



U.S. Department of Transportation  
**Pipeline and Hazardous Materials  
Safety Administration**

8701 S. Gessner, Suite 630  
Houston TX 77074

**NOTICE OF PROBABLE VIOLATION,  
PROPOSED CIVIL PENALTY,  
and  
PROPOSED COMPLIANCE ORDER**

**VIA ELECTRONIC MAIL**

February 22, 2023

Todd Dunn  
Vice President Operations – HYCO  
Linde, Inc.  
1585 Saw Dust Road  
Suite 300  
The Woodlands, TX 77300

**CPF 4-2023-005-NOPV**

Dear Mr. Dunn:

From March 30 to September 6, 2022, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code (U.S.C.), inspected Linde Inc.'s (Linde) hydrogen pipeline system in Louisiana and Texas.

As a result of the inspection, it is alleged that Linde has committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (C.F.R.). The items inspected and the probable violations are:

1. **§ 191.22 National Registry of Operators.**
  - (a) ....
  - (c) **Changes.** Each operator of a gas pipeline, gas pipeline facility, UNGSF, LNG plant, or LNG facility must notify PHMSA electronically through the National Registry of Operators at <https://portal.phmsa.dot.gov> of certain events.
    - (1) An operator must notify PHMSA of any of the following events not later than 60 days before the event occurs:
      - (i) ....
      - (ii) Construction of 10 or more miles of a new pipeline;

Linde failed to notify PHMSA of the construction of 10 or more miles of new pipeline in accordance with § 191.22(c)(1)(ii). Specifically, Linde failed to notify PHMSA electronically through the National Registry of Operators of approximately 17.39 miles of a new 14-inch hydrogen pipeline construction project 60 days before the event occurred.

During the inspection Linde stated that it began construction on the hydrogen pipeline on March 15, 2020 and completed the project on July 31, 2021. Linde failed to notify PHMSA of the construction project 60 days before the event occurred. Rather, Linde filed the notification for the project on September 9, 2022. The notification should have been made no later than January 15, 2020.

Therefore, Linde failed to notify PHMSA of the construction of 10 or more miles of new pipeline in accordance with § 191.22(c)(1)(ii).

**2. § 192.459 External corrosion control: Examination of buried pipeline when exposed.**

**Whenever an operator has knowledge that any portion of a buried pipeline is exposed, the exposed portion must be examined for evidence of external corrosion if the pipe is bare, or if the coating is deteriorated. If external corrosion requiring remedial action under §§ 192.483 through 192.489 is found, the operator shall investigate circumferentially and longitudinally beyond the exposed portion (by visual examination, indirect method, or both) to determine whether additional corrosion requiring remedial action exists in the vicinity of the exposed portion.**

Linde failed to examine two exposed portions of buried pipelines for evidence of external corrosion in accordance with § 192.459. Specifically, Linde failed to perform a visual examination on two (2) of the five (5) replacements/repairs of exposed buried pipeline (the LA-TX Hydrogen Pipeline System) for evidence of deteriorated coating and/or external corrosion.

During the inspection Linde failed to provide Exposure Report Forms SMP-189 or any records showing an internal/external corrosion examination or visual examinations of the coating on the exposed portions of the pipe when exposed for the following two projects: 1) Sens Road Relocation Project in LaPorte, Texas (2019) and 2) Line Lowering project in Texas City, Texas (2020).

Therefore, Linde failed to examine two exposed portions of buried pipelines for evidence of external corrosion in accordance with § 192.459.

**3. § 192.937 What is a continual process of evaluation and assessment to maintain a pipeline's integrity?**

**(a) . . . .**

**(b) *Evaluation.* An operator must conduct a periodic evaluation as frequently as needed to assure the integrity of each covered segment. The periodic evaluation must be based on a data integration and risk assessment of the entire pipeline as specified in § 192.917. For plastic transmission pipelines, the periodic evaluation is based on the threat**

**analysis specified in 192.917(d). For all other transmission pipelines, the evaluation must consider the past and present integrity assessment results, data integration and risk assessment information (§ 192.917), and decisions about remediation (§ 192.933) and additional preventive and mitigative actions (§ 192.935). An operator must use the results from this evaluation to identify the threats specific to each covered segment and the risk represented by these threats.**

Linde failed to conduct a periodic evaluation as frequently as needed to assure the integrity of each covered segment in accordance with § 192.937(b). Specifically, Linde failed to conduct a risk analysis of its pipeline to identify additional preventive and mitigative actions after constructing seventeen miles of covered segments. In addition, Linde's procedures failed to include a requirement to conduct a periodic evaluation as frequently as needed to assure the integrity of each covered segment in accordance with § 192.937(b).

Linde has not conducted a risk analysis since 2010. Therefore, Linde must conduct a risk analysis to determine if additional preventive and mitigative actions, including automatic shut-off valves or remote control valves, would mitigate or enhance public safety for its covered segments, including the newly-constructed segments. Linde must also revise its procedures to include a requirement to conduct a periodic evaluation, at a specified interval, to assure the integrity of each covered segment in accordance with § 192.937(b).

Therefore, Linde failed to conduct a periodic evaluation as frequently as needed to assure the integrity of each covered segment in accordance with § 192.937(b).

#### Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$257,664 per violation per day the violation persists, up to a maximum of \$2,576,627 for a related series of violations. For violation occurring on or after March 21, 2022 and before January 6, 2023, the maximum penalty may not exceed \$239,142 per violation per day the violation persists, up to a maximum of \$2,391,412 for a related series of violations. For violation occurring on or after May 3, 2021 and before March 21, 2022, the maximum penalty may not exceed \$225,134 per violation per day the violation persists, up to a maximum of \$2,251,334 for a related series of violations. For violation occurring on or after January 11, 2021 and before May 3, 2021, the maximum penalty may not exceed \$222,504 per violation per day the violation persists, up to a maximum of \$2,225,034 for a related series of violations. For violation occurring on or after July 31, 2019 and before January 11, 2021, the maximum penalty may not exceed \$218,647 per violation per day the violation persists, up to a maximum of \$2,186,465 for a related series of violations. For violation occurring on or after November 27, 2018 and before July 31, 2019, the maximum penalty may not exceed \$213,268 per violation per day, with a maximum penalty not to exceed \$2,132,679. For violation occurring on or after November 2, 2015 and before November 27, 2018, the maximum penalty may not exceed \$209,002 per violation per day, with a maximum penalty not to exceed \$2,090,022.

We have reviewed the circumstances and supporting documentation involved for the above probable violation(s) and recommend that you be preliminarily assessed a civil penalty of \$ 20,400 as follows:

<u>Item number</u>	<u>PENALTY</u>
1	\$ 20,400

Proposed Compliance Order

With respect to Item 3 pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Linde, Inc. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Warning Item

With respect to Item 2, we have reviewed the circumstances and supporting documents involved in this case and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to promptly correct this item. Failure to do so may result in additional enforcement action.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Enforcement Proceedings*. Please refer to this document and note the response options. All material you submit in response to this enforcement action may be 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 respond as described in the enclosed *Response Options*. 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 a Final Order. If you are responding to this Notice, we propose that you submit your correspondence to my office within 30 days from receipt of this Notice. The Region Director may extend the period for responding upon a written request timely submitted demonstrating good cause for an extension.

In your correspondence on this matter, please refer to **CPF 4-2023-005-NOPV** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Bryan Lethcoe  
Director, Southwest Region  
Pipeline and Hazardous Materials Safety Administration

Enclosures: *Proposed Compliance Order*  
*Response Options for Pipeline Operators in Enforcement Proceedings*

cc: John Maitino, National Pipeline Compliance Mgr., Linde, Inc., [john.maitino@linde.com](mailto:john.maitino@linde.com)

## **PROPOSED COMPLIANCE ORDER**

Pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Linde, Inc. a Compliance Order incorporating the following remedial requirements to ensure compliance with the pipeline safety regulations:

- A. In regard to Item 3 of the Notice pertaining to Linde's failure to conduct a periodic evaluation as frequently as needed to assure the integrity of each covered segment, Linde must conduct a risk analysis and submit the analysis to the Director, Southwest Region within **60** days of issuance of the Final Order. Linde must also revise its procedures to include a requirement to conduct a periodic evaluation, at a specified interval, to assure the integrity of each covered segment and submit the revised procedures to the Director, Southwest Region within **60** days of issuance of the Final Order.

It is requested (not mandated) that Linde, Inc. maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Bryan Lethcoe, Director, Southwest Region, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: 1) total cost associated with the preparation/revision of plans, procedures, studies, and analyses, and 2) the total cost associated with replacements, additions, and other changes to pipeline infrastructure.