



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

840 Bear Tavern Road, Suite 300
West Trenton, NJ 08628
609.771.7800

NOTICE OF AMENDMENT

OVERNIGHT EXPRESS DELIVERY

August 18, 2022

Mr. Jim Martin
President
Century Aluminum
1401 Spring Bank Drive, Suite 16
Owensboro, Kentucky 42303

CPF 1-2022-065-NOA

Dear Mr. Martin:

From November 15, 2021 to November 19, 2021, and February 15, 2022 to February 16, 2022, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code inspected Century Aluminum's procedures for its East Slaughters Underground Natural Gas Storage in Hopkins, Kentucky.

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

1. **§ 192.12 Underground natural gas storage facilities.**

(a) ...

(c) *Procedural manuals.* Each operator of a UNGSF must prepare and follow for each facility one or more manuals of written procedures for conducting operations, maintenance, and emergency preparedness and response activities under paragraphs (a) and (b) of this section. Each operator must keep records necessary to administer such procedures and review and update these manuals at intervals not exceeding 15 months, but at least once each calendar year. Each operator must keep the appropriate parts of these manuals accessible at locations where UNGSF work is being performed. Each operator must have written procedures in place before commencing operations or beginning an activity not yet implemented.

Century Aluminum's written procedures for conducting operations, maintenance, and emergency preparedness and response activities were inadequate to ensure safe operation of a pipeline facility. Specifically, Century Aluminum failed to include a procedure for monitoring the presence of annular gas by measuring and recording annular pressure and/or annular gas flow in accordance with API RP 1171, Section 9.3.2 Well Integrity Monitoring (Section 9.3.2).

Section 9.3.2 states in part, "[t]he operator shall monitor for presence of annular gas by measuring and recording annular pressure and/or annular gas flow."

During the inspection, PHMSA requested Century Aluminum's procedures for monitoring the presence of annular gas by measuring and recording annular pressure and/or annular gas flow. Century Aluminum provided the *Storage Integrity Management Plan* (SIMP), Section 4. However, the SIMP failed to include a process for monitoring the presence of annular gas by measuring and recording annular pressure and/or annular gas flow.

Therefore, Century Aluminum's written procedures required by §192.12(c) were inadequate. Century Aluminum must revise its procedures to address the deficiency outlined above.

2. § 192.12 Underground natural gas storage facilities.

(a) ...

(c) *Procedural manuals.* Each operator of a UNGSF must prepare and follow for each facility one or more manuals of written procedures for conducting operations, maintenance, and emergency preparedness and response activities under paragraphs (a) and (b) of this section. Each operator must keep records necessary to administer such procedures and review and update these manuals at intervals not exceeding 15 months, but at least once each calendar year. Each operator must keep the appropriate parts of these manuals accessible at locations where UNGSF work is being performed. Each operator must have written procedures in place before commencing operations or beginning an activity not yet implemented.

Century Aluminum's written procedures for conducting operations, maintenance, and emergency preparedness and response activities were inadequate to ensure safe operation of a pipeline facility. Specifically, Century Aluminum failed to establish an annual frequency for testing the operation of the master valve and wellhead pipeline isolation valve for proper function and ability to isolate the well in accordance with Section 9.3.2

Section 9.3.2 states in part, "[t]he operator shall test the operation of the master valve and wellhead pipeline isolation valve at least annually for proper function and ability to isolate the well."

During the inspection, PHMSA requested Century Aluminum's procedures regarding testing of the master valve and wellhead pipeline isolation valve for proper function. Century Aluminum provided its SIMP, which failed to establish an annual frequency requirement for testing of the operation of the master valve and wellhead pipeline isolation valve for proper function and ability to isolate the well.

Therefore, Century Aluminum's written procedures required by §192.12(c) were inadequate. Century Aluminum must revise its procedures to address the deficiency outlined above.

3. § 192.12 Underground natural gas storage facilities.

(a) ...

(c) *Procedural manuals.* Each operator of a UNGSF must prepare and follow for each facility one or more manuals of written procedures for conducting operations, maintenance, and emergency preparedness and response activities under paragraphs (a) and (b) of this section. Each operator must keep records necessary to administer such procedures and review and update these manuals at intervals not exceeding 15 months, but at least once each calendar year. Each operator must keep the appropriate parts of these manuals accessible at locations where UNGSF work is being performed. Each operator must have written procedures in place before commencing operations or beginning an activity not yet implemented.

Century Aluminum's written procedures for conducting operations, maintenance, and emergency preparedness and response activities were inadequate to ensure safe operation of a pipeline facility. Specifically, Century Aluminum failed to include a procedure to define a threshold or limit for the annular pressure and/or annular gas flow and to evaluate annular gas occurrences in accordance with Section 9.3.2.

Section 9.3.2 states in part, "[t]he operator shall evaluate each annular gas occurrence that exceeds operator- or regulatory-defined threshold levels determined from well integrity evaluation and from risk assessment."

During the inspection, PHMSA requested Century Aluminum's procedures regarding evaluating annular gas occurrences. Century Aluminum provided its SIMP, which failed to include a process for determining threshold levels from well integrity evaluation and from risk assessment. The SIMP also failed to include a process for evaluating each annular gas occurrence that exceeds operator- or regulator-defined thresholds.

Therefore, Century Aluminum's written procedures required by §192.12(c) were inadequate. Century Aluminum must revise its procedures to address the deficiency outlined above.

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 Enforcement Proceedings.

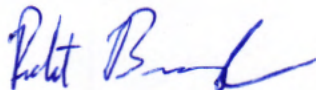
Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5

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 Century Aluminum maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Robert Burrough, Director, Eastern Region, Pipeline and Hazardous Materials Safety Administration, 840 Bear Tavern Road, Suite 300, West Trenton, NJ 08628. In correspondence concerning this matter, please refer to **CPF 1-2022-065-NOA** and, for each document you submit, please provide a copy in electronic format whenever possible. Smaller files may be emailed to robert.burrough@dot.gov. Larger files should be sent on USB flash drive accompanied by the original paper copy to the Eastern Region Office.

Sincerely,



Robert Burrough
Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration

Enclosure: Response Options for Pipeline Operators in Enforcement Proceedings