



**David W. McMasters**  
PHMSA Program Manager, Base Business & Control Center

February 6, 2020

**Via FedEx/E-mail**

Ms. Mary L. McDaniel, P.E.,  
Director, Southwest Region  
Pipeline and Hazardous Materials Safety Administration  
8701 S. Gessner, Suite 630  
Houston, TX 77074

**RE: CPF 4-2020-5004M  
NOTICE OF ADMENDMENT  
Response to Statements in Notice of Amendment**

Dear Ms. McDaniel,

Chevron Pipe Line Company ("Chevron") received the above referenced Notice of Amendment ("NOA") issued by the Pipeline and Hazardous Materials Safety Administration ("PHMSA") by certified mail received by CPL on January 23, 2020. The NOA directs Chevron to amend Chevron's procedures CRM – 101-Roles and Responsibilities and CRM – 109 Fatigue Risk Management System.

CHEVRON'S RESPONSE TO NOTICE OF AMENDMENT

In the NOA, PHMSA states the following:

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, and operator must define each of the following:
    - (4) **A method of recording controller shift-changes and any hand-over of responsibility between controllers.**

Chevron's procedures fail to properly define the roles and responsibilities of a controller during abnormal and emergency operating conditions.

At the time of the inspection, Chevron provided PHMSA inspectors with their procedure titled *CRM – 101 Roles and responsibilities*. Section 4.7 (page 3) states:

*4.7 In the event a Console becomes unattended for any reason (on duty Controller is unable to perform his or her duties; unfit for duty; because of illness, fatigue, car trouble or other issues) the following procedure shall be initiated:*

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4.7.3 *Until an off-duty Controller arrives, the Console Supervisor can select a Controller from the current on duty Controllers whose workload allows him or her to monitor the unattended console and their regular AOR.*

4.74 *If controlling actions are required to maintain the console in a "Safe and Controlled" state of operations, the Controller who is monitoring the unattended console can take direction from a qualified Controller for that console via telephone*

This procedure makes selection of a controller to monitor the console optional, giving the Console Supervisor the option to leave the pipeline running in an unmonitored state. Chevron's above procedure must be revised to make this selection mandatory, or specify another method to ensure the pipeline is kept in a "Safe and Controlled" state.

#### Chevron Response

Chevron has developed and follows Control Room Management procedures to ensure the safe operation of its pipeline systems. Chevron did not intend to allow the Control Room Supervisor the option of leaving pipeline(s) running in an unmonitored state. Upon further review of the procedure, Chevron will make Section 4.7 mandatory as required by PHMSA. CRM – 101 Roles and Responsibilities Section 4.7 has been amended as follows (highlight to show change):

- 4.7 In the event a Console becomes unattended for any reason (on duty Controller is unable to perform his or her duties; unfit for duty, because of illness, fatigue, car trouble or other issues) the following procedure shall be initiated:
- 4.7.1 Notification shall be made to the Console Supervisor.
  - 4.7.2 Console Supervisor shall immediately call in an off-duty Controller within FRMS guidelines.
  - 4.7.3 Until an off-duty Controller arrives, the Console Supervisor shall select a Controller from the current on duty Controllers whose workload allows him or her to monitor the unattended console and their regular AOR.
  - 4.7.4 If controlling actions are required to maintain the console in a "Safe and Controlled" state of operations, the Controller who is monitoring the unattended console can take direction from a qualified Controller for that console via telephone.

A copy of Page 3 from CRM – 101 Roles and Responsibilities has been attached for your review.

#### 2. §195.446 Control Room Management

**(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:**

**(4) Establish a maximum limit on controller hours-of-service, which may provide for an emergency deviation from the maximum limit if necessary for the safe operation of a pipeline facility.**

Chevron's procedures fail to establish an appropriate maximum limit on controller hours-of-service.

Chevron provided PHMSA inspectors with their procedure titled *CRM – 109 Fatigue Risk Management System*. Section 6.10.4 (page 12) states:

*6.10.4 The maximum number of hours worked in any seven (7) day period shall be 84 and shall be followed by at least 35 hours of off-duty time.*

Chevron regularly schedules their controllers for 84 hours in a seven-day period, with up to 30 minutes allowed for shift handover. The combination of the shift handover and the schedule shift controllers result in regular exceeding the 84-hour limit.

Chevron's procedure must be revised to establish an appropriate maximum number of hours worked, or the controller's schedule must be changed to work within the existing procedure.

#### Chevron Response

Chevron has developed and follows Control Room Management procedures to ensure the safe operation of its pipeline systems. Upon review of the procedure, Chevron agrees that the language in procedure titled *CRM – 109 Fatigue Risk Management System Section 6.10.4* should be revised to allow additional work hours to manage the shift change. CRM – 109 Fatigue Risk Management System Section 6.10.4 has been amended as follows (highlight to show change):

#### 6.10 Maximum Hours of Service

- 6.10.1 The maximum hours of service on one shift shall be 14, including the time for the shift exchange.
- 6.10.2 The maximum number of day shifts in a row shall be seven (7), and shall be followed by at least 35 hours of off-duty time.
- 6.10.3 The maximum number of night shifts in a row shall be seven (7) and shall be followed by at least 35 hours of off-duty time.
- 6.10.4 The maximum number of hours worked in any seven (7) day period shall be 90 hours including turnovers and shall be followed by at least 35 hours of off-duty time.
- 6.10.5 The Console Supervisor should plan with the Controllers so that these maximum hours of service are not exceeded, except in emergencies.

A copy of Page 12 from CRM – 109 Fatigue Risk Management System has been attached for your review.

Please contact the undersigned with any questions or comments in connection with this response to the NOA. Thank you for your time and attention.

Regards,



David W. McMasters

Attachments

- 4.3 Controllers shall stay at the Console to verify all SCADA commands that have been initiated are fulfilled, and that commands given through verbal communication are acknowledged before leaving the console.
- 4.4 Controllers shall not allow maintenance on the SCADA system during times when significant changes to pipeline operations are being performed.
- 4.5 Controllers shall utilize the Console Hand Held Alarm Viewer and forward console phone to console cell phone for kitchen, washroom, and any other temporary leave from the assigned console while on duty.
- 4.6 In the event the oncoming Controller fails to arrive for shift duty, the Controller on duty shall notify a Console Supervisor and remain on duty until properly relieved or instructed by the Console Supervisor to shut down the pipeline systems on their console.
- 4.7 In the event a Console becomes unattended for any reason (on duty Controller is unable to perform his or her duties; unfit for duty, because of illness, fatigue, car trouble or other issues) the following procedure shall be initiated:
  - 4.7.1 Notification shall be made to the Console Supervisor.
  - 4.7.2 Console Supervisor shall immediately call in an off-duty Controller within FRMS guidelines.
  - 4.7.3 Until an off-duty Controller arrives, the Console Supervisor shall select a Controller from the current on duty Controllers whose workload allows him or her to monitor the unattended console and their regular AOR.
  - 4.7.4 If controlling actions are required to maintain the console in a “Safe and Controlled” state of operations, the Controller who is monitoring the unattended console can take direction from a qualified Controller for that console via telephone.
- 4.8 If it becomes necessary to transfer control to the backup Control Center, the Controllers follow the instructions in the CPL Control Center Business Continuity Plan (BCP). Those instructions include requirements for controller console log on/log off during transition between control centers.

## 5 SECTION RESPONSIBILITIES

- 5.1 The Console Supervisors shall develop statements of roles, responsibilities, accountability, and authority.
- 5.2 The Console Supervisors shall ensure Controllers know their roles and fulfill their responsibilities.

- 6.9.2.1 Standing at the console at any time during a shift for 10-15 minutes.
  - 6.9.2.2 Strategic use of caffeine.
  - 6.9.2.3 Conversations and social interactions with other Controllers or other personnel.
  - 6.9.2.4 Breaks away from the console for brief periods of time, particularly the last four hours of a shift.
  - 6.9.2.5 Non-strenuous exercise either at or away from the console. The exercise could be walking, use of exercise bands, stretches, exercises on the "Alertness Exercises" card, or similar exercises, including use of equipment.
  - 6.9.2.6 Eating a healthful snack, chewing aromatic gum, and drinking a proper amount of water.
- 6.9.3 The fatigue countermeasures shall be documented each shift on the "Fatigue Countermeasures Log," which is retained for five years in the Control Center.

#### 6.10 Maximum Hours of Service

- 6.10.1 The maximum hours of service on one shift shall be 14, including the time for the shift exchange.
- 6.10.2 The maximum number of day shifts in a row shall be seven (7), and shall be followed by at least 35 hours of off-duty time.
- 6.10.3 The maximum number of night shifts in a row shall be seven (7) and shall be followed by at least 35 hours of off-duty time.
- 6.10.4 The maximum number of hours worked in any seven (7) day period shall be 90 hours including turnovers and shall be followed by at least 35 hours of off-duty time.
- 6.10.5 The Console Supervisor should plan with the Controllers so that these maximum hours of service are not exceeded, except in emergencies.

#### 6.11 Emergency Deviations from Maximum Hours of Service

- 6.11.1 An emergency, in the FRMS, is an unexpected and unplanned occurrence that requires deviations from regular work schedules in order to maintain safe pipeline operations.
  - 6.11.1.1 Examples of emergencies include:
    - Natural disasters or weather events.