



September 13, 2022

**Via Electronic Mail to: Gregory.Ochs@dot.gov and Alan.Mayberry@dot.gov**

Mr. Gregory Ochs  
Director, Central Region  
Pipeline and Hazardous Materials Safety Administration  
U.S. Department of Transportation  
901 Locust Street, Suite 480  
Kansas City, Missouri 64106

**RE: CPF No. 3-2022-046-NOA: Response**

Dear Mr. Ochs:

DTE Midstream Appalachia, LLC (DTM or the Company) received the above-referenced Notice of Amendment (“NOA”) issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA or the Agency) on May 12, 2022.

PHMSA identified potential inadequacies in DTM’s Control Room Management (CRM) procedures and records. DTM does not contest the NOA and has made changes to its CRM plan and Operations & Maintenance procedures that it believes addresses the potential inadequacies.

Please bear in mind when reviewing our response that the subject CRM inspection occurred during the period August 23-27, 2021 during which time DTM employed the CRM services of DTE Gas who, at the time, was a sister company of DTM’s under DTE Energy. On May 1, 2022, as a result of the DTM spinoff from DTE Energy on July 1, 2021, DTM switched control room management services to Everline. Since we are no longer using DTE Gas’ CRM services it seemed more practical to respond to the Compliance Actions based on how Everline’s CRM Plan would have responded to the alleged violations. A copy of the current Everline CRM Plan is enclosed.

**1. § 192.631 Control room management.**

**(a) *General.***

**(1) 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, except that for each control room where an operator’s activities are limited to either or both of: . . . .**

**(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:**

....

**PHMSA Identified:**

DTM procedures were inadequate to define the limit of a controller's roles and responsibilities in the operation of systems presented on the various consoles. The procedures defined console asset and facility assignments. However, when a controller logged in to SCADA he had access to all control room console assets, in addition to the one he is assigned to work. The Principal or Senior Controller has access to view all alarms and monitor all systems. While the controllers "understood" they are to only operate the systems on their assigned console, either language needs to be added to disallow controllers from operating or responding to alarms on another console, or the SCADA system needs to be set up to disallow access beyond the assigned controller console.

**DT Midstream Response:**

Since the completion of Staff's inspection in August of 2021, DTM has moved all of their pipeline Control Room functions from DTE's Gas Control to Everline's Gas Control. As such, our response's will be drawn from Everline's Pipeline Control Room Management Plan (Ver. 15, 03/01/2022) as well as DT Midstream's Operations and Maintenance Procedure 631 – Control Room Management (Rev. E, June 2022). A copy of both these documents are included with this letter.

This issue is addressed by Section 3.2 of Everline's CRM Plan on page 3-2. The amendment is highlighted in yellow below:

**3.1 Domain of Responsibility**

Controllers have the operational responsibility for the pipelines and desk materials that are included on the operating console(s) that the Controller occupies for a given shift and per the requirements in **Section 3.1 Authority and Responsibility**. A detailed list is available in **Exhibit B**. **Only one individual can serve as the Controller over a given Domain of Responsibility at time. The Domain of Responsibility is established during each shift turnover, by completion of a Shift Turnover Checklist (FORM 11-1) for the outgoing and oncoming Controller(s).**

**Note:** Trainees, while serving as the Controller over a given Domain of Responsibility, will be observed by a Qualified Controller.

2. § 192.631 Control room management.

(a) *General.*

(1) 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, except that for each control room where an operator's activities are limited to either or both of: . . . .

(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 with the authority to direct of supersede the specific technical actions of a controller.

**PHMSA Identified:**

DTM's procedure GCCRM-305 Rev 1.4 5/6/2021 and CRM Plan July 19, 2021 Version 3.2 was inadequate because it stated "No individual has the authority to supersede the Senior/Principle Gas controller on shift. The Gas Controller who has worked the longest as a Senior or higher in DTM's Gas Control has ultimate authority." The procedure was silent on the controllers who are not Senior or Principle levels. It does not address whether anyone can supersede them. Nor does the procedure address whether the Senior/Principle Controller can supersede the lower level controllers. There is no indication that consideration has been given to who can supersede or direct the controller. The operator indicated that the procedure assumes the senior can supersede or direct the controller.

Additionally, the procedure left the assumption that the Senior/Principle controller is qualified. The procedure did not include the events that would lead or require superseding a controller or how that would be documented.

The procedure needs to be amended to clearly define who can supersede the specific technical actions of all controllers, their qualifications, conditions under which these actions can occur, and how the events will be documented.

**DT Midstream Response:**

Since the completion of Staff's inspection in August of 2021, DTM has moved all of their pipeline Control Room functions from DTE's Gas Control to Everline's Gas Control. As such, our response's will be drawn from Everline's Pipeline Control Room Management Plan (Ver. 15, 03/01/2022) as well as DT Midstream's Operations and Maintenance Procedure 631 – Control Room Management (Rev. E, June 2022). A copy of both these documents are included with this letter.

This issue is addressed by Section 3.1 and Section 3.4 of Everline's CRM Plan. The amendment

is highlighted in yellow below:

### **3.1 Authority and Responsibility**

Controllers are responsible for the safe control room operation of the pipeline and must maintain qualifications to perform covered tasks identified in the Qualification Program required by Everline's clients. Everline prohibits anyone who has not been trained and qualified, compliant with this Program, from performing Controller duties, unless working as a trainee whereby the trainee will be observed by a Qualified Controller. Only Qualified Controllers are provided a log-in to access the SCADA system to perform Controller duties.

Each Controller on duty has the authority and responsibility to shut down any pipeline that they are operating if there are any indications of a release or that the system is operating outside safe operating parameters. Controllers do not need to seek approval from the Control Room Manager or other authorized personnel prior to taking action to shut down or isolate the system if there are any indications of a release or if the system is operating outside safe operating parameters. Authority to restart a pipeline that has been shut down due to a potential release should follow the Asset Specific O&M Manuals or ERP Manuals.

Controllers do not have the authority to adjust critical alarm set points. Controllers do not have the authority to take points off scan. Controllers do not have authority to inhibit alarms without approval from the Control Room Manager – approval should be noted in the Controller Log Book, summarizing the conversation with the Control Room Manager and the time of the conversation.

### **3.4 Controller Responsibility**

The Controller must ensure the shift change operations are conducted at a time that does not interfere with the fulfillment of any SCADA command actions that are critical to pipeline operations or communications with field personnel.

Controllers are required to stay at the console to verify all SCADA commands that have been initiated are fulfilled and that commands given via verbal communications are acknowledged before leaving the console.

Controllers are responsible for documenting all activities affecting the control room operation and safety of the pipeline. The Controller is responsible for keeping a logbook at the console to document the

activities, including the time, date and activity as well as contacts made.

**Note:** Only the Lead Controller has the authority to direct or supersede the specific technical actions of a controller in control of the pipeline. In that instance, the Lead Controller is responsible for ALL operational actions taken or directed to the controller to take (or not take.) This action, if taken, will be recorded in the controller's log. If the primary Controller disagrees with the directed or superseded technical actions, a shift turnover, compliant with **Section 5 Shift Turnover**, may be performed to replace the conflicted Controller. The comments section of the turnover checklist will reflect this event.

### 3. § 192.631 Control room management.

#### (a) *General.*

(1) This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all of 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, except that for each control room where an operator's activities are limited to either or both of: . . . .

(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) Implement sections 1, 4, 8, 9, 11.1, 11.3 of API RP 1165 (incorporated by reference, see §192.7) whenever a SCADA system is added, expanded or replaced, unless the operator demonstrates that certain provisions of sections 1, 4, 8, 9, 11.1 and 11.3 of API RP 1165 are not practical for the SCADA system used.

#### **PHMSA Identified:**

DTM's CRM Plan Section 402 was not adequate because it did not define addition, expansion, or replacement of a SCADA system that would require implementing the required sections of API RP 1165 in § 192.631(c)(1). The language of this section restated the regulation. Three examples provided were: upgrade to a different operating system that affects display parameters, replace/addition of workstations that effect display parameters, new drawing tool for displays that affect display parameters. When DTM acquired AGS/SGG they employed a different SCADA system. DTM chose to design the new screens for the acquired assets and add them to their SCADA system rather than bring the different SCADA system and screens into their control room. Their examples did not cover this type of event nor others that have nothing to do with display parameters.

The procedure needs to be amended to include definitions of add, expand and replace in addition

to examples of these events.

### **DT Midstream Response:**

Since the completion of Staff's inspection in August of 2021, DTM has moved all of their pipeline Control Room functions from DTE's Gas Control to Everline's Gas Control. As such, our response's will be drawn from Everline's Pipeline Control Room Management Plan (Ver. 15, 03/01/2022) as well as DT Midstream's Operations and Maintenance Procedure 631 – Control Room Management (Rev. E, June 2022). A copy of both these documents are included with this letter.

This issue is addressed by Section 4.5 of Everline's CRM Plan as shown in the excerpt below:

#### **4.5 Pipeline SCADA Displays and API RP-1165**

API RP-1165 shall be implemented whenever any additions, expansions, or replacements have been made to the SCADA system after implementation of this manual and will follow Everline's SCADA Functional Technical Specification (e.g. upgrades to later versions of SCADA software or upgrades to larger/faster hard drives). This would include changes that DO impact display parameters (i.e. display symbols, color palettes or anything that affects the controller-machine interface). Routine upgrades or modifications of existing SCADA systems that do not impact display parameters, such as operating system, applications software or hard drive upgrades do not necessarily require implementation of API 1165. This requirement shall be waived if it is demonstrated that the API RP-1165 requirements are not practical to implement. This may be demonstrated by a description, in memorandum or other form, of why API RP-1165 is not appropriate for a given system change. Result of this review shall be documented utilizing **Form 11-17**.

##### **4.5.1 Client Integrations**

When Everline integrates a new Client with an existing SCADA platform, there may be a period where the pipeline system is remotely controlled through the existing platform until the system is fully integrated into Everline's Clear SCADA platform. During this interim time, Everline shall ensure they are the proprietary controllers of the system. Remote control of the existing systems shall not be controlled in conjunction with existing Client controllers, unless specific procedures have been established between Everline and the Client. Everline will conduct a design review of the Client's existing SCADA System and identify any differences between Everline's SCADA standard and Client's SCADA Standard.

When Everline integrates new Clients with an existing SCADA platform and the existing platform design does not materially differ from Everline's platform design, Everline may operate on the Client's existing SCADA platform indefinitely. In these cases, Everline will conduct a design review of the Client's existing SCADA system and identify any differences between Everline's SCADA standard and Client's SCADA Standard. Everline will provide the Client's SCADA standard at the console for reference, conduct additional training on the Client's SCADA standard and provide a summary template identifying the key differences between Everline's SCADA standard and Client's SCADA standard.

#### **4.5.2 Number of Monitors per Controller Console**

Controller consoles and workstations are equipped with multiple monitors, typically 10-14 monitors. The exact number of monitors chosen is based on expected controller workload, the number of displays to be viewed concurrently, and how much information can be clearly presented on each monitor. Monitors are positioned horizontally in front of or around the controller and typically stacked on two or more rows.

#### **4.5.3 Consistency**

Display designs are documented in Everline's SCADA Functional Technical Specification or the Client's SCADA standard. For consoles where a Client's SCADA system is displayed, Everline provides a copy of the SCADA standard at the console for reference, conducts additional training on the Client's SCADA standard and provides a summary template identifying key differences between Everline's SCADA standard and Client's SCADA standard. All SCADA standards referenced in this manual are listed in Exhibit Z.

#### **4.5.4 Controller Input Devices**

The controller input devices used for each system are a standard computer keyboard and mouse that are used to perform input on multiple monitors. For consoles where more than one SCADA system is displayed, Everline labels the input devices for each system.

4. § 192.631 Control room management.

(a) *General.*

(1) This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all of 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, except that for each control room where an operator's activities are limited to either or both of: . . . .

(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;

**PHMSA Identified:**

DTM's procedures were inadequate because they did not have a specific process to define when and how to identify and correct inaccurate or malfunctioning alarms. In practice they utilized the Defect Log to track SCADA related alarm issues once identified. The Training Plan section 1600 described that this log should be used, however, there are no other instructions or procedures on how to manage the content of the log. The log had an indicator for whether the issue was resolved or not. There were several entries that did not indicate they were resolved. Due to the observed unresolved issues, the operator was asked if they periodically review the outstanding issues. The operator answered they "do not look at this as often as they should." It was unclear if there was a connection back to Birdsboro Pipeline to track the "tickets" created from the control room to their maintenance group. DTM's control room, in practice, is using the Defect Log. Birdsboro and DTM's field maintenance groups may use JIRA and Gensuite, respectively, for field tracking.

The procedure needs to be amended to include a process to handle inaccurate and malfunctioning alarms, as well as other deficiencies, to make sure they are identified and corrected. The procedure needs to include the logging requirement, as well as any connection to the field maintenance work ticket process and follow-up reviews to ensure issues and deficiencies are identified corrected as quickly as possible.

**DT Midstream Response:**

Since the completion of Staff's inspection in August of 2021, DTM has moved all of their pipeline Control Room functions from DTE's Gas Control to Everline's Gas Control. As such, our response's will be drawn from Everline's Pipeline Control Room Management Plan (Ver. 15, 03/01/2022) as well as DT Midstream's Operations and Maintenance Procedure 631 – Control Room Management (Rev. E, June 2022). A copy of both these documents are included with this letter.

This issue is addressed by Section 8.9.1 and 8.9.6 of Everline's CRM Plan as shown in the



excerpt below:

### **8.9.1 Inaccurate alarms**

Inaccurate alarms include those alarms that are not functioning properly or could lead to an Abnormal Operating / Emergency Condition. These alarms may include but are not limited to:

- Inaccurate or Malfunctioning – These alarms can include false, stale, chattering, fleeting, etc. These alarms do not represent live data from the pipeline system and is usually a result of equipment malfunction. Inaccurate alarms can be identified by monitoring upstream or downstream operating conditions through the verification of pressures, flow rates, temperatures, or system status alarms. For example, if a pressure transmitter were to fail, the controller may receive a low-low alarm. By verifying the upstream and downstream pressures and flow rates on the system are constant, an operator can report to field support that an inaccurate or malfunctioning pressure transmitter needs to be fixed.
- Stale Data – This includes data that no longer represents live data from pipeline process and could result in an upset condition. Typically, stale data can result from communication system errors, SCADA system errors, operational practices to take points off-scan or inhibit alarms, forced values, calibration source left on a device, and other applicable causes

Follow **Section 8.9.6 – Reporting Alarm Problems / Malfunctions** to report.

### **8.9.6 Reporting Alarm Problems / Malfunctions**

All alarm problems / malfunctions shall be reported to a SCADA Technician as soon as possible, but no longer than end of the shift either via phone call or by creation of a ticket using the **Everline Customer Support Ticketing Portal**. The deficiency, list any alarm details, will be described to the SCADA team. The SCADA team will complete the documentation. The problem / malfunction will be communicated with affected personnel and by controllers during shift changes until the problem / malfunction has been corrected.

The qualified SCADA Technician investigating the situation should prioritize the alarms for correction in accordance with its relevance to safety (i.e. Safety- related alarms should be corrected as soon as possible vs non safety-related alarms). The problem / malfunction should be analyzed for recurring or chronic issues. When the problem / malfunction has been corrected, the SCADA Technician will complete documentation and all affected parties will be notified.

Note: Alarm adjustments must be made by a trained and qualified

I&E, SCADA programmers, or third party contractors.

**5. § 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 of 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, except that for each control room where an operator's activities are limited to either or both of:....

**(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 operation using a process that ensures alarms are accurate and support safe pipeline operations;**

**PHMSA Identified:**

DTM's procedures were inadequate because, while they stated in the Roles and Responsibilities section, to what degree controllers could change alarm limits or set points, inhibit alarms, or take points off-scan, the procedure did not include how a controller would suggest, submit or request changes if they thought it was necessary to ensure alarms are accurate and support safe pipeline operations, as well as managing the changes to pipeline alarm configurations.

The procedure needs to be amended to include a method of requesting and documenting change requests to alarm configurations outside those changes authorized by procedure.

**DT Midstream Response:**

Since the completion of Staff's inspection in August of 2021, DTM has moved all of their pipeline Control Room functions from DTE's Gas Control to Everline's Gas Control. As such, our response's will be drawn from Everline's Pipeline Control Room Management Plan (Ver. 15, 03/01/2022) as well as DT Midstream's Operations and Maintenance Procedure 631 – Control Room Management (Rev. E, June 2022). A copy of both these documents are included with this letter.

This issue is addressed by Section 8.7.1 of Everline's CRM Plan as shown in the excerpt below:

**8.7.1 Rationalization Process**

All alarms or changes in alarms, will undergo an alarm rationalization process that involves a team of knowledgeable individuals. The team of knowledgeable individuals may include:

- Experienced controllers from different shifts or teams;
- SCADA system engineers, programmers, or technicians;
- Safety and environmental experts;
- Pipeline engineers

- Maintenance or field personnel;
- Personnel knowledgeable about applicable regulations (safety, environmental, etc.)

The team will undergo a rationalization process that will include the following elements:

- Determine and discuss each configured and possible alarm on a point.
- Verify if the alarm should exist at all;
- Verify that an alarm does not duplicate another alarm under the same conditions;
- Determine appropriate alarm setpoints;
- Determine the appropriate priority of each alarm;
- Document alarm information (e.g. tag name, alarm description, etc.)
- Note any modification(s) needed to be made to the alarm;
- Record appropriate settings for each configuration for pipelines or facilities with different operating configurations;
- Include controllers input to determine alarm descriptions are clearly understood by all controllers.

The process is documented using a Chain of Custody Form that outlines each major step of the Rationalization Process and include approvals from each responsible party for each step completed. The Chain of Custody Form also defines MOC's training and communication associated with any alarm changes.

Everline's SCADA Manager leads the Rationalization Process in close coordination with the Control Room Manager, Controllers and Client representatives. For new systems, the SCADA Manager will perform a first draft Rationalization using Everline's latest Rationalization Template that includes the standard alarm configuration for Everline's most common devices. The draft Rationalization is documented in a draft Points List/Alarm Configuration. The SCADA Manager then shares the draft Rationalization with the Control Room Manager, at least one experienced Controller and a Client representative for review. After feedback and discussion among these individuals, the SCADA Manager finalizes the Points List/Alarm Configuration and completes system alarm configuration. For periodic rationalizations, the individuals involved follow a similar process, although the Rationalization Template may be modified and a new version issued based on feedback from Controllers, results of Monthly Alarm Reviews, system expansions or changes. Any change to the Rationalization Template will follow the MOC process.

6. § 192.631 Control room management.

(a) *General.*

(1) 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, except that for each control room where an operator's activities are limited to either or both of: ....

(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.

**PHMSA Identified:**

DTM's CRM Plan was inadequate because there was no process for management review of the Alarm Response Log which documents various alarm deficiencies to verify remediation in a timely manner.

Section 603 of the CRM plan stated, "[A]larms classified as safety related shall be reviewed for stale or unreliable indication to Gas Control and an action plan for remediation to be created immediately upon discovery." TP-1 Section 1.4, 1.5, 1.6, 2.0 and 3.0 related to actions required for various types of Loss of Communication. Section 603 does not reference TP-1 to tie stale and inaccurate alarms to loss of communication action. It is not clear if the "action plan for remediation" is defined by TP-1.

TP-1 requires the controller to document in the Alarm Response Log several types of alarms that may be encountered. The Training Plan, in section 2c, included a requirement for discussion of the Alarm Response Log. However, there was no process for management review of the Alarm Response Log information to review the status for repair or remediation, frequency or length of time for repairs.

The procedure needs to be amended to include how the Alarm Response Log, or other methods, supports the action plan for remediation of alarms reported to the Log. It must also include roles and responsibilities to define who is responsible to review the logs on a periodic basis to ensure remediation is scheduled and completed. The procedure also needs to include the name of the person responsible to document the completion of a remediation task. This process also needs to be included in the training program.

## **DT Midstream Response:**

Since the completion of Staff’s inspection in August of 2021, DTM has moved all of their pipeline Control Room functions from DTE’s Gas Control to Everline’s Gas Control. As such, our response’s will be drawn from Everline’s Pipeline Control Room Management Plan (Ver. 15, 03/01/2022) as well as DT Midstream’s Operations and Maintenance Procedure 631 – Control Room Management (Rev. E, June 2022). A copy of both these documents are included with this letter.

This issue is addressed by Section 8.10, specifically 8.10.6, of Everline’s CRM Plan as shown in the excerpt below:

### **8.10.6 Deficiencies**

All deficiencies corresponding with the Alarm Management Plan shall be reported to the Control Room Manager as soon as possible and shall be documented on **Form 11-16 Alarm Management Plan Deficiencies** or via the **Everline Customer Support Ticketing Portal**. The Control Room Manager will work with the SCADA Tech to correct the deficiency and should correct specific issues commensurate with their importance to safety (i.e. Safety-related alarms should be corrected as soon as possible vs non safety- related alarms). All Alarm Management Plan Deficiencies shall be scheduled for correction on the same basis as the Alarm “Priority” status in SCADA (Critical, High, Low, etc). If multiple Alarm Management Plan Deficiencies of the same priority, then they’ll be corrected on a “first-in, first-out” basis.

Any deficiencies that pose a threat to people, property or the environment will be the highest priority and will be corrected immediately. If necessary, the Control Room Manager has the responsibility to make a determination that, for the safe operation of the pipeline system, through discussions with SCADA Tech, Controllers, and any other pertinent information sources, dictate that the pipeline system be shutdown or Controlled in Manual Mode until corrective action has been taken and the deficiency has been repaired.

Any deficiencies identified shall promptly be corrected.  
Documentation for deficiencies should include:

- Itemized list of deficiencies,
- Date of discovery of each deficiency,
- Corrective action taken per deficiency,
- Completion date (or schedule) for corrective action, and
- Basis for selection and scheduling of corrective action.

Note: Follow **Section 8.9.6 – Reporting Alarm Problems / Malfunctions** to report Alarm Problems / Malfunctions.

All documentation shall be kept in accordance with **Section 2 – Plan Review Documentation** of this program.

7. § 192.631 Control room management.

(a) *General.*

(1) This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all of 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, except that for each control room where an operator’s activities are limited to either or both of: . . . .

(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) Establish communications between control room representatives, operator’s management, and associated field personnel when planning and implementing physical changes to pipeline equipment or configurations.

**PHMSA Identified:**

DTM’s procedures were inadequate to ensure changes in field equipment that could affect control room operations are coordinated with the control room personnel. Procedure BG-ENG- SO33F SWI Management for Change Request Instructions and Form did not include requirements to consider whether the change affected control room operations. The Control Center was not a choice in the list of affected groups.

DTM’s Management Change Procedure needs to be modified to include consideration of the control room when changes are proposed.

**DT Midstream Response:**

Since the completion of Staff’s inspection in August of 2021, DTM has moved all of their pipeline Control Room functions from DTE’s Gas Control to Everline’s Gas Control. As such, our response’s will be drawn from Everline’s Pipeline Control Room Management Plan (Ver. 15, 03/01/2022) as well as DT Midstream’s Operations and Maintenance Procedure 631 – Control Room Management (Rev. E, June 2022). A copy of both these documents are included with this letter.

This issue is addressed by Section 7.1 of Everline’s CRM Plan as shown in the excerpt below:

**7.1. Management of Change**

The Management of Change (MOC) shall be used to track and document all changes identified in this section. NOTE: MOC changes may result in updated procedures, alarm databases, point-to-point verifications, or etc.

Any of the items covered in **Section 7.2 – Systems / Processes Undergoing Change** will be evaluated for the need to implement this MOC process. A control room representative must participate in meetings where changes that could directly or indirectly affect the hydraulic performance of the pipeline (including routine maintenance and repairs) are being considered, designed and implemented. The control room representative must have sufficient technical procedural familiarity with control room activities to adequately perform this task. The control room representative must adequately communicate related information to all impacted controllers. The control room representative involved in the meeting is required to communicate any particulars to the control room. All MOC activities must be thoroughly documented and maintained in the Control Room Management Recordkeeping Files.

**NOTE:** Any MOCs NOT initiated by the Control Room will be lead by the Operations Manager (or designee) and meetings will be held to communicate any particulars with all applicable control room personnel. Corresponding documentation will be the responsibility of the Operations Manager (or designee.)

**8. § 192.631 Control room management.**

**(a) General.**

**(1) This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all of 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, except that for each control room where an operator’s activities are limited to either or both of: ....**

**(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;**

**PHMSA Identified:**

DTM’s Field Procedures were inadequate because Procedure 739 Pressure Control Inspection did not indicate to call Gas Control prior to starting work. Other procedures did include requirements to call the control room: Procedure 745 Valve Inspection, Procedure 739 OPP Maintenance, the ESD procedure, and Fire Alarm and Gas Atmosphere procedures.

DTM needs to amend all field maintenance procedures, and any other procedures (measurement, SCADA, etc.), to include requirements to call the control room prior to start of work.

**DT Midstream Response:**

Since the completion of Staff’s inspection in August of 2021, DTM has moved all of their pipeline Control Room functions from DTE’s Gas Control to Everline’s Gas Control. As such, our response’s will be drawn from Everline’s Pipeline Control Room Management Plan (Ver. 15, 03/01/2022) as well as DT Midstream’s Operations and Maintenance Procedure 631 – Control Room Management (Rev. E, June 2022). A copy of both these documents are included with this letter.

This issue is addressed by DT Midstream’s Operations and Maintenance Procedure 739, Section 5 (Rev. F, May 2022) excerpted below and with the full version attached:

**5. INSPECTION AND TESTING REQUIREMENTS**

**CAUTION: Prior to conducting any testing or inspections required by this procedure, the qualified person shall notify Gas Control of their intention. They shall also notify Gas Control upon their completion.**

**(A) Regulators and Relief Devices**

Record the annual inspection and test of pressure control and relief devices on Form 5202, Pressure Control Device Inspection & Test Report (see Appendix 1 of this Procedure) .....

**9. § 192.631 Control room management.**

**(a) General.**

**(1) This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all of 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, except that for each control room where an operator’s activities are limited to either or both of: . . . .**

**(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 define by the operator . . . .



## **PHMSA Identified:**

DTM's training program was not adequate to provide a structure approach to train each controller to carry out the roles and responsibilities define by the operator.

DTM's training program identified the training content in section 200, which included computer- based courses, field visits, classroom training, reading lists, tabletop exercises, and on the job training (OJT) of control. The controller was provided an on-boarding packet that included the Required Reading Checklist and the Discussion Checklist. The Reading Checklist required a sign off when complete, and the Discussion Checklist is a combination of interrogatories related to system operations and procedures and task completions such as remotely open/close

valve. Both must be completed for the controller to be considered ready for the next phase of training. This second phase of training focused on operating and monitoring the pipeline systems through a SCADA console and took approximately one year, at which point the trainee was eligible to take the OQ test.

What was missing from the training plan was a structured approach to training on the consoles. There was no plan for the controller to learn each unique system in a structured approach. For example, keeping a controller on one console until competency was achieved and then moving to the next. The controller was put into the operating mix with a 1:2 span of control mentoring and only a large operating document to reference some system operations related to alarm handling and select operations. The controller shift rotation rotated the controller through the various consoles. He may spend only two days on a console, then off two days then three days on another console. This training method leaves interpretation of how to develop critical knowledge of each system up to the controller.

Once the controller completed an 8-week training/orientation program they were assessed by the Discussion Checklist. Successful completion of this assessment moves the unqualified controller trainee into the shift rotation to operate one of the four consoles. There were no "how to" guides, alarm handling guidelines or operating procedures to support the controller training how to perform their roles and responsibilities under normal, abnormal, and emergency conditions. The controller training was unstructured OJT. One point of concern was that the operator did not have procedures for starting and stopping compressor stations remotely. It was shared that some compressor stations are manned and require the control room to start and stop compressors through direction to field employees. Other stations were capable of remote start and stop.

49 C.F.R. § 192.605 (a)(7) requires operators to have written procedures for "[S]tarting, operating, and shutting down compressor units." The operator did not develop procedures to address compressors. While for the local start and shut down stations it could be argued that the local field personnel have those procedures, the same argument cannot be made for the remote operated compressor stations. Adequate procedures would consider the different configurations of stations, types of compressors, and operating conditions to support the controller's roles and responsibilities when starting and stopping those facilities.

The procedures did not provide guidance for alarm handling that could be used as a training reference for controllers' consistent safe response to alarms. Instruction for this activity was

delivered orally by the qualified controller trainer.

The training plan Required Reading Checklist did not include DTM/Birdsboro Pipeline Emergency Plan which is different from DTM's emergency plan.

During the inspection, the operator shared a PowerPoint that reviewed storage summer mode operations and various winter settings, including max withdrawal. There was nothing in the training to help the controller refer to this information; controllers relied on Senior Controllers to provide this information.

The procedure must be amended to provide a structured training plan for each console operating system(s), as well as assessments for the controller on each console. Procedures must be developed and controllers trained, that address compressor start up, operation, and shut down for both manual starts/stops and remote starts/stop. Procedures also need to be developed to provide the controller training and guidance in alarm handling, especially considering that safety-related alarms can present as different priorities.

The operator indicated they were in the process of developing tests or assessments for each console to support evaluating the controller's progress. A procedure was also developed to address alarm handling.

**DT Midstream Response:**

Since the completion of Staff's inspection in August of 2021, DTM has moved all of their pipeline Control Room functions from DTE's Gas Control to Everline's Gas Control. As such, our response's will be drawn from Everline's Pipeline Control Room Management Plan (Ver. 15, 03/01/2022) as well as DT Midstream's Operations and Maintenance Procedure 631 – Control Room Management (Rev. E, June 2022). A copy of both these documents are included with this letter.

This issue is addressed by the whole of Section 10 of Everline's CRM Plan as attached.

DTM believes these changes addresses PHMSA's requirements. DTM remains committed to the safe operation of its pipeline system. Please feel free to contact me if you have any questions.

Sincerely,



Philip W. Coleman  
Director, Codes & Regulatory  
DT Midstream, Inc.

Enclosures

Everline RM Manual – Version 15

DTM O&M Procedure 631, Control Room Management, June 2022

DTM O&M Procedure 739, Pressure Control and Monitoring Equipment, May 2022

cc: David J. Slater, President & CEO, DT Midstream, Inc.  
Chris Zona, COO, DT Midstream, Inc.  
Maureen Williams, PHMSA