

Inspection Output (IOR)

Generated on 2024.February.01 14:23

Report Filters

Assets All, and including items not linked to any asset.

Results All

Inspection Information

Inspection Name	8632 Seaport CRM Inspection	Operator(s)	SEAPORT SOUND TERMINAL, LLC (39906)	Plan Submitted	09/18/2023
Status	LOCKED	Lead	Derek Norwood	Plan Approval	09/19/2023 by Dennis Ritter
Start Year	2023	Team Members	David Cullom, Lex Vinsel, Anthony Dorrough, Scott Anderson, Tom Green	All Activity Start	08/28/2023
System Type	HL	Supervisor	Dennis Ritter	All Activity End	08/30/2023
Protocol Set ID	HL.2023.02	Director	Scott Rukke	Inspection Submitted	02/01/2024
				Inspection Approval	02/01/2024 by Scott Rukke

Inspection Summary

Inspection Scope and Summary

This Control Room Management Plan inspection was conducted at Seaport Sound Terminal in Tacoma, WA on August 28-30, 2023. The inspection included a review of Seaport's control management procedures, records and facilities.

There are two probable violations found as a result of this inspection see summary below and Questions CR.CRMTRAIN.TRAININGREVIEW.R and CR.CRMTRAIN.TEAMTRAINFREQ.P for specific details.

Facilities visited and Total AFOD

AFOD: 3 days

Summary of Significant Findings (DO NOT Discuss Enforcement options)

There are two probable violations found as a result of this inspection. The first is related to annual review of Seaport's controller training program (49 CFR 195.446(h)) and the second is related to Seaport's lack of team training and exercises as a part of their controller training program (49 CFR 195.446(h)(6)).

Primary Operator contacts and/or participants

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Scope (Assets)

#	Short Name	Long Name	Asset Type	Asset IDs	Excluded Topics	Planned	Required	Inspected	Total %	Required Complete
1.	88920	Seaport Sound Terminal	unit	88920	Offshore GOM HVL CO2 Biofuels Reg Rural Gather Rural Low Stress Abandoned	148	148	148	100.0%	

1. Percent completion excludes unanswered questions planned as "always observe".

Plans

Plan #	Assets	Focus Directives	Involved Groups/Subgroups	Qst Type(s)	Extent	Notes
1.	88920	Control Room Management	AR, CR, DC, TDC, EP, FS, IM, MO, PD, RPT, SRN, TD, TQ, 114, GENERIC	P, R, O, S	Detail	--

Plan Implementations

Activity #	Name	SMART Act#	Start Date	End Date	Focus Directives	Involved Groups/Subgroups	Assets	Qst Type(s)	Planned	Required	Inspected	Total %	Required Complete
1.	CRM	--	08/28/2023	08/30/2023	--	all planned questions	all assets	all types	148	148	148	100.0%	

1. Since questions may be implemented in multiple activities, but answered only once, questions may be represented more than once in this table.

2. Percent completion excludes unanswered questions planned as "always observe".

Forms

No.	Entity	Form Name	Status	Date Completed	Activity Name	Asset
1.	Attendance List	CRM	COMPLETED	09/18/2023	CRM	88920

Results (all values, 148 results)

CR.CRMGEN: General

1. Question Result, ID, References [Sat, CR.CRMGEN.CRMCRITERIA.P, 195.446\(a\)](#)

Question Text *Do procedures adequately address the process and criteria to determine which facilities are control rooms?*

Assets Covered 88920

Result Notes CRM Plan Section 2 Definitions

Seaport has 1 control, would shutdown if there were any issues

2. Question Result, ID, References [Sat, CR.CRMGEN.CRMMGMT.P, 195.446\(a\)](#)

Question Text *Are CRM procedures formalized and controlled?*

Assets Covered 88920

Result Notes CRM Manual in place, reviewed SOPs which are controlled and cannot be changed by unauthorized personnel

3. Question Result, ID, References **Sat, CR.CRMGEN.CRMIMPLEMENT.R, 195.446(a)**
 Question Text *Are procedures approved, in place, and implemented?*
 Assets Covered **88920**
 Result Notes **CRM in place, current revision is March 2021**
4. Question Result, ID, References **Sat, CR.CRMGEN.CRMPROCLOCATION.O, 195.446(a)**
 Question Text *Are procedures readily available to controllers in the control room?*
 Assets Covered **88920**
 Result Notes **Asked controller about procedures and quick reference sheet. Controller had access to binders with all procedures and knew how to access information**

CR.CRMRR: Roles and Responsibilities

5. Question Result, ID, References **Sat, CR.CRMRR.RESPONSIBLE.P, 195.446(b)(1)**
 Question Text *Are there clear processes to describe each controller's physical domain of responsibility for pipelines and other facility assets?*
 Assets Covered **88920**
 Result Notes **CRM Plan Section 3 Roles and Responsibilities**

One controller assigned as responsible individual
6. Question Result, ID, References **Sat, CR.CRMRR.QUALCONTROL.P, 195.446(b)(1)**
 Question Text *Are there provisions in place to assure that only qualified individuals may assume control at any console/desk?*
 Assets Covered **88920**
 Result Notes **CRM Plan Section 14**

Field Personnel Training

CRM Plan Section 9.5
7. Question Result, ID, References **NA, CR.CRMRR.DOMAINCHANGE.P, 195.446(b)(1)**
 Question Text *If the physical domain of responsibility periodically changes, has a clear process been established to describe the conditions for when such a change occurs?*
 Assets Covered **88920**
 Result Notes **Seaport physical domain for controllers does not periodically change. Controller has one station and controls entire pipeline**
8. Question Result, ID, References **Sat, CR.CRMRR.RESPCHANGE.P, 195.446(b)(1)**
 Question Text *Do processes address a controller's role during temporary impromptu (unplanned) changes in controller responsibilities?*
 Assets Covered **88920**
 Result Notes **CRM Plan Section 3 defines roles during normal, abnormal and emergency operations**
9. Question Result, ID, References **Sat, CR.CRMRR.COMMANDVERIFY.P, 195.446(b)(1)**
 Question Text *Do the defined roles and responsibilities require controllers 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 for any reason?*
 Assets Covered **88920**
 Result Notes **CRM Plan Section 3 defines roles during normal, abnormal and emergency operations**
10. Question Result, ID, References **Sat, CR.CRMRR.AUTHORITYABNORMAL.P, 195.446(b)(2)**

Question Text *Have processes been established to define the controllers' authority and responsibilities when an abnormal operating condition is detected?*

Assets Covered 88920

Result Notes CRM Plan Section 3 Roles and Responsibilities

2. Abnormal Operating Conditions

11. Question Result, ID, References Sat, CR.CRMRR.PRESSLIMITS.O, 195.446(b)(2)

Question Text *Are controllers aware of the current MOPs of all pipeline segments for which they are responsible, and have they been assigned the responsibility to maintain those pipelines at or below the MOP?*

Assets Covered 88920

Result Notes Discussed with controller alarm setpoints, MOP and what they would do if high pressure alarms occurred.

12. Question Result, ID, References Sat, CR.CRMRR.AUTHORITYEMERGENCY.P, 195.446(b)(3) (NTSB P-11-9)

Question Text *Do processes define the controllers' authority and responsibility to make decisions, take actions, and communicate with others upon being notified of, or upon detection of, and during, an emergency or if a leak or rupture is suspected?*

Assets Covered 88920

Result Notes Quick Reference Sheet reviewed for AOCs, O&M Subpart F outlines specific procedures for AOCs

CRM Plan Section 3.3

13. Question Result, ID, References Sat, CR.CRMRR.EVACUATION.P, 195.446(b)(3)

Question Text *Do processes specifically address the controller's responsibilities in the event the control room must be evacuated?*

Assets Covered 88920

Result Notes CRM Plan Section 3.4

14. Question Result, ID, References Sat, CR.CRMRR.COMMSYSFAIL.P, 195.446(b)(3)

Question Text *Do processes specifically address the controller's responsibilities in the event of a SCADA system or data communications system failure impacting large sections of the controller's domain of responsibility?*

Assets Covered 88920

Result Notes CRM Plan Section 7

15. Question Result, ID, References Sat, CR.CRMRR.HANDOVER.P, 195.446(b)(4) (195.446(c)(5))

Question Text *Have processes been established for the hand-over of responsibility that specify the type of information to be communicated to the oncoming shift?*

Assets Covered 88920

Result Notes CRM Plan Section 9

Shift Changes

16. Question Result, ID, References Sat, CR.CRMRR.HANDOVER.O, 195.446(b)(4) (195.446(c)(5))

Question Text *Do observations indicate adequate hand-over of responsibility to the oncoming shift?*

Assets Covered 88920

Result Notes Discussed with controller, shift changeover duties and process. Reviewed shift change forms which requires controllers to brief the incoming controller of current situation. Also discussed temporary shift changes for short breaks, etc.

17. Question Result, ID, References Sat, CR.CRMRR.HANDOVERDOC.P, 195.446(b)(4) (195.446(c)(5))

Question Text *Do processes require that records document the hand-over of responsibility, document the time the actual hand-over of responsibility occurs, and the key information and topics that were communicated during the hand-over?*

Assets Covered 88920

Result Notes CRM Plan Section 9

Shift Changes

18. Question Result, ID, References Sat, CR.CRMRR.HANDOVERDOC.R, 195.446(b)(4) (195.446(c)(5))
Question Text *Are there records that document the hand-over of responsibility, document the time the actual hand-over of responsibility occurs, and the key information and topics that were communicated during the hand-over?*
Assets Covered 88920
Result Notes Reviewed a sample of Shift hand over forms, no concerns
19. Question Result, ID, References Sat, CR.CRMRR.HANDOVEROVERLAP.P, 195.446(b)(4)
Question Text *Do processes require the controllers to discuss recent and impending important activities ensuring adequate overlap?*
Assets Covered 88920
Result Notes CRM Plan Section 9.1

c) System control remains with the out-going controller until the briefing is completed.

d) Out-going controllers will still monitor all incoming information by phone and manage distractions as applicable.
20. Question Result, ID, References Sat, CR.CRMRR.HANDOVERALTERNATIVE.P, 195.446(b)(4)
Question Text *When a controller is unable to continue or assume responsibility for any reason, do the shift hand-over processes include alternative shift hand-over actions that specifically address this situation?*
Assets Covered 88920
Result Notes CRM Plan Section 9.4
21. Question Result, ID, References Sat, CR.CRMRR.UNATTENDCONSOLE.P, 195.446(b)(4)
Question Text *Has the operator established an adequate process for occasions when the console is left temporarily unattended for any reason?*
Assets Covered 88920
Result Notes Seaport has emergency procedures if the control needs to be evacuated (CRM Plan Section 3.4) but does not leave the control room unattended
22. Question Result, ID, References Sat, CR.CRMRR.CONSOLECOVERAGE.P, 195.446(b)(4)
Question Text *Do processes maintain adequate console coverage during shift hand-over?*
Assets Covered 88920
Result Notes CRM Plan Section 9.1
23. Question Result, ID, References Sat, CR.CRMRR.OTHERAUTHORITYDISALLOW.P, 195.446(b)(5)
Question Text *Do processes disallow others to have authority to direct or supersede the specific technical actions of a controller?*
Assets Covered 88920
Result Notes Controller has ultimate authority as defined in roles and responsibilities

CRM Plan Section 3
24. Question Result, ID, References Sat, CR.CRMRR.OTHERAUTHORITYDISALLOW.R, 195.446(b)(5)
Question Text *Do records indicate that the policy disallowing others to have authority to direct or supersede the specific technical actions of a controller has been communicated to controllers and others?*
Assets Covered 88920
Result Notes Records indicate that the controller has the ultimate authority

Discussed with controller during the field visit

25. Question Result, ID, References **Sat, CR.CRMRR.OTHERAUTHORITYDISALLOW.O, 195.446(b)(5)**
 Question Text *Are controllers aware of, and can reference, processes that disallow others to have authority to direct or supersede the specific technical actions of a controller?*
 Assets Covered **88920**
 Result Notes **Controller stated that they have authority and no one can direct or supersede their decisions**
26. Question Result, ID, References **NA, CR.CRMRR.OTHERAUTHORITYQUAL.P, 195.446(b)(5)**
 Question Text *Does the process result in identification of required qualification elements for those authorized to direct or supersede the technical actions of a controller that are sufficient for those individuals to understand the implications of the scope of potential actions?*
 Assets Covered **88920**
 Result Notes **Seaport does not allow individuals to supersede technical actions of the controller**
27. Question Result, ID, References **NA, CR.CRMRR.OTHERAUTHORITYQUAL.R, 195.446(b)(5)**
 Question Text *Do records indicate that others given authority to direct or supersede the specific technical actions of a controller were qualified?*
 Assets Covered **88920**
 Result Notes **Seaport does not allow individuals to supersede technical actions of the controller**
28. Question Result, ID, References **NA, CR.CRMRR.OTHERAUTHORITYIMPLEMENT.P, 195.446(b)(5)**
 Question Text *Is the process defined with respect to the details of how those authorized to direct or supersede the technical actions of a controller are to implement their authority?*
 Assets Covered **88920**
 Result Notes **Seaport does not allow individuals to supersede technical actions of the controller**
29. Question Result, ID, References **NA, CR.CRMRR.OTHERAUTHORITYLIST.R, 195.446(b)(5)**
 Question Text *Is a list of individuals with authority to direct or supersede the technical actions of a controller readily available to controllers?*
 Assets Covered **88920**
 Result Notes **Seaport does not allow individuals to supersede technical actions of the controller**
30. Question Result, ID, References **NA, CR.CRMRR.OTHERAUTHORITYIMPLEMENT.R, 195.446(b)(5)**
 Question Text *Do records adequately document occurrences of when others authorized to direct or supersede the technical actions of a controller have done so?*
 Assets Covered **88920**
 Result Notes **Seaport does not allow individuals to supersede technical actions of the controller**
31. Question Result, ID, References **NA, CR.CRMRR.OTHERAUTHORITYIMPLEMENT.O, 195.446(b)(5)**
 Question Text *Do others authorized to direct or supersede the technical actions of a controller demonstrate an understanding of the process to implement this authority?*
 Assets Covered **88920**
 Result Notes **Seaport does not allow individuals to supersede technical actions of the controller**

CR.SCADA: Supervisory Control and Data Acquisition

32. Question Result, ID, References **Sat, CR.SCADA.SYSTEMMOC.P, 195.446(c)(1)**
 Question Text *Do processes clearly define the types of changes to the SCADA system(s) that constitute additions, expansions, or replacements under the meaning of the CRM rule?*
 Assets Covered **88920**
 Result Notes **Definitions in CRM Plan Section 5**
33. Question Result, ID, References **Sat, CR.SCADA.DISPLAYCONFIG.P, 195.446(c)(1)**

Question Text *Are there written processes to implement the API RP 1165 display standards to the SCADA systems that have been added, expanded, or replaced since August 1, 2012?*

Assets Covered 88920

Result Notes CRM Plan Section 5

34. Question Result, ID, References Sat, CR.SCADA.1165HUMANFACTORS.O, 195.446(c)(1)

Question Text *Has section 4 of API RP 1165 regarding human factors engineering been implemented?*

Assets Covered 88920

Result Notes Reviewed SCADA displays for signal-to-noise ratios, appropriate information in alignment with scan patterns and that information is consistently displayed

35. Question Result, ID, References Sat, CR.SCADA.DISPLAYHARDWARE.R, 195.446(c)(1)

Question Text *Has section 5 of API RP 1165 regarding display hardware been implemented?*

Assets Covered 88920

Result Notes Reviewed photos of control room setup, 4 monitors, keyboards, mouse

36. Question Result, ID, References Sat, CR.SCADA.DISPLAYLAYOUT.R, 195.446(c)(1)

Question Text *Has section 6 of API RP 1165 regarding display layout and organization been implemented?*

Assets Covered 88920

Result Notes Reviewed monitor setup, all displays seem in accordance with API RP 1165

37. Question Result, ID, References Sat, CR.SCADA.DISPLAYNAVIGATION.R, 195.446(c)(1)

Question Text *Has section 7 of API RP 1165 regarding display navigation been implemented?*

Assets Covered 88920

Result Notes Reviewed controller display to verify the controller has ability to navigate data, zoom, overlay and use drop-down menus

38. Question Result, ID, References Sat, CR.SCADA.DISPLAYOBJECTS.O, 195.446(c)(1)

Question Text *Has section 8 of API RP 1165 regarding display object characteristics been implemented?*

Assets Covered 88920

Result Notes Reviewed controller display to verify limited use of colors, consistent font, labels, abbreviations and symbols used.

All were in accordance with API RP 1165 Section 8

39. Question Result, ID, References Sat, CR.SCADA.DISPLAYDYNAMICS.R, 195.446(c)(1)

Question Text *Has section 9 of API RP 1165 regarding display object dynamics been implemented?*

Assets Covered 88920

Result Notes Reviewed controller display to verify alarm acknowledgement and historian, alarm set points and data states (open/closed)

All were in accordance with API RP 1165 Section 9

40. Question Result, ID, References Sat, CR.SCADA.CONTROLSELECTION.R, 195.446(c)(1)

Question Text *Has section 10 of API RP 1165 control selection and techniques been implemented?*

Assets Covered 88920

Result Notes Reviewed controller display to verify poke points don't overlap, controls require multiple actions before a command is set, etc.

All were in accordance with API RP 1165 Section 10

41. Question Result, ID, References Sat, CR.SCADA.ADMINISTRATION.R, 195.446(c)(1)

Question Text *Has section 11 of API RP 1165 administration been implemented?*

Assets Covered 88920

Result Notes Seaport has one control room and one HMI in the field at the pump station. Display at the HMI is the same as in the control

42. Question Result, ID, References NA, CR.SCADA.1165IMPRACTICAL.R, 195.446(c)(1)

Question Text *If any/all applicable paragraph(s) of API RP 1165 have not been implemented, has it been demonstrated and documented that the unimplemented provisions are impractical for the SCADA system used?*

Assets Covered 88920

Result Notes No such event occurred, or condition existed, in the scope of inspection review.

43. Question Result, ID, References Sat, CR.SCADA.SETPOINT.P, 195.446(c)(2) (195.406(b))

Question Text *Does the process adequately define safety-related points?*

Assets Covered 88920

Result Notes Seaport maintains a master alarm list with Alarm Priority (1 or 2), 1 is higher priority and are safety related.

No concerns

CRM Plan Section 17

Safety Related Alarms definitions

44. Question Result, ID, References Sat, CR.SCADA.SETPOINT.R, 195.446(c)(2)

Question Text *Do records indicate safety-related points have been adequately implemented?*

Assets Covered 88920

Result Notes Seaport maintains a master alarm list with Alarm Priority (1 or 2), 1 is higher priority and are safety related.

No concerns

Pressure Ladder Diagram maintained as well

45. Question Result, ID, References Sat, CR.SCADA.POINTVERIFY.P, 195.446(c)(2)

Question Text *Are there adequate processes to define and identify the circumstances which require a point-to-point verification?*

Assets Covered 88920

Result Notes CRM Plan Section 6

46. Question Result, ID, References Sat, CR.SCADA.POINTVERIFY.R, 195.446(c)(2)

Question Text *Have required point-to-point verifications been performed?*

Assets Covered 88920

Result Notes Pressure and temperature sensors are performed 2x per year and when new equipment is added or changed

47. Question Result, ID, References Sat, CR.SCADA.POINTVERIFYEXTENT.P, 195.446(c)(2)

Question Text *Are there adequate processes for the thoroughness of the point-to-point verification?*

Assets Covered 88920

Result Notes CRM Plan Section 6

48. Question Result, ID, References Sat, CR.SCADA.POINTVERIFYEXTENT.R, 195.446(c)(2)

Question Text *Do records demonstrate adequate thoroughness of the point-to-point verification?*

Assets Covered 88920

Result Notes Reviewed samples of point-to-point verification tests for pressure and temperature sensors, verified that SCADA displays were consistent with that shown in field, verified that valves and SCADA position displays are aligned

49. Question Result, ID, References **Sat, CR.SCADA.POINTVERFIYINTVL.P, 195.446(c)(2)**
 Question Text *Is there an adequate process for defining when the point-to-point verification must be completed?*
 Assets Covered **88920**
 Result Notes **CRM Plan Section 6**
50. Question Result, ID, References **Sat, CR.SCADA.POINTVERFIYINTVL.R, 195.446(c)(2)**
 Question Text *Do records indicate the point-to-point verification has been completed at the required intervals?*
 Assets Covered **88920**
 Result Notes **No new equipment has been added or modified**

Seaport performs point-to-point verification on pressure and temperature sensors 2x per year. Reviewed those records
51. Question Result, ID, References **NA, CR.SCADA.POINTVERIFY.O, 195.446(c)(2)**
 Question Text *Are point-to-point verifications performed adequately when required?*
 Assets Covered **88920**
 Result Notes **No such activity/condition was observed during the inspection.**
52. Question Result, ID, References **Sat, CR.SCADA.COMMPLAN.P, 195.446(c)(3)**
 Question Text *Has an internal communication plan been established and implemented that is adequate to manually operate the pipeline during a SCADA failure/outage?*
 Assets Covered **88920**
 Result Notes **CRM Plan Section 7**
53. Question Result, ID, References **Sat, CR.SCADA.COMMPLAN.R, 195.446(c)(3)**
 Question Text *Has the internal communication plan been tested and verified for manual operation of the pipeline safely at least once each calendar year but at intervals not exceeding 15 months?*
 Assets Covered **88920**
 Result Notes **Reviewed records for annual tests for 2020-2023, no concerns**
54. Question Result, ID, References **NA, CR.SCADA.BACKUPSCADA.O, 195.446(c)(4)**
 Question Text *Is there a backup SCADA system?*
 Assets Covered **88920**
 Result Notes **No such relevant facilities/equipment existed in the scope of inspection review.**
55. Question Result, ID, References **NA, CR.SCADA.BACKUPSCADADEV.P, 195.446(c)(4)**
 Question Text *Has the use of the backup SCADA system for development work been defined?*
 Assets Covered **88920**
 Result Notes **No such relevant facilities/equipment existed in the scope of inspection review.**
56. Question Result, ID, References **NA, CR.SCADA.BACKUPSCADATEST.R, 195.446(c)(4)**
 Question Text *Is the backup SCADA system tested at least once each calendar year at intervals not to exceed 15 months?*
 Assets Covered **88920**
 Result Notes **No such relevant facilities/equipment existed in the scope of inspection review.**
57. Question Result, ID, References **NA, CR.SCADA.BACKUPSCADAVERIFY.R, 195.446(c)(4)**
 Question Text *Does the testing verify that there are adequate processes in place for decision-making and internal communications to successfully implement a transition from primary SCADA to backup SCADA, and back to primary SCADA?*
 Assets Covered **88920**
 Result Notes **No such relevant facilities/equipment existed in the scope of inspection review.**

58. Question Result, ID, References **NA, CR.SCADA.BACKUPSCADADEQUACY.R, 195.446(c)(4)**
 Question Text *If the back-up SCADA system is not designed to handle all the functionality of the main SCADA system, does the testing determine whether there are adequate procedures in place to account for displaced and/or different available functions during back-up operations?*
 Assets Covered **88920**
 Result Notes **No such relevant facilities/equipment existed in the scope of inspection review.**
59. Question Result, ID, References **NA, CR.SCADA.BACKUPSCADATRANSFER.P, 195.446(c)(4)**
 Question Text *Do processes adequately address and test the logistics of transferring control to a backup control room?*
 Assets Covered **88920**
 Result Notes **No such relevant facilities/equipment existed in the scope of inspection review.**
60. Question Result, ID, References **NA, CR.SCADA.BACKUPSCADARETURN.P, 195.446(c)(4)**
 Question Text *Do procedures adequately address and test the logistics of returning operations back to the primary control room?*
 Assets Covered **88920**
 Result Notes **No such relevant facilities/equipment existed in the scope of inspection review.**
61. Question Result, ID, References **NA, CR.SCADA.BACKUPSCADAFUNCTIONS.R, 195.446(c)(4)**
 Question Text *Is a representative sampling of critical functions in the back-up SCADA system being tested to ensure proper operation in the event the backup system is needed?*
 Assets Covered **88920**
 Result Notes **No such relevant facilities/equipment existed in the scope of inspection review.**

CR.CRMFM: Fatigue Management

62. Question Result, ID, References **Sat, CR.CRMFM.FATIGUEMITIGATION.P, 195.446(d)**
 Question Text *Does the fatigue mitigation process or procedures (plan) identify operator-specific fatigue risks?*
 Assets Covered **88920**
 Result Notes **CRM Plan Section 10**
63. Question Result, ID, References **Sat, CR.CRMFM.FATIGUERISKS.P, 195.446(d)**
 Question Text *Does the fatigue mitigation plan adequately address how the program reduces the risk associated with controller fatigue?*
 Assets Covered **88920**
 Result Notes **CRM Plan Section 10**

Seaport has processes to provide adequate time off and controls to limit hours worked in a day and a week
64. Question Result, ID, References **Sat, CR.CRMFM.FATIGUEQUANTIFY.P, 195.446(d)**
 Question Text *Do processes require that the potential contribution of controller fatigue to incidents and accidents be quantified during investigations?*
 Assets Covered **88920**
 Result Notes **CRM Plan Section 11.4**

CRM Plan Section 13
65. Question Result, ID, References **Sat, CR.CRMFM.FATIGUEMANAGER.P, 195.446(d)**
 Question Text *Is there a designated fatigue risk manager who is responsible and accountable for managing fatigue risk and fatigue countermeasures, and someone (perhaps the same person) that is authorized to review and approve HOS emergency deviations?*
 Assets Covered **88920**

Documentation Requirements

66. Question Result, ID, References **Sat, CR.CRMFM.SHIFTLENGTH.R, 195.446(d)(1)**
Question Text *Is the scheduled shift length less than or equal to 12 hours (not including shift hand-over) or is there a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?*
Assets Covered **88920**
Result Notes **Shifts are scheduled for 12 hours**
4 on (day), 3 off, 4 on (night), 5 off
67. Question Result, ID, References **Sat, CR.CRMFM.SHIFTLENGHTIME.R, 195.446(d)(1)**
Question Text *Does the operator factor in all time the individual is working for the company when establishing shift lengths and schedule rotations or is there a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?*
Assets Covered **88920**
Result Notes **Shifts are scheduled for 12 hours**
4 on (day), 3 off, 4 on (night), 5 off
68. Question Result, ID, References **Sat, CR.CRMFM.SCHEDULEDTIMEOFF.R, 195.446(d)(1)**
Question Text *Are all scheduled periods of time off at least one hour longer than 8 hours plus commute time or is there a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?*
Assets Covered **88920**
Result Notes **12+ hours off between shifts**
69. Question Result, ID, References **NA, CR.CRMFM.ONCALLCONTROLLER.P, 195.446(d)**
Question Text *For controllers who are on call, do processes minimize interrupting the required 8 hours of continuous sleep or require a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?*
Assets Covered **88920**
Result Notes **Seaport has no on call controllers**
70. Question Result, ID, References **NA, CR.CRMFM.ONCALLCONTROLLER.R, 195.446(d)(1)**
Question Text *For controllers who are on call, does the operator minimize interrupting the required 8 hours of continuous sleep or is there a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?*
Assets Covered **88920**
Result Notes **Seaport has no on call controllers**
71. Question Result, ID, References **Sat, CR.CRMFM.MAXHOS.P, 195.446(d)(4)**
Question Text *Do processes limit the maximum HOS limit in any sliding 7-day period to no more than 65 hours or is there a documented technical basis to show reduction of the risk associated with controller fatigue?*
Assets Covered **88920**
Result Notes **CRM Plan Section 10**
72. Question Result, ID, References **Sat, CR.CRMFM.MINTIMEOFF.P, 195.446(d)(4)**
Question Text *After reaching the HOS limit in any sliding 7-day period, is the minimum time off at least 35 hours or is there a documented technical basis to show a reduction of the risk associated with controller fatigue?*
Assets Covered **88920**
Result Notes **CRM Plan Section 10**

73. Question Result, ID, References **Sat, CR.CRMFM.DOCSCCHEDULE.P, 195.446(d)(4)**
 Question Text *Is there a formal system to document all scheduled and unscheduled HOS worked, including overtime and time spent performing duties other than control room duties?*
 Assets Covered **88920**
 Result Notes **Paychex system to verify hours worked and Pipeline supervisor reviews schedule to ensure exceedances do not occur**
74. Question Result, ID, References **NA, CR.CRMFM.DAYSOFF.P, 195.446(d)(4)**
 Question Text *For normal business hour type operations (i.e., five days per week), are no more than five days worked in succession before at least two days off?*
 Assets Covered **88920**
 Result Notes **Seaport does not have normal business type operations**
75. Question Result, ID, References **NA, CR.CRMFM.WORKHOURS.R, 195.446(d)(4)**
 Question Text *For normal business hour type operations (i.e., five days per week), do records indicate shift start times no earlier than 6:00 a.m. and shift end times no later than 7:00 p.m.?*
 Assets Covered **88920**
 Result Notes **Seaport does not operate only during normal business hours**
76. Question Result, ID, References **Sat, CR.CRMFM.FATIGUECOUNTERMEASURES.P, 195.446(d)(4)**
 Question Text *For shifts longer than 8 hours, have specific fatigue countermeasures been implemented for the ninth and beyond hours?*
 Assets Covered **88920**
 Result Notes **CRM Plan Section 9**

Temporary handover of responsibility
77. Question Result, ID, References **Sat, CR.CRMFM.DAILYHOSLIMIT.P, 195.446(d)(4)**
 Question Text *Do processes limit the daily maximum HOS limit to no more than 14 hours in any sliding 24-hour period?*
 Assets Covered **88920**
 Result Notes **CRM Plan Section 10**
78. Question Result, ID, References **Sat, CR.CRMFM.CONTROLLERNUMBERS.O, 195.446(d)(4)**
 Question Text *Do operations include a sufficient number of qualified controllers?*
 Assets Covered **88920**
 Result Notes **13 qualified controllers, 4 teams that rotate through**
79. Question Result, ID, References **Sat, CR.CRMFM.OFFDUTYHOURS.P, 195.446(d)(4)**
 Question Text *Do processes ensure that controllers are provided with at least thirty-five (35) continuous off-duty hours when limits are reached following the most recent 35-hour (minimum) off-duty rest period or is there a documented technical basis to show that the maximum limit on controller HOS is adequate to reduce the risk associated with controller fatigue?*
 Assets Covered **88920**
 Result Notes **CRM Plan Section 10**
80. Question Result, ID, References **Sat, CR.CRMFM.SHIFTHOLDOVER.P, 195.446(d)(4)**
 Question Text *Does the shift holdover process conform to shift holdover guidelines or is there a documented technical basis to show that the maximum limit on controller HOS is adequate to reduce the risk associated with controller fatigue?*
 Assets Covered **88920**
 Result Notes **CRM Plan Section 10**
81. Question Result, ID, References **Sat, CR.CRMFM.SPECIFICCOUNTERMEASURES.P, 195.446(d)(4)**

Question Text *Do processes require specific fatigue countermeasures during applicable time periods, or is there a documented technical basis to show that the maximum limit on controller HOS is adequate to reduce the risk associated with controller fatigue?*

Assets Covered 88920

Result Notes CRM Plan Section 9.4

82. Question Result, ID, References Sat, CR.CRMFM.HOSDEVIATIONS.P, 195.446(d)(4)

Question Text *Is there a formal process for approving deviations from the maximum HOS limits?*

Assets Covered 88920

Result Notes CRM Plan Section 10

Pipeline Supervisor shall document approval of the hours of when service limits are exceeded and the reason.

83. Question Result, ID, References Sat, CR.CRMFM.FATIGUEEDUCATE.P, 195.446(d)(2) (195.446(d)(3))

Question Text *Does the program require that fatigue education/training is required for all controllers and control room supervisors?*

Assets Covered 88920

Result Notes CRM Plan Section 11

84. Question Result, ID, References Sat, CR.CRMFM.FATIGUEEDUCATE.R, 195.446(d)(2) (195.446(d)(3))

Question Text *Is periodic fatigue education/training documented for all controllers and control room supervisors?*

Assets Covered 88920

Result Notes Reviewed a sample of training records for fatigue mitigation

Completed annually NTE 15 months

85. Question Result, ID, References Sat, CR.CRMFM.FATIGUEREVIEW.P, 195.446(d)(2) (195.446(d)(3), 195.402(a))

Question Text *Do processes require that the effectiveness of the fatigue education/training program be reviewed at least once each calendar year, not to exceed 15 months?*

Assets Covered 88920

Result Notes CRM Plan Section 11.4

86. Question Result, ID, References Sat, CR.CRMFM.FATIGUESTATEGY.P, 195.446(d)(2)

Question Text *Does fatigue education address fatigue mitigation strategies (countermeasures)?*

Assets Covered 88920

Result Notes Reviewed training documentation, mitigation strategies included

87. Question Result, ID, References Sat, CR.CRMFM.OFFDUTY.P, 195.446(d)(2)

Question Text *Does fatigue education address how off-duty activities contribute to fatigue?*

Assets Covered 88920

Result Notes Reviewed training documentation, training included stress management, coping with family issues, etc.

88. Question Result, ID, References Sat, CR.CRMFM.FATIGUECONTENT.P, 195.446(d)(3)

Question Text *Is the content of fatigue training adequate for training controllers and supervisors to recognize the effects of fatigue?*

Assets Covered 88920

Result Notes CRM Plan Section 11.3b

Supervisors receive training to recognize effects of fatigue

89. Question Result, ID, References Sat, CR.CRMFM.FATIGUECONTENT.R, 195.446(d)(3)

Question Text *Has controller and supervisor training to recognize the effects of fatigue been documented?*

Assets Covered 88920

Result Notes Reviewed supervisor training records for 2020-2023

Content included Fatigue monitoring, staffing, shift scheduling, etc.

CR.CRMAM: Alarm Management

90. Question Result, ID, References Sat, CR.CRMAM.ALARM.P, 195.446(e)

Question Text *Is the alarm management plan a formal process that specifically identifies critical topical areas included in the program?*

Assets Covered 88920

Result Notes CRM Plan Section 17

91. Question Result, ID, References Sat, CR.CRMAM.ALARMMALFUNCTION.P, 195.446(e)(1)

Question Text *Is there a process to identify and correct inaccurate or malfunctioning alarms?*

Assets Covered 88920

Result Notes CRM Plan Section 17.2

92. Question Result, ID, References Sat, CR.CRMAM.ALARMREVIEW.P, 195.446(e)(1)

Question Text *Does the review of safety-related alarms account for different alarm designs and all alarm types/priorities?*

Assets Covered 88920

Result Notes CRM Plan Section 17.1

93. Question Result, ID, References NA, CR.CRMAM.CONTROLLERPERFORMANCE.P, 195.446(h) (195.446(e)(1))

Question Text *Does the review of safety-related alarms account for console differences that could affect individual-specific controller qualification and performance?*

Assets Covered 88920

Result Notes Seaport only has one console

94. Question Result, ID, References Sat, CR.CRMAM.STALEDATA.P, 195.446(e)(1)

Question Text *Does the review of safety-related alarms include specific procedures and practices for managing stale or unreliable data?*

Assets Covered 88920

Result Notes CRM Plan Section 17.2

95. Question Result, ID, References Sat, CR.CRMAM.MONTHLYANALYSIS.P, 195.446(e)(2)

Question Text *Do processes require the monthly identification, recording, review, and analysis of points that have been taken off scan, have had alarms inhibited, generated false alarms, or that have had forced or manual values for periods of time exceeding that required for associated maintenance or operating activities?*

Assets Covered 88920

Result Notes CRM Plan Section 17.2

96. Question Result, ID, References Sat, CR.CRMAM.PROBLEMCORRECTION.P, 195.446(e)(2)

Question Text *Does the alarm management plan include a process for promptly correcting identified problems and for returning these points to service?*

Assets Covered 88920

Result Notes CRM Plan Section 17.6

Monthly Alarm Review Procedure

Document corrective action taken

Resolution of Alarm Problems

The controller is the first person to discover problems with the alarm system. When the controller identifies the problems, they will notify the Pipeline Supervisor who has responsibility for addressing and solving the problem.

97. Question Result, ID, References Sat, CR.CRMAM.ALARMVERIFY.R, 195.446(e)(2)

Question Text *Do records verify that monthly reviews and analysis of alarm points have been performed?*

Assets Covered 88920

Result Notes Completed monthly, reviewed a sample of records from 2020-2023

98. Question Result, ID, References Sat, CR.CRMAM.ALARMSETPOINTS.P, 195.446(e)(3)

Question Text *Is there a formal process to determine the correct alarm setpoint values and alarm descriptions?*

Assets Covered 88920

Result Notes CRM Plan Section 17.3

Annual Review. The following is the data required to be logged for inclusion in the alarm summary.

- *Timestamp –date and time (with one-second resolution or better)*
- *Point identification and description*
- *Alarm message or description*
- *Type of alarm*
- *Location*
- *Priority*
- *Alarm setpoint and current value at the time of alarm*
- *Unit of measure*
- *Console or system indicator(where the alarm was annunciated)*
- *Timestamp of acknowledgment of alarm*

99. Question Result, ID, References Sat, CR.CRMAM.SETTINGCONTROL.P, 195.446(e)(3)

Question Text *Have procedures been established to clearly address how and to what degree controllers can change alarm limits or setpoints, or inhibit alarms, or take points off-scan?*

Assets Covered 88920

Result Notes CRM Plan Section 17

Alarm Handling

Controllers do not have the ability to change setpoints or inhibit alarms

100. Question Result, ID, References Sat, CR.CRMAM.VERIFICATION.P, 195.446(e)(3)

Question Text *Do processes require that any calibration or change to field instruments require verification of alarm setpoints and alarm descriptions?*

Assets Covered 88920

Result Notes CRM Plan Section 6

Purpose: To provide a point-to-point verification between SCADA displays and related field equipment when the following changes occur:

- 1. Field equipment is added or moved, and*
- 2. Any other change that affects pipeline safety is made to field equipment or SCADA displays.*

Confirmation that alarm set point values match value in Alarm Master List

101. Question Result, ID, References **Sat, CR.CRMAM.ALARMVALUEVERIFY.R, 195.446(e)(3)**
Question Text *Do records demonstrate 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?*
Assets Covered **88920**
Result Notes **Completed annually NTE 15 months**

Reviewed records for 2020-2023
102. Question Result, ID, References **Sat, CR.CRMAM.PLANREVIEW.P, 195.446(e)(4)**
Question Text *Are there processes to review the alarm management plan at least once each calendar year, but at intervals not exceeding 15 months, in order to determine the effectiveness of the plan?*
Assets Covered **88920**
Result Notes **CRM Plan Section 17.4**

Alarm Management Plan Annual Review Procedure

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103. Question Result, ID, References **Sat, CR.CRMAM.PLANREVIEW.R, 195.446(e)(4)**
Question Text *Do records indicate review of the alarm management plan at least once each calendar year, but at intervals not exceeding 15 months, in order to determine the effectiveness of the plan?*
Assets Covered **88920**
Result Notes **Completed annually NTE 15 months**

Reviewed records for 2020-2023
104. Question Result, ID, References **Sat, CR.CRMAM.WORKLOAD.P, 195.446(e)(5)**
Question Text *Does the CRM program have a means of identifying and measuring the work load (content and volume of general activity) being directed to an individual controller?*
Assets Covered **88920**
Result Notes **CRM Plan Section 17.5**
105. Question Result, ID, References **Sat, CR.CRMAM.WORKLOADMONITORING.P, 195.446(e)(5)**
Question Text *Is the process of monitoring and analyzing general activity comprehensive?*
Assets Covered **88920**
Result Notes **CRM Plan**

Annual Controller Workload Study

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106. Question Result, ID, References **Sat, CR.CRMAM.CONTROLLERREACTION.P, 195.446(e)(5)**
Question Text *Does the process have a means of determining that the controller has sufficient time to analyze and react to incoming alarms?*
Assets Covered **88920**

Result Notes Completed as part of annual workload assessment completed by Circadian 24/7 Workforce Solutions

CRM Plan Section 17 Annual Controller Work Load Study

107. Question Result, ID, References Sat, CR.CRMAM.PERFORMANCEANALYSIS.R, 195.446(e)(5)

Question Text *Has an analysis been performed to determine if controller(s) performance is currently adequate?*

Assets Covered 88920

Result Notes Complete annual employee performance reviews and annual workload assessment

108. Question Result, ID, References Sat, CR.CRMAM.DEFICIENCIES.P, 195.446(e)(6)

Question Text *Is there a process to address how deficiencies found in implementing 195.446(e)(1) through 195.446(e)(5) will be resolved?*

Assets Covered 88920

Result Notes CRM Plan Section 17

Alarm Management Plan Annual Review

Report:

Personnel assigned the annual review will prepare a report on their findings and suggestions to address deficiencies identified. The report will be addressed to the Compliance Manager.

Deficiencies:

The Compliance Manager will assign responsibility for addressing the deficiencies and require the documentation completion of the deficiencies.

109. Question Result, ID, References NA, CR.CRMAM.DEFICIENCIES.R, 195.446(e)(6)

Question Text *Do records indicate deficiencies found in implementing 195.446(e)(1) through 195.446(e)(5) have been resolved?*

Assets Covered 88920

Result Notes No such event occurred, or condition existed, in the scope of inspection review.

CR.CRMCMGT: Change Management

110. Question Result, ID, References Sat, CR.CRMCMGT.CHANGEMEETINGS.P, 195.446(f)(1)

Question Text *Is there a process to mandate a control room representative will participate in meetings where changes that could directly or indirectly affect control room operations (including routine maintenance and repairs) are being considered, designed and implemented?*

Assets Covered 88920

Result Notes CRM Plan Section 12

Method

111. Question Result, ID, References Sat, CR.CRMCMGT.CHANGETRAINING.R, 195.446(f)(1)

Question Text *Before implementing changes, do records indicate controllers were provided with notification and training to assure their ability to safely incorporate the proposed change into operations?*

Assets Covered 88920

Result Notes Training in 2022 when Pipeline Manager Software was being implemented. Controllers had an opportunity for input and learning during that training

112. Question Result, ID, References Sat, CR.CRMCMGT.EMERGENCYCONTACT.P, 195.446(f)(2)

Question Text *Is there a process requiring field personnel and SCADA support personnel to contact the control room when emergency conditions exist?*

Assets Covered 88920

Result Notes CRM Plan Section 12.2

113. Question Result, ID, References Sat, CR.CRMCMGT.CHANGECOORDINATION.P, 195.446(f)(1)
Question Text *Does the process assure changes in field equipment (e.g., relocating a valve or replacing a valve) that could affect control room operations are coordinated with control room personnel?*
Assets Covered 88920
Result Notes CRM Plan Section 12

Method Section 1 and 3
114. Question Result, ID, References Sat, CR.CRMCMGT.CHANGECOORDINATION.R, 195.446(f)(1)
Question Text *Do records indicate that changes in field equipment (e.g., relocating a valve or replacing a valve) that could affect control room operations were coordinated with control room personnel?*
Assets Covered 88920
Result Notes Emails provided to control room staff when any transmitters or equipment is replaced.
115. Question Result, ID, References Sat, CR.CRMCMGT.FIELDCONTACT.P, 195.446(f)(2)
Question Text *Does the process require field personnel and SCADA support personnel to contact the control room when making field changes (e.g., operating a valve, O&M inspections/calibrations, RTU/PLC modifications) that affect control room operations?*
Assets Covered 88920
Result Notes CRM Plan Section 12.2
116. Question Result, ID, References Sat, CR.CRMCMGT.FIELDCHANGES.R, 195.446(f)(2)
Question Text *Do records indicate field personnel and SCADA support personnel contacted the control room when making field changes (e.g., operating a valve, O&M inspections/calibrations, RTU/PLC modifications) that affect control room operations?*
Assets Covered 88920
Result Notes Log book has notes regarding contact with field techs and OPL

CR.CRMEXP: Operating Experience

117. Question Result, ID, References Sat, CR.CRMEXP.REPORTABLEACCIDENTREVIEW.P, 195.446(g)(1)
Question Text *Is there a formal, structured approach for reviewing and critiquing reportable events to identify lessons learned?*
Assets Covered 88920
Result Notes CRM Plan Section 13
118. Question Result, ID, References NA, CR.CRMEXP.REPORTABLEACCIDENTREVIEW.R, 195.446(g)(1)
Question Text *Do records indicate reviews of reportable events specifically analyzed all contributing factors to determine if control room actions contributed to the event, and corrected any deficiencies?*
Assets Covered 88920
Result Notes No reportable events have occurred
119. Question Result, ID, References Sat, CR.CRMEXP.LESSONSLEARNED.P, 195.446(g)(2) (195.446(b)(5))
Question Text *Does the program require training on lessons learned from a broad range of events (reportable incidents/accidents, near misses, leaks, operational and maintenance errors, etc.), even though the control room may not have been at fault?*
Assets Covered 88920
Result Notes CRM Plan Section 14

Annual Training Program Review

CRM Plan Section 13.3

120. Question Result, ID, References **Sat, CR.CRMEXP.LESSONSLEARNED.R, 195.446(g)(2) (195.446(b)(5))**
Question Text *Has operating experience review training been conducted on lessons learned from a broad range of events (reportable incidents/accidents, near misses, leaks, operational and maintenance errors, etc.)?*
Assets Covered **88920**
Result Notes **Seaport had a concern with valve alignment in the tank farm that didn't affect the pipeline but they did do lesson learned training with all team leads**

No events related to the pipeline or control room

CR.CRMTRAIN: Training

121. Question Result, ID, References **Sat, CR.CRMTRAIN.CONTROLLERTRAIN.P, 195.446(h)**
Question Text *Has a controller training program been established to provide training for each controller to carry out their roles and responsibilities?*
Assets Covered **88920**
Result Notes **CRM Plan Section 14**
122. Question Result, ID, References **Sat, CR.CRMTRAIN.CONTROLLERTRAIN.R, 195.446(h)**
Question Text *Has a controller training program been implemented to provide training for each controller to carry out their roles and responsibilities?*
Assets Covered **88920**
Result Notes **Seaport controllers receive OQ training for various field and control room tasks, on-the-job training and test for control room. All qualifications were current**
123. Question Result, ID, References **Sat, CR.CRMTRAIN.TRAININGREVIEW.P, 195.446(h)**
Question Text *Have processes been established to review the controller training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed 15 months?*
Assets Covered **88920**
Result Notes **CRM Plan Section 14**

Training Program Elements

Annual Training Program Review

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124. Question Result, ID, References **Unsat, CR.CRMTRAIN.TRAININGREVIEW.R, 195.446(h)**
Question Text *Have processes been implemented to review the controller training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed 15 months?*
Assets Covered **88920**
Result Issue Summary **49 CFR §195.446 Control room management.**

(a) Each operator must *have and follow* written control room management procedures that implement the requirements of this section.

Section 14 of Seaport's Control Room Management Plan (CRM Plan) outlines four items that shall be reviewed when completing the annual training program review. These include:

a) Documentation of the training topics covered in the training sessions to ensure all required Roles and Responsibilities have been addressed and covered

b) Abnormal Operations Logs and associated documentation to ensure controllers properly implement the abnormal operating procedures.

c) Incident Investigation Reports to determine lessons learned and that controllers properly implement emergency procedures and

d) Interviews of controllers for their suggestions to improve the training program

Of these four items, Seaport provided records for review of Abnormal Operations Logs (Item b). There were no incident investigation reports to review but the operator should have completed and kept records for review of items a) and d) from Section 14 of the CRM Plan. Seaport should revise there procedures to align with the practices they have in place or revise their practices and recordkeeping to align with the procedure as stated in Section 14 of the CRM Plan as required by 49 CFR 195.446(a).

Standard Issues C (Documentation/administrative - no significant impact) : 195.446(a) : No record/documentation.

Result Notes **49 CFR §195.446 Control room management.**

(a) Each operator must *have and follow* written control room management procedures that implement the requirements of this section.

Section 14 of Seaport's Control Room Management Plan (CRM Plan) outlines four items that shall be reviewed when completing the annual training program review. These include:

a) Documentation of the training topics covered in the training sessions to ensure all required Roles and Responsibilities have been addressed and covered

b) Abnormal Operations Logs and associated documentation to ensure controllers properly implement the abnormal operating procedures.

c) Incident Investigation Reports to determine lessons learned and that controllers properly implement emergency procedures and

d) Interviews of controllers for their suggestions to improve the training program

Of these four items, Seaport provided records for review of Abnormal Operations Logs (Item b). There were no incident investigation reports to review but the operator should have completed and kept records for review of items a) and d) from Section 14 of the CRM Plan. Seaport should revise there procedures to align with the practices they have in place or revise their practices and recordkeeping to align with the procedure as stated in Section 14 of the CRM Plan as required by 49 CFR 195.446(a).

125. Question Result, ID, References Sat, CR.CRMTRAIN.TRAININGCONTENT.R, 195.446(h)

Question Text *Does training content address all required material, including training each controller to carry out the roles and responsibilities that were defined by the operator?*

Assets Covered 88920

Result Notes Veriforce used for OQs and task specific OJT and testing for control room tasks

126. Question Result, ID, References Sat, CR.CRMTRAIN.AOCLIST.R, 195.446(h)(1)

Question Text *Has a list of the abnormal operating conditions that are likely to occur simultaneously or in sequence been established?*

Assets Covered 88920

Result Notes In sequence AOC they described was unintended valve closure and pipeline pressure increase.

AOC manual reviewed and each OQ task has AOCs listed with appropriate response

Seaport also has a Pipeline Alarm Quick Reference for controller use

127. Question Result, ID, References Sat, CR.CRMTRAIN.TRAININGABNORMAL.P, 195.446(h)(1)

Question Text *Does the training program provide controller training on recognizing and responding to abnormal operating conditions that are likely to occur simultaneously or in sequence?*

Assets Covered 88920

Result Notes CRM Plan Section 14

Training Program Elements

OQ tasks and Controller training identify AOCs

128. Question Result, ID, References Sat, CR.CRMTRAIN.TRAINING.R, 195.446(h)(2)
Question Text *Does the training program use a simulator or tabletop exercises to train controllers how to recognize and respond to abnormal operating conditions?*
Assets Covered 88920
Result Notes Seaport completes drills 4x per year, controllers are trained and required to respond appropriately. Training includes tabletop exercises
129. Question Result, ID, References Sat, CR.CRMTRAIN.TRAINING.O, 195.446(h)(2)
Question Text *Does the training program use a simulator or tabletop exercises to train controllers how to recognize and respond to abnormal operating conditions?*
Assets Covered 88920
Result Notes Tabletop spill drill performed during inspection, controller continuing to monitor and is aware of their role in the drill
130. Question Result, ID, References Sat, CR.CRMTRAIN.COMMUNICATIONTRAINING.P, 195.446(h)(3)
Question Text *Does the CRM program train controllers on their responsibilities for communication under the operator's emergency response procedures?*
Assets Covered 88920
Result Notes CRM Plan Section 14

Training Program Elements

131. Question Result, ID, References Sat, CR.CRMTRAIN.SYSKNOWLEDGE.P, 195.446(h)(4)
Question Text *Does the training program provide controllers a working knowledge of the pipeline system, especially during the development of abnormal operating conditions?*
Assets Covered 88920
Result Notes CRM Plan Section 14

Training Program Elements

Job Shadowing, Simulate HiHi alarms

132. Question Result, ID, References Sat, CR.CRMTRAIN.INFREQOPSLIST.R, 195.446(h)(5)
Question Text *Has a list of pipeline operating setups that are periodically (but infrequently) used been established?*
Assets Covered 88920
Result Notes Infrequent setup is when Seaport is launching a pig, no changes to alarm or controller procedures
133. Question Result, ID, References Sat, CR.CRMTRAIN.INFREQOPSREVIEW.P, 195.446(h)(5)
Question Text *Do processes specify that, for pipeline operating set-ups that are periodically (but infrequently) used, the controllers must be provided an opportunity to review relevant procedures in advance of their use?*
Assets Covered 88920
Result Notes CRM Plan Section 14

Training Program Elements

Item 6

134. Question Result, ID, References Sat, CR.CRMTRAIN.TEAMTRAINPERSONNEL.P, 195.446(h)(6)
Question Text *Do processes establish who, regardless of location, operationally collaborates with control room personnel?*
Assets Covered 88920

Field Personnel Training

135. Question Result, ID, References **Unsat, CR.CRMTRAIN.TEAMTRAINFREQ.P, 195.446(h)(6)**

Question Text *Do processes define the frequency of new and recurring team training?*

Assets Covered **88920**

Result Issue Summary **49 CFR §195.446 Control room management.**

(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:

(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 no later than January 23, 2018.

Seaport was able to provide examples of exercises that were completed but they do not have a formal process outlining frequency, personnel and methods of team training and exercises. Seaport must develop a program to include team training and exercises into their controller training program and ensure all appropriate personnel are included. The program should include frequency, methods and documentation requirements. For more information on what is required, see Section H of PHMSA's Control Room Management FAQs.

Standard Issues B2 (Moderate or small impact/limited occurrence) : 195.446(h)(6) : No process.

Result Notes **49 CFR §195.446 Control room management.**

(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:

(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 no later than January 23, 2018.

Seaport was able to provide examples of exercises that were completed but they do not have a formal process outlining frequency, personnel and methods of team training and exercises. Seaport must develop a program to include team training and exercises into their controller training program and ensure all appropriate personnel are included. The program should include frequency, methods and documentation requirements. For more information on what is required, see Section H of PHMSA's Control Room Management FAQs.

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136. Question Result, ID, References **NA, CR.CRMTRAIN.TEAMTRAINCOMPLETE.P, 195.446(h)(6) (ADB-2014-02)**

Question Text *Do processes address all operational modes and operational collaboration/control?*

Assets Covered **88920**

Result Notes **No such event occurred, or condition existed, in the scope of inspection review.**

137. Question Result, ID, References **NA, CR.CRMTRAIN.TEAMTRAINEXPERIENCE.P, 195.446(h)(6)**

Question Text *Do processes include incorporation of lessons learned from actual historical events and other oil-gas industry events?*

Assets Covered **88920**

Result Notes **No such event occurred, or condition existed, in the scope of inspection review.**

CRM Plan Section 13.3

Not incorporating other oil-gas industry events

138. Question Result, ID, References **Sat, CR.CRMTRAIN.TEAMTRAINEXERCISE.R, 195.446(h)(6)**
Question Text *Do records indicate that training exercises were adequate and involved at least one qualified controller?*
Assets Covered **88920**
Result Notes **RVP testing team training completed in 2023, Drill conducted with small teams in 2021 simulating maintenance issue and controllers had to do calculations to monitor flow**
139. Question Result, ID, References **NA, CR.CRMTRAIN.TEAMTRAINEXERCISE.O, 195.446(h)(6)**
Question Text *Does implementation of a control room team exercise demonstrate performance in accordance with regulatory and process requirements?*
Assets Covered **88920**
Result Notes **No team training completed during the inspection**
140. Question Result, ID, References **Sat, CR.CRMTRAIN.TEAMTRAINIDENTINDIVIDUAL.R, 195.446(h)(6)**
Question Text *Do records demonstrate that individuals identified as of January 23, 2018 received team training by January 23, 2019?*
Assets Covered **88920**
Result Notes **RVP testing team training completed in 2023, Drill conducted with small teams in 2021 simulating maintenance issue and controllers had to do calculations to monitor flow**

CR.CRMCOMP: Compliance Validation and Deviations

141. Question Result, ID, References **Sat, CR.CRMCOMP.SUBMITPROCEDURES.P, 195.446(i)**
Question Text *Are there adequate processes to assure that the operator is responsive to requests from applicable agencies to submit their CRM procedures?*
Assets Covered **88920**
Result Notes **CRM Plan Section 15**
142. Question Result, ID, References **Sat, CR.CRMCOMP.SUBMITPROCEDURES.R, 195.446(i)**
Question Text *Has the operator been responsive to requests from applicable agencies to submit their CRM procedures?*
Assets Covered **88920**
Result Notes **Submitted to UTC in 2021**
143. Question Result, ID, References **Sat, CR.CRMCOMP.CRMCOORDINATOR.R, 195.446(i)**
Question Text *Is there an individual that is responsible and accountable for compliance with requests from PHMSA or other applicable agencies?*
Assets Covered **88920**
Result Notes **Compliance Manager is responsible for submittals**
144. Question Result, ID, References **Sat, CR.CRMCOMP.RECORDS.P, 195.446(j)(1)**
Question Text *Are records management processes adequate to assure records are sufficient to demonstrate compliance with the CRM rule?*
Assets Covered **88920**
Result Notes **CRM Plan Section 16**

Documents maintained on paper and on shared drive
145. Question Result, ID, References **Sat, CR.CRMCOMP.RECORDS.R, 195.446(j)(1)**
Question Text *Are records sufficient to demonstrate compliance with the CRM rule?*

Assets Covered 88920

146. Question Result, ID, References Sat, CR.CRMCOMP.ELECTRONICRECORDS.R, 195.446(j)(1)

Question Text *Are electronic records properly stored, safeguarded, and readily retrievable?*

Assets Covered 88920

Result Notes Limited access to authorized personnel, backed up on company servers

147. Question Result, ID, References Sat, CR.CRMCOMP.DEVIATIONS.P, 195.446(j)(2)

Question Text *Are there processes to demonstrate and provide a documented record that every deviation from any CRM rule requirement was necessary for safe operation?*

Assets Covered 88920

Result Notes CRM Plan Section 16.2

148. Question Result, ID, References Sat, CR.CRMCOMP.DEVIATIONS.R, 195.446(j)(2)

Question Text *Were all deviations documented in a way that demonstrates they were necessary for safe operation?*

Assets Covered 88920

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