



U.S. Department  
of Transportation

Pipeline and Hazardous Materials  
Safety Administration

1200 New Jersey Avenue SE  
Washington DC 20590

FEB 04 2019

Mr. Alope Lohia  
Group Chief Executive Officer  
Indorama Ventures Public Company Limited  
75/102 Ocean Tower 2, 37<sup>th</sup> floor  
Sukhumvit Soi 19  
Bangkok 10110, Thailand

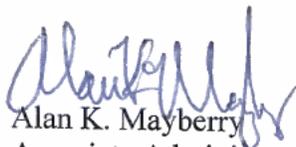
**Re: CPF No. 4-2018-5007**

Dear Mr. Lohia:

Enclosed please find the Final Order issued in the above-referenced case to your subsidiary, Indorama Ventures Olefins, LLC (Indorama). It makes findings of violation and specifies actions that need to be taken by Indorama to comply with the pipeline safety regulations. When the terms of the compliance order have been completed, as determined by the Director, Southwest Region, Office of Pipeline Safety, PHMSA, this enforcement action will be closed. Service of the Final Order by certified mail is effective upon the date of mailing 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: Ms. Mary L. McDaniel, Director, Southwest Region, Office of Pipeline Safety, PHMSA  
Mr. Anand Kumar Agarwal, Chief Financial Officer, Indorama Ventures Olefins, LLC,  
4300 Hwy 108, Westlake, LA 70669

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

**U.S. DEPARTMENT OF TRANSPORTATION  
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION  
OFFICE OF PIPELINE SAFETY  
WASHINGTON, D.C. 20590**

**In the Matter of**

**Indorama Ventures Olefins, LLC,  
a subsidiary of Indorama Ventures Public  
Company Limited,**

**Respondent.**

**CPF No. 4-2018-5007**

**FINAL ORDER**

From June 12, 2017, through August 3, 2017, pursuant to 49 U.S.C. § 60117, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted an on-site pipeline safety inspection of the facilities and records of Indorama Ventures Olefins, LLC's (Indorama or Respondent) Lake Charles/Orange Ethylene pipeline in Houston, Texas. Indorama is a subsidiary of Indorama Ventures PCL,<sup>1</sup> a global petrochemical company with 85 manufacturing facilities in 29 countries.<sup>2</sup> Indorama's Lake Charles/Orange Ethylene Line is a 6-5/8-inch-diameter liquid pipeline that starts at the Glen Springs Holding Plant in Sulphur, Louisiana, and ends at a Chevron chemical plant in Orange, Texas.<sup>3</sup> The pipeline is approximately 33 miles long, with approximately 12 miles running through marshy areas and two crossings of navigable waterways.<sup>4</sup> The pipeline is currently purged and not operational.<sup>5</sup>

As a result of the inspection, the Director, Southwest Region, OPS (Director), issued to Respondent, by letter dated April 27, 2018, a Notice of Probable Violation and Proposed Compliance Order (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that Indorama had committed three violations of 49 C.F.R. Part 195, and proposed ordering Respondent to take certain measures to correct the alleged violations.

<sup>1</sup> Indorama Ventures PCL Organization Structure, available at <http://www.indoramaventures.com/storage/company/organization-chart/20181002-orgchart-en.jpg>, last accessed October 10, 2018.

<sup>2</sup> Indorama Ventures Company Overview, available at <http://www.indoramaventures.com/en/our-company/overview>, last accessed October 17, 2018.

<sup>3</sup> Pipeline Safety Violation Report (Violation Report), (April 27, 2018) (on file with PHMSA), at 1.

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

Indorama responded to the Notice by letter dated May 25, 2018 (Response). The company did not contest the allegations of violation but provided information concerning the corrective actions it had taken. Respondent did not request a hearing and therefore has waived its right to one.

### **FINDINGS OF VIOLATION**

In its Response, Indorama did not contest the allegations in the Notice that it violated 49 C.F.R. Part 195, as follows:

**Item 1:** The Notice alleged that Respondent violated 49 C.F.R. §195.403(b)(1), which states:

**§ 195.403 Emergency response training.**

(a) ....

(b) At the intervals not exceeding 15 months, but at least once each calendar year, each operator shall:

(1) Review with personnel their performance in meeting the objectives of the emergency response training program set forth in paragraph (a) of this section; . . . .

The Notice alleged that Respondent violated 49 C.F.R. § 195.403(b)(1) by failing to conduct and document reviews with personnel concerning their performance in meeting the objectives of the company's emergency-response training program at the required interval of once each calendar year, not to exceed 15 months. Specifically, the Notice alleged that Indorama could not provide any documentation demonstrating that it had conducted emergency-response personnel performance reviews at the required intervals.

Respondent did not contest this allegation of violation. Accordingly, based upon a review of all of the evidence, I find that Respondent violated 49 C.F.R. § 195.403(b)(1) by failing to conduct and document reviews with personnel concerning their performance in meeting the objectives of the emergency-response training program at the required interval of once each calendar year, not to exceed 15 months.

**Item 2:** The Notice alleged that Respondent violated 49 C.F.R. § 195.575(a), which states:

**§ 195.575 Which facilities must I electrically isolate and what inspections, tests, and safeguards are required?**

(a) You must electrically isolate each buried or submerged pipeline from other metallic structures, unless you electrically interconnect and cathodically protect the pipeline and the other structures as a single unit.

The Notice alleged that Respondent violated 49 C.F.R. § 195.575(a) by failing to determine whether each buried pipeline was electrically isolated from other metallic structures. Specifically, the Notice alleged that Section 10 of Indorama's Corrosion Control Procedure, *Liquid Pipeline Operations, Maintenance & Emergency Manual*, did not include any guidance

regarding electrical isolation of each buried or submerged pipeline from other metallic structures.

Respondent did not contest this allegation of violation. Accordingly, based upon a review of all of the evidence, I find that Respondent violated 49 C.F.R. § 195.575(a) by failing to determine whether each buried pipeline was electrically isolated from other metallic structures.

**Item 3:** The Notice alleged that Respondent violated 49 C.F.R. § 575(e), which states:

**§ 195.575 Which facilities must I electrically isolate and what inspections, test, and safeguards are required?**

(a) ....

(e) If a pipeline is in close proximity to electrical transmission tower footings, ground cables, or counterpoise, or in other areas where it is reasonable to foresee fault currents or an unusual risk of lightning, you must protect the pipeline against damage from fault currents or lighting and take protective measures at insulating devices.

The Notice alleged that Respondent violated 49 C.F.R. § 195.575(e) by failing, when a pipeline is in close proximity to electrical transmission tower footings, ground cables, or counterpoise, or in other areas where it is reasonable to foresee fault currents or an unusual risk of lightning, to determine when protection is required and when protective measures must be taken to protect the pipeline against damage. Specifically, the Notice alleged that Section 10 of Indorama's Corrosion Control Procedures, *Liquid Pipeline Operations, Maintenance & Emergency Manual*, failed to include any guidance for personnel to determine when such protection is needed.

Respondent did not contest this allegation of violation. Accordingly, based upon a review of all of the evidence, I find that Respondent violated 49 C.F.R. § 195.575(e) by failing to determine when protection from fault currents and lightning strikes is required and when protective measures must be taken to protect the pipeline against damage.

These findings of violation will be considered prior offenses in any subsequent enforcement action taken against Respondent.

### **COMPLIANCE ORDER**

The Notice proposed a compliance order with respect to Items 1, 2, and 3 in the Notice for violations of 49 C.F.R. §§ 195.403(b)(1), 195.575(a), and 195.575(e), respectively. 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. The Director has indicated that Respondent has taken the following actions to address one of the cited violations:

For **Item 2**, the Director has indicated that Respondent submitted a revised section 10.8, *Electrical Isolation*, of its procedures, to provide detailed guidance for personnel to determine when and how to accomplish electrical isolation. Accordingly, I find that compliance has been achieved with respect to this violation. Therefore, the compliance terms proposed in the Notice

for Item 2 are not included in this Order.

As for the remaining compliance terms, pursuant to the authority of 49 U.S.C. § 60118(b) and 49 C.F.R. § 190.217, I order Respondent to take the following actions to ensure compliance with the pipeline safety regulations applicable to its operations:

1. With respect to the violation of § 195.403(a) (**Item 1**), Respondent must conduct and document reviews of emergency-response personnel's performance within 60 days following receipt of the Final Order, and must submit documentation to the Director once personnel are trained to the objectives of the company's emergency-response training program.
2. With respect to the violation of § 195.575(e) (**Item 3**), Respondent must develop and follow a procedure as required by § 195.402(c)(3) that covers the determination of when protection from fault currents and lightning strikes is required to protect the pipeline and other devices, and any mitigating steps taken to protect the pipeline and devices that could be affected by fault currents and lightning strikes. The procedure required by this paragraph must be submitted to the Director within 30 days following receipt of this Final Order. Within 90 days following receipt of the Final Order, Respondent must conduct inspections following the procedures and provide documentation to the Director.

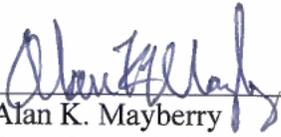
The Director may grant an extension of time to comply with any of the required items upon a written request timely submitted by the Respondent and demonstrating good cause for an extension.

It is requested that Respondent maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to the Director. It is requested that these costs be reported in two categories: (1) the total cost associated with preparation/revision of plans, procedures, studies and analyses; and (2) the total cost associated with replacements, additions and other changes to pipeline infrastructure.

Failure to comply with this Order may result in administrative assessment of civil penalties not to exceed \$200,000, as adjusted for inflation (49 C.F.R. § 190.223), for each violation for each day the violation continues or in referral to the Attorney General for appropriate relief in a district court of the United States.

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, 2<sup>nd</sup> Floor, Washington, DC 20590, with a copy sent to the Office of Chief Counsel, PHMSA, at the same address, no later than 20 days after receipt of service of this 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.



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Alan K. Mayberry  
Associate Administrator  
for Pipeline Safety

FEB 04 2019

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Date Issued