

August 24, 2023

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

Re: CPF 3-2023-014-NOPV
Response from Boardwalk Petrochemical Pipeline, LLC (“Boardwalk”) to
PHMSA’s Notice of Probable Violation, Proposed Civil Penalty, and Proposed
Compliance Order (“Notice”)

Dear Mr. Ochs,

On July 27, 2023, the Pipeline and Hazardous Materials Safety Administration (“PHMSA”) issued the above-referenced Notice in association with the inspection of Boardwalk’s Control Room Management Program procedures and records in Sulphur, LA, conducted remotely from September 19 through September 23, 2022.

Boardwalk is providing the following response with respect to the Proposed Compliance Order items. All referenced supporting documentation for each item is attached to this letter, including Management of Change (MOC) documentation.

1. Leak Detection (§195.444 (b))

Proposed Compliance Order: Regarding Item 1 of the Notice pertaining to Boardwalk not including procedures that demonstrated an effective system for detecting leaks in accordance with §195.444 (b) and §195.452 (i)(3), Boardwalk must develop procedures to include recommended frequency of testing as well as the format and criteria for testing, and evaluation of the results and response/action items to address findings. Boardwalk must also conduct and document test/assessments/evaluations and present documentation to PHMSA within 90 days of receipt of the Final Order.

Boardwalk response: Procedures were revised in MOC 2023-04-04 to add a test of the leak detection system once per calendar year, but not to exceed 15 months. The new procedure can be found in Section 1.8 of the current *Control Room Management Plan: Hazardous Liquids* which is attached to this letter. The MOC and these updated procedures were submitted to PHMSA on May 1, 2023.

Additionally, Boardwalk is in the process of creating a form to document the evaluation of the results and response/action items to address findings of the test. Procedures will then be updated with the publication of this form. Boardwalk will also conduct and document test/assessments/evaluations and present documentation to PHMSA withing 90 days of receipt of the Final Order.

Item 1 Documentation: *Control Room Management Plan: Hazardous Liquids* (Section 1.8), MOC 2023-04-04.

2. Control Room Management (§195.446 (c)(1))

Proposed Compliance Order: Regarding Item 2 of the Notice pertaining to Boardwalk failing to demonstrate that it had implemented and were compliant with API RP 1165 whenever a SCADA system is added, expanded or replaced, Boardwalk must conduct an audit of their SCADA screens and style guide against API RP 1165 to identify compliance and deficiencies and correct those deficiencies, or demonstrate that certain provisions of API RP 1165 are not practical for the SCADA system used, within 90 days of receipt of the Final Order.

Boardwalk response: Boardwalk will conduct a full audit of its SCADA screens and Style Guide against API RP 1165 and submit to PHMSA within 90 days of receipt of the Final Order.

Item 2 Documentation: None

3. Control Room Management (§195.446 (c)(2))

Proposed Compliance Order: Regarding Item 3 of the Notice pertaining to Boardwalk's failure to conduct a point-to-point (P2P) when implementing the new AVIVA SCADA system. Boardwalk must complete a P2P of the AVIVA Sulphur SCADA system. The procedure for (P2P) must also be modified to include verification of all screens, verify all point values and status match, the appropriate alarm conditions present such as on/off, open/closed, local/remote, in alarm with the correct priority, etc., within 120 days of receipt of the Final Order.

Boardwalk response: Boardwalk would like to clarify that the Issues Log referenced in the Notice was not used in place of P2P verification. A P2P verification was completed and presented to the inspector during one of two follow-up Teams meetings which were held on March 15th and 24th, 2023. According to our records, the inspector did not request this record from Boardwalk. The P2P record is included as an attachment to this letter.

Item 3 Documentation: BLM-BPP-Freeport AVEVA P2P records

4. Control Room Management (§195.446 (c)(3))

Boardwalk failed to complete a test of the internal communication system for safe manual operation of the pipeline in calendar year 2020 and could not provide records for the actual event they counted as a test on May 11, 2019.

Boardwalk response: Civil penalty payment of \$16,700 for Item 4 will be submitted to PHMSA separately.

Item 4 Documentation: None

5. Alarm Management (§195.446 (e))

Proposed Compliance Order: Regarding Item 5 of the Notice pertaining to Boardwalk's failure to have a process to address rationalization of alarms to provide for effective controller response to alarms, Boardwalk must develop an alarm rationalization process that supports a consistent method for determination of alarm priorities and set points to provide effective controller response to alarms. The operator must also utilize that process to rationalize all alarms within 120 days of receipt of the Final Order.

Boardwalk response: Boardwalk revised its procedures in MOC 2022-11-01 to document its established process for alarm rationalization and previously submitted those procedures to PHMSA in November 2022. Those procedures can be found in Chapter 6 of the attached *Control Room Management Plan: Hazardous Liquids*. Boardwalk will utilize this process to rationalize all alarms within 120 days of receipt of the Final Order.

Item 5 Documentation: *Control Room Management Plan: Hazardous Liquids* (Chapter 6), MOC 2022-11-01

6. Control Room Management (§195.446 (h)(1))

Proposed Compliance Order: Regarding Item 6 of the Notice pertaining to Boardwalk failing to provide training content for abnormal operations that could occur simultaneously or in sequence to support the training requirement, Boardwalk must identify alarms that could occur simultaneously or in sequence, the response to those conditions and training content to support those conditions. The operator must also train controllers on the content. The operator must also utilize that process to rationalize all alarms within 60 days of receipt of the Final Order.

Boardwalk response: Boardwalk implemented its Liquids Control Trainer (simulator-based training) in late 2022. The syllabus for each scenario includes a list of abnormal operating conditions likely to occur simultaneously or in sequence. Records for the training and syllabus for each scenario are attached to this letter. Training with the Liquids Control Trainer will be completed once each calendar year, not to exceed 15 months, by each Controller and Control Room Management.

Additionally, the last sentence of the proposed compliance order for this item repeats from the previous item. Please clarify the requirement for Boardwalk to close out this item in the Final Order.

Mr. Gregory A. Ochs
Director, Central Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration
August 24, 2023
Page 4

Item 6 Documentation: BLM_Scenarios_2022 and 2022 Liquids Control Trainer Training Records

7. Control Room Management (§195.446 (h)(3))

Proposed Compliance Order: Regarding Item 7 of the Notice pertaining to Boardwalk failing to establish specific training for how the leak detection system works and supports alarming to SCADA as well as what steps to take, as the controller, if a possible leak or leak is identified, Boardwalk must develop training content to describe how the Aviva system works to calculate the benchmark, how the value is alarmed to SCADA, and how the controller must respond should the alarm present. The operator must also train controllers on the content within 60 days of receipt of the Final Order.

Boardwalk response: Going forward, this training requirement is satisfied using Scenario #4 of the Liquids Control Trainer. Prior to the inspection, Boardwalk identified the need for improved training on leak detection. While the Liquids Control Trainer was in development, Controllers received training in Boardwalk's Learning Management System on Liquids Pipeline Rupture. The training PowerPoint, which was shown during the inspection, and roster are attached to this letter.

Item 7 Documentation: Liquids Pipeline Rupture Training and Pipeline Rupture Training Roster

The Management of Change Requests (MOC) referenced above are included in this letter. In addition to the MOC redlines, the new version of Boardwalk's CRM-HL is included as well.

Through the actions specified in this letter, Boardwalk has fulfilled the requirements of the Notice. If you have any questions concerning the information contained in this response, please do not hesitate to contact me or Tina H. Baker, Manager, Compliance Services.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Tony G. Rizk", with a stylized flourish at the end.

Tony G. Rizk
Vice President, Technical Services

CC: Tina H. Baker, Manager, Compliance Services

Enclosures: Items 1, 3, 5, 6, 7 Supporting Documentation