms and classifies the status as Safety-Related or non-Safety-Related and sets safety-related limit alarms appropriately based on design criteria as established in section 3.2.1. Procedures for alarm set-points are located in this document: \\SLCData02\Data1_COC2\DeptData\Gas Control\PHMSA\Alarm Management\Yearly Alarm Review\Limit alarms.xlsx, and procedures for SCADA data descriptors are located here in this document: \\SLCData02\Data1_COC2\DeptData\Gas Control\PHMSA\Gas Control Screens\SCADA data descriptors.docx.

NOA Item:

5. § 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) ...

(6) **Address deficiencies identified through the implementation of paragraphs (e)(1) through (e)(5) of this section.**

MWP's procedures are inadequate to assure safe operation of a pipeline facility. Specifically, MWP's CRM plan Section 5.7 lacks specificity on how identified deficiencies will be documented and tracked through to full remediation. MWP must amend its procedures to provide for the identification and documentation of CRM Plan deficiencies from identification through to full remediation.

Response:

CRM Plan Section 5.7.4 was updated, adding the following language (procedure included with this transmittal):

5.7.4 Remedial Action Report process documents and tracks the deficiency through full remediation.

NOA Item 6:

6. § 192.631 Control room management.

(a)...

(f) *Change management.* Each operator must assure that changes that could affect control room operations are coordinated with the control room personnel by performing each of the following:

(1) ...

(2) Require its field personnel to contact the control room when emergency conditions exist and when making field changes that affect control room operations;

MWP's procedures are inadequate to assure safe operation of a pipeline facility. Specifically, MWP's CRM Plan Section 6.1 fails to include maintenance activities in the list of activities field staff should notify gas control room personnel about. MWP must amend its procedures to include all activities conducted by field personnel that affect control room operations in the list contained in CRM Plan Section 6.1.

Response:

CRM Plan Section 6.1.2.a.9 was updated, adding the following language (procedure included with this transmittal):

6.1.2.a.9. regular maintenance activities;

If you have any questions or requests pertaining to this matter, please do not hesitate to contact me or Douglas Brunt, Manager Pipeline Safety, douglas.brunt@mwpipe.com. MWP appreciates the opportunity to work with PHMSA to improve Company procedures and pipeline safety processes.

Regards,

Colleen Larkin Bell
President
MWP Pipeline