

February 14, 2023

VIA ELECTRONIC MAIL TO: jonmauer@islandenergyservices.com

Mr. Jon Mauer
President and Chief Executive Officer
Island Energy Services, LLC
91-480 Malakole Street
Kapolei, Hawaii 96707

Re: CPF No. 5-2022-023-NOPV

Dear Mr. Mauer:

Enclosed please find the Final Order issued in the above-referenced case. It makes a finding of violation and finds that the proposed actions to comply with the pipeline safety regulations have been completed. This case is now closed. Service of the Final Order by e-mail is effective upon the date of transmission and acknowledgement of receipt as provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Alan K. Mayberry
Associate Administrator
for Pipeline Safety

Enclosure

cc: Mr. Dustin Hubbard, Director, Western Region, Office of Pipeline Safety, PHMSA
Mr. Mark Dangler, Vice President, Logistics, Island Energy Services, LLC,
mdangler@islandenergyservices.com
Mr. Teja Arika, Pipeline Integrity Engineer, Island Energy Services, LLC,
tarika@islandenergyservices.com

CONFIRMATION OF RECEIPT REQUESTED

Respondent and OPS held a meeting to discuss the Proposed Compliance Order on June 27, 2022. OPS subsequently submitted a recommendation that included revised compliance terms on August 4, 2022 (Region Recommendation). Respondent then submitted a letter, dated October 25, 2022, which summarized the steps Respondent “plans to take to continue to inspect, maintain and repair Hilo Tank 12 including the roof plates” (Supplemental Response). On December 12, 2022, OPS submitted a supplemental recommendation finding the information provided by Respondent on October 25, 2022, satisfied the terms of the amended proposed compliance items (Supplemental Region Recommendation).

FINDING OF VIOLATION

The Notice alleged that Respondent violated 49 C.F.R. Part 195, as follows:

Item 1: The Notice alleged that Respondent violated 49 C.F.R. § 195.205(b)(1), which states:

§ 195.205 Repair, alteration and reconstruction of aboveground breakout tanks that have been in service.

(a) Aboveground breakout tanks that have been repaired, altered, or reconstructed and returned to service must be capable of withstanding the internal pressure produced by hazardous liquid to be stored therein and any anticipated external loads.

(b) After October 2, 2000, compliance with paragraph (a) requires the following:

(1) For tanks designed for approximate atmospheric pressure, constructed of carbon and low alloy steel, welded or riveted, and non-refrigerated; and for tanks built to API Std 650 (incorporated by reference, *see* § 195.3) or its predecessor Standard 12C; repair, alteration; and reconstruction must be in accordance with API Std 653 (except section 6.4.3) (incorporated by reference, *see* § 195.3)

The Notice alleged that Respondent violated 49 C.F.R. § 195.205(b)(1) by failing to repair the roof of Tank 12, an atmospheric pressure breakout tank built to API Standard (Std) 12C, in accordance with API Std 653. Specifically, the Notice alleged that on November 4, 2021, a PHMSA inspector observed holes in the roof of Tank 12 due to corrosion. An email from the operator dated November 11, 2021, explained that the holes in the tank observed by the inspector had been sealed with epoxy. The Notice alleged the epoxy repair does not meet the requirements of § 195.205(b)(1) or Chapter 9 of API Std 653.

In its Response, Respondent argued it was in compliance with pipeline safety regulations because API RP 575, Section 9.3 allows for repairs of tank roofs with soft patches. Respondent stated its records showed that, as of last testing in May 2022, the repaired areas on Tank 12's roof were within safe operating standards around the holes filled with the metal-epoxy. Respondent reported that metal thickness readings in the areas surrounding the holes following repairs were above 0.09 inches at the lowest points, but Respondent did not provide the precise readings. Respondent stated other areas where external coating had failed in a similar fashion to the holes returned readings at 0.144 inches at the lowest points. Respondent stated Island Energy inspectors concluded that the integrity of the tank roof was not compromised for the purposes of personnel accessing and walking on the roof.

Section 195.205(a) requires aboveground breakout tanks that have been repaired and returned to service be capable of withstanding any anticipated external loads. Section 195.205(b)(1) requires certain tanks to be repaired in accordance with API Std 653. API Std 653, Section 4.2.1.2 requires "[r]oof plates corroded to an average thickness of less than 0.09 in. in any 100-inch area or roof plates with any holes through the roof plate shall be repaired or replaced." Chapter 9 of API Std 653 describes allowable methods for tank repair. API Std 653, Section

9.1.1 states, “the basis for repairs and alterations shall be an API Std 650 equivalence.” Section 5.10.2.2 of API Std 650 requires roof plates to measure at a minimum thickness of 3/16th of an inch (0.1875 in.). Chapter 4 of API Std 650 contains detailed requirements regarding allowable materials and Appendix N describes conditions that must be followed when using an alternative material. Neither API Std 653 nor API Std 650 specifically authorize the use of epoxy to repair holes or corroded areas of roof plates.

Here, there is no dispute that API Std 653 required the roof plate of Tank 12 to be replaced or repaired as the roof had several holes through the metal plate. Respondent did not replace the roof plate, but rather it filled the holes with epoxy on November 11, 2021. Respondent does not describe any action taken to repair the other corroded areas on the roof plate. Respondent conducted testing on May 10, 2022, following the November repairs, which showed that the plate thickness around the holes filled with metal-epoxy was above 0.09 inches (without reporting the precise readings), and other areas as thin as 0.144 inches due to corrosion.¹ This testing shows that the repairs made on November 11, 2021, failed to restore the tank roof plate consistent with the requirements of API Std 650, Section 5.10.2.2, which requires a minimum roof plate thickness of 0.1875 inches. Further, the use of the epoxy is not consistent with the materials requirements in Chapter 4 or Appendix N of API Std 650. The repairs of the roof plate, therefore, were not in compliance with the API Std 653 or API Std 650.

Respondent argues the use of epoxy to make the repairs is consistent with § 195.205(b)(1) because portions of API Std 653 reference API Std 2610, which references API RP 575, and the repair with metal epoxy is in accordance with the recommendations in API RP 575.² However, here, the applicable section of API Std 653 does not refer to API Std 2610, but rather it refers to API Std 650. While API RP 575 may allow for repairs to be made with soft patches, the code specifically requires repairs be made in accordance with API Std 653, which requires API 650 equivalence, and those requirements were not met in making the repairs on November 11, 2021, as described above. Because Respondent’s repair is not consistent with API Std 653, I find the Respondent’s repair was not compliant with § 195.205(b)(1).

Accordingly, after considering all of the evidence, I find that Respondent violated 49 C.F.R. § 195.205(b)(1) by failing to repair the roof of an aboveground breakout tank in accordance with API Std 653.

This finding of violation will be considered a prior offense in any subsequent enforcement action taken against Respondent.

¹ Response, at 1-2.

² AP RP 575 Section 10.3.1 states, in relevant part “[f]illing with air-hardening adhesive-to-steel epoxies may be suitable if it will not be affected by the tank’s contents. Any other material of a putty-like nature that hardens upon drying can be used for temporary repairs; such materials must be able to tolerate the tank’s contents in addition to making a tight bond with the steel plate.”

COMPLIANCE ORDER

The Notice proposed a compliance order with respect to Item 1 in the Notice for violation of 49 C.F.R. Part 195. Under 49 U.S.C. § 60118(a), each person who engages in the transportation of hazardous liquids or who owns or operates a pipeline facility is required to comply with the applicable safety standards established under chapter 601.

With regard to the violation of § 195.205(b)(1) (Item 1), Respondent argued that it was in compliance with the regulation and requested a meeting with OPS to discuss the Proposed Compliance Order. Island Energy did not provide a separate argument for withdrawal or modification of the Compliance Order for this Item. For the reasons stated above, the underlying allegation of violation has not been withdrawn, and consequently, the Compliance Order for this Item is not withdrawn.

OPS and Respondent met on June 27, 2022, where the parties discussed the Proposed Compliance Order.³ At that time, Respondent expressed its concern of conducting a roof plate repair consistent with the proposed compliance terms within the time frame set forth in the Proposed Compliance Order.⁴ Pursuant to that conversation, OPS submitted a recommendation to amend the proposed compliance terms.⁵

For the above reasons, the Compliance Order is modified as set forth below.

Pursuant to the authority of 49 U.S.C. § 60118(b) and 49 C.F.R. § 190.217, Respondent is ordered to take the following actions to ensure compliance with the pipeline safety regulations applicable to its operations:

1. With respect to the violation of § 195.205(b)(1) (**Item 1**), Respondent must, within 90 days of receiving the Final Order, provide to the Director, Western Region, procedures for maintaining and repairing Tank 12's roof plates in such a manner to ensure that personnel are safely supported by the tank's roof. The procedures must include, at a minimum:
 - a. Procedures for conducting Tank 12's routine, monthly in-service inspection, that include provisions for close inspection of the coating condition of all surfaces where personnel have access to the tank roof. The procedures must have clear and specific provisions to promptly repair and re-coat any location that has coating damage or visible evidence of corrosion;
 - b. Procedures for conducting Tank 12's external and ultrasonic inspections by an authorized inspector. The procedures must clearly describe the inspection process and inspection interval, and that interval must be based on a

³ See Region Recommendation, at 1.

⁴ *Id.*

⁵ *Id.*, at 2.

conservative estimate of corrosion growth rate from known thickness measurements. The ultrasonic inspection procedures must include a close examination and thickness measurements along the tank's walkway at all locations where coating has failed, where local dishing allows ponding of rainwater, or anywhere else where there is visible evidence of corrosion or thinning of the roof plate; and

- c. Procedures for repairing the failed locations of Tank 12's roof with replacement plates or patch plates upon the tanks next out-of-service inspection. These procedures must include dates, to the nearest month and year, that the tank will be taken out of service for inspection and repair.

On October 25, 2022, Respondent submitted documentation to OPS in accordance with the amended proposed compliance terms described in the Region Recommendation. On December 12, 2022, OPS submitted a Supplemental Region Recommendation stating it reviewed Respondent's October Supplemental Response, and the Director found Respondent's actions sufficient to satisfy the amended proposed compliance terms.⁶

WARNING ITEMS

With respect to Items 2 through 6, the Notice alleged probable violations of Part 195, but identified them as warning items pursuant to § 190.205. The warnings were for:

49 C.F.R. § 195.575(c) **(Item 2)** — Respondent's alleged failure to inspect and electrically test each electrical isolation to assure isolation is adequate;

49 C.F.R. § 195.579(d) **(Item 3)** — Respondent's alleged failure to install a tank bottom lining in an aboveground breakout tank built to Standard 12C in accordance with API RP 652;

49 C.F.R. § 195.581(b) **(Item 4)** — Respondent's alleged failure to use coating material suitable for the prevention of atmospheric corrosion;

49 C.F.R. § 195.583(a) **(Item 5)** — Respondent's alleged failure to inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion at least once every three calendar years, but with intervals not exceeding 39 months; and

49 C.F.R. § 195.589(c) **(Item 6)** — Respondent's alleged failure to maintain a record of each analysis, check, demonstration, examination, inspection, investigation, review, survey, and test required to demonstrate the adequacy of corrosion control measures or that corrosion requiring control measures does not exist.

⁶ Supplemental Region Recommendation, at 1.

Respondent presented information in its Response showing that it had taken certain actions to address the cited warning items. Under § 190.205, PHMSA does not adjudicate warning items to determine whether a probable violation occurred. If OPS finds a violation of any of these items in a subsequent inspection, Respondent may be subject to future enforcement action.

Under 49 C.F.R. § 190.243, Respondent may submit a Petition for Reconsideration of this Final Order to the Associate Administrator, Office of Pipeline Safety, PHMSA, 1200 New Jersey Avenue, SE, East Building, 2nd Floor, Washington, DC 20590, with a copy sent to the Office of Chief Counsel, PHMSA, at the same address. The written petition must be received no later than 20 days after receipt of the Final Order by Respondent. Any petition submitted must contain a statement of the issue(s) and meet all other requirements of 49 C.F.R. § 190.243. The terms of the order, including corrective action, remain in effect unless the Associate Administrator, upon request, grants a stay.

The terms and conditions of this Final Order are effective upon service in accordance with 49 C.F.R. § 190.5.

February 14, 2023

Alan K. Mayberry
Associate Administrator
for Pipeline Safety

Date Issued