Mr. Gregory A. Ochs  
Director, Central Region, Office of Pipeline Safety  
Pipeline and Hazardous Materials Safety Administration  
901 Locust Street, Suite 480  
Kansas City, MO 64106

Subject: Notice of Amendment CPF 3-2022-031-NOA  
Warning Letter CPF 3-2022-041-WL  
Plains Pipeline, L.P., Control Room Management

Dear Mr. Ochs,

On March 4, 2022, Plains Pipeline L.P. (Plains), received two emails from Pipeline and Hazardous Materials Safety Administration (PHMSA), one email with Notice of Amendment (Notice) for case CPF 3-2022-031-NOA and the other email with Warning Letter (Warning) for case CPF 3-2022-041-WL. Both the Notice and Warning pertain to a 2021 PHMSA Control Room Management (CRM) audit of Plains’ Control Center in Midland, TX. In the Notice PHMSA identified apparent inadequacies in Plains’ procedures and in the Warning PHMSA identified apparent inadequacies with Plains’ documentation, which are provided below in **bold italicized text**, followed with the corresponding Plains response. The Enclosure includes excerpted pages from Plains’ procedures that were revised to address the apparent inadequacies from the Notice, and the corresponding revised text in those pages were highlighted yellow:

### Notice of Amendment

1. **49 CFR 195.446 (a)**— Plain’s CRM procedure was inadequate because it did not provide a reference to the decision tree used to determine whether assets were considered control rooms. During the inspection, the operator explained how they used a decision tree to evaluate facilities for control room determination. The decision tree was completed and when locations were found that met the criteria of a control room, those facilities were brought into the designated control room for remote monitoring and control. The procedure also did not identify when this decision tree should be used. Therefore, the procedure must be amended.

   Plains’ Response: As shown on Pages E-1 through E-5 of the Enclosure, Plains revised Sections 1.2.2., 1.6.7., and 7.5.1.4. of the Control Room Management Plan and added Section 13.4. “Appendix D – Controller Definition Decision Tree” to the Control Room Management Plan to address Notice Item 1.

2. **§195. 446 (c)(1)**— Plains CRM Plan was inadequate because CRM Plan Section 3.6.2 merely restated §195.446(c)(1) and did not provide definitions or examples for addition, expansion.
or replacement of SCADA systems. There was a link in the SCADA Procedure Manual that led to a SCADA MOC Form 015. This form provided an audit check list to help verify API 1165 compliance when new points were added, or when assets were relocated and required SCADA design for new points or new screens. The CRM Plan did not reference the SCADA Procedure Manual.

The procedure needs to be amended to define additions, expansions and replacement definitions, and provide examples when for addition, expansion or replacement of SCADA systems is required.

Plains’ Response: As shown on Pages E-6 through E-9 of the Enclosure, Plains revised Sections 3.6.2.4.3, 3.6.2.4.3.1., 3.6.2.4.3.2., and 3.7.12. of the Control Room Management Plan to address Notice Item 2. The definitions noted in Sections 3.3.1., 3.3.4., and 3.3.6. as well as the reference noted in Section 3.7.11. of the Control Room Management Plan (blue highlight) were not revised, as their current versions were determined, during the inspection, to show compliance with Notice Item 2.

3. §195. 446(b)(2)— Plains Pipeline procedure for Point to Point was not adequate because it lacked thoroughness of the point-to-point verification and documentation, as required by §195.446(c)(2). CRM Section 3.6.3 Point to Point stated, in 3.6.3.7, “[T]he process shall verify the data value, information, and any control or alarm functions and sequence to/from the point are accurately represented on all SCADA displays provided to Controllers by testing a representative sampling of impacted displays.” This is not an acceptable practice for new or moved facilities. Points and alarm presentations must be verified on all screens where a point is presented. Documentation needs to provide verification of all screens reviewed. Additionally, the point-to-point test documentation requirements in Sections 3.6.3.11.1 - 3.6.3.11.7 did not include verification of the set point and alarm descriptions. It was identified, during the review of records, that while Plains did not document these elements of point-to-point testing, they were completed, as stated by a Plains representative, during the inspection, “[I]f the alarms didn’t come in right, or points were reading different it would not be a point to point per procedure.” There is no reference to the form that is used for P2P.

The SCADA Procedure Manual, Section 6, is less detailed than the CRM Plan. Section 6.2 provides different requirements for documentation than the CRM Plan. It also did not reference the form used for point to point verifications.

The procedure needs to be amended to provide guidance for new or moved points to complete a thorough point-to-point verification. The procedure needs to include, at a minimum, verification of values between field equipment and SCADA, correct alarm set points and alarm descriptions and alarm priorities, correct presentation on all relative screens, verification of SCADA tag to field device and location, the individual completing the verification, and the date completed.

Plains’ Response: As shown on Pages E-10 through E-18 of the Enclosure, Plains revised Sections 3.6.3.7., 3.6.3.11.1., 3.6.3.12. of its Control Room Management Plan and Section 6 “Point-to-Point (PTP) Verification” of the SCADA Procedures Manual to address Notice Item 3.
4. §195.446(e)(4)—Plains CRM Procedure Section 6.6.10 is inadequate because it did not provide metrics for determining if the Alarm Management Plan is effective, per §195.446(e)(4). Section 6.6.10.3.1–6.6.10.3.7 of the procedure provides performance measures for the annual Alarm Management Plan (AMP) Review. While the measures were reasonable, the procedure did not provide metrics for determination if the performance measures were meeting the operator’s expectation for an effective AMP. The procedure did include a review of the alarm system KPI performance reports. KPI metrics were adequately defined in Section 6.6.6 of the procedure.

The procedure needs to be amended to include metrics for the performance measures identified in the procedure to determine effectiveness of the AMP.

Plains’ Response: As shown on Pages E-19 through E-20 of the Enclosure, Plains revised Section 6.6.10.3. “Performance measures and metric targets...” of the Control Room Management plan to address Notice Item 4.

5. §195.446(h)(1)—Plains CRM Plan was inadequate because it did not identify abnormal conditions that could occur in sequence or simultaneously and provide training on those conditions, as required by §195.446(h)(1). During the inspection, the operator stated they “[O]nly train on single source abnormal conditions.” However, Section 9.4.2.4 of the CRM Manual states, “Preparing the Controller to recognize and respond to AOCs, as defined in the Operational and Maintenance (O&M) Manuals and Section 8 of this manual, including those likely to occur simultaneously or in sequence.” General Procedure 500-12 Appendix B provided a list of conditions related to the shut down and restart authority table. The operator presented, at the inspection, a power point delivered at the 4th quarter safety meeting in November 2020, Abnormal & Emergency Conditions, with a section called “how do you know” using a variety of abnormal operations to look for given the different pipeline conditions.

The procedure needs to be amended to identify abnormal operations that could present in series or sequence and include these operations in the training content.

Plains’ Response: As shown on Pages E-21 through E-28 of the Enclosure, Plains revised Section 9.4.2.4. “Controller Training Program” of the Control Room Management Plan, Section 500-0 “Abnormal Operating Conditions” of the Control Center General Procedures, and Pages 2, 11, and 12 of the Recognizing and Responding to Abnormal Operating Condition and Emergency Conditions Controller training presentation to address Notice Item 5.

Warning Letter

1. §195.446(e)(3)—Plains failed to complete the verification of correct safety-related alarm set-point values and alarm descriptors when associated field instruments are calibrated or changed and at least once each calendar year, but at intervals not to exceed 15 months. The operator stated, during the inspection, that prior to 2020, they were “just relying on the fact that safety related alarms were part of DOT maintenance; they were dependent upon the
field doing the job.” They could not validate that all safety related alarms were verified through this process.

In 2020, Plains changed its process (Section 6.6.12) to export all safety-related alarms to a format where it could review the set points and alarm descriptions. While Plains staff indicated they did look at all alarms, they did not have the documentation to support what they looked at.

Plains also modified its O&M manual to include the field safety related points and flagged them in Maximo, the operator’s work management system, as required work tickets. This was noted on the annual review log changes completed on February 5, 2021.

Plains’ Response: Plains has revised the format of the Console-Specific Procedures Annual Review Checklist, used when performing the annual review of safety-related alarms, to include all relevant alarm attributes, including alarm descriptions and alarm setpoint values.

2. §195. 446 (e)(4)—Plains failed to follow their procedure to provide documentation demonstrating compliance it performed review of the Alarm Management Plan (AMP) at least once each calendar year, but at intervals not exceeding 15 months, in order to determine the effectiveness of the plan for 2018, 2019, and 2020. In a review of the records, there was no reference or documentation of the performance measures outlined in sections 6.6.10.3.1 - 6.6.10.3.7 of the AMP. The Alarm Management Review Form has dates of 3/25/2019, 10/9/19, and 10/1/2020. A note in the 3/25/2019 review findings from the AMP review were noted in form 2018 CRM Plan and Procedures Review Improvement Action Items. This was a general tracking document for action items from review various control room procedures. Some of the items were obviously related to the Alarm Management Plan. While it appears some portion or all the review was completed in 2018, the documentation is dated in 2019. The operator was not able to explain this.

A document titled Pacific Pipeline Systems Console Procedures Annual Review Checklist 6/29/2020, provided as a 2020 compliance record, was submitted as an example for all consoles. Section 2 under the Console - Specific SCADA System & Screen Review provided questions for review related to accuracy of the SCADA data base for alarms set points and descriptions. This was not in the procedure. It could have been included as a performance measure, but it was not.

Also, while recommendations were made for improvements, there was no documentation to demonstrate what was reviewed, results compared to metrics, findings/deficiencies, and corrective actions. All that was provided were corrective actions. There were no links between performance measurements, findings/deficiencies, proposed corrective actions, completion of action items and documentation.

Plains’ Response: Plains has revised the format of the documentation (checklist) used when performing the annual plan and procedures review to include the “date of review” to ensure the date of review is not confused with the date the document/checklist was signed. This was explained during the inspection.
As stated previously in response to Warning Item 1, Plains has revised the format of the Console-Specific Procedures Annual Review Checklist, used when performing the annual review of safety-related alarms, to include all relevant alarm attributes, including alarm descriptions and alarm setpoint values.

Also, Plains has updated the format of all annual review checklists to include references to the relevant procedure, document, form, report, or other data summary used for analysis during the review process to determine plan/procedure effectiveness. And, as stated previously in response to Notice Item 4 requiring Plains to revise Section 6.6.10. of the Control Room Management plan “to include metrics for the performance measures identified in the procedure to determine effectiveness of the AMP”, Plains has revised Section 6.6.10.3 as requested.

Plains is asserting a claim of confidentiality as to the information contained in the Enclosure as it contains trade secrets and proprietary business information and as such, is for Agency use only and has been marked “Plains Pipeline, L.P. – Confidential and Other Information Protected Under Law – Do Not Disclose to Public or Other Third Parties.” The Enclosure contains information that is exempt from public disclosure pursuant to 5 U.S.C. §552(b). Plains is submitting both a complete original document and a version with the confidential information in the Enclosure redacted.

We appreciate the opportunity to correct the apparent inadequacies to our procedures, and trust this submittal addresses them satisfactorily. Should you have any questions you may contact me directly at 713-646-4452, email at PDHodgins@paalp.com or contact Kevin Cunningham by email at KHCunningham@paalp.com, or call 713-993-5568.

Sincerely,

Patrick D. Hodgins
Vice President, Health, Safety, & Environmental, NA

Enclosure

cc: Kevin Cunningham, Plains