

NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

April 27, 2018

Mr. Saswati Biswas
Chief Financial Officer
Indorama Ventures Olefins, LLC
4300 Hwy 108
Westlake, LA 70669

CPF-4-2018-5008M

Dear Mr. Biswas:

From June 12, 2017 to August 3, 2017, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code inspected Indorama Ventures Olefins, LLC procedures for the Lake Charles/Orange Ethylene Pipeline in Houston, TX.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within Indorama's plans or procedures, as described below:

§195.402 Procedural manual for operations, maintenance, and emergencies.

(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

Throughout Indorama's Liquid Pipeline Operations, Maintenance & Emergency Manual, the procedures replicate and paraphrase the regulations, and reference the regulations instead of their own processes and procedures. Indorama's procedures must be amended to be more specific to

the Indorama system, provide adequate details and not simply paraphrase the regulations for conducting normal operations and maintenance activities.

The following sections of Indorama's Liquid Pipeline Operations, Maintenance & Emergency Manual need to be amended:

1. Section 1.11: Communications to meet the requirements of §195.408 Communications. Indorama's procedures closely paraphrased the regulations and did not include details specific to the Indorama pipeline system. Indorama's procedure should include specific details of the Indorama communication system requirements that ensure the communications system provides for the efficient transmission of information needed for the safe operation of the Indorama pipeline system.
2. Section 7.4: CPM Leak Detection to meet the requirements of §195.444 CPM Leak Detection. Indorama's procedures paraphrase the regulations and did not include details specific to the Indorama pipeline system. Indorama's procedure should include the requirement to evaluate the capability of its leak detection system, and modify as necessary, where the process for evaluation includes length and size of the pipeline, type of product carried, the pipeline's proximity to the high consequence area, the swiftness of leak detection, location of nearest response personnel, leak history, and risk assessment results.
3. Section 19: Emergency Response Plan of the Liquid Pipeline Operations, Maintenance & Emergency Manual and Section 10: Training of the Emergency Response Plan to meet the requirements of §195.403 Emergency Response Training. Indorama's procedures paraphrase the regulations and did not include details specific to the Indorama pipeline system. Indorama's procedure also did not include product specific guidance for emergency response and emergency response training. Indorama's procedures must include the requirement that emergency personnel are trained on the specific characteristics and hazards of the hazardous liquids transported, which is ethylene for this pipeline.
4. Section 19 Emergency Response Plan, Part 19.10: Accidental Release of Hazardous Liquid to meet the requirements of §195.402(e) Emergencies. Indorama's procedures did not include details specific to the Indorama pipeline system. Section 19.10: Accidental Release of Hazardous Liquid procedure should include correct information for forms used to notify the Accident Commander during an accidental spill. Indorama's procedure directs personnel to fill out the Indorama Spill Report Form and to fax this form to the Accident Commander. This referenced form is not assigned a number and is not included in the list of forms Section 21: Forms, with this manual. Indorama had not developed the Spill Report Form at the time of this inspection.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.206. Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).

Following the receipt of this Notice, you have 30 days to submit written comments, revised procedures, or a request for a hearing under §190.211. If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue an Order Directing Amendment. If your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.206). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within 30 days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

It is requested (not mandated) that Indorama Ventures Olefins, LLC maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Mary McDaniel, Director, Southwest Region, Pipeline and Hazardous Materials Safety Administration. In correspondence concerning this matter, please refer to **CPF-4-2018-5008M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Mary L. McDaniel, P.E.
Director, Southwest Region
Pipeline and Hazardous Materials Safety Administration

Enclosure: *Response Options for Pipeline Operators in Compliance Proceedings*