

NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 16, 2018

Mr. James M. Piccone
President
Resolute Natural Resources Company
1700 Lincoln Street, Suite 2800
Denver, CO 80203

CPF 5-2018-5001M

Dear Mr. Piccone:

On August 1 through 4, 2017, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code, inspected Resolute Natural Resources Company (RNRC) procedures for the Greater Aneth CO2 Pipeline in Cortez, Colorado, and Aneth, Utah.

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

1. **§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.**

Resolute Natural Resources Company (RNRC)'s Emergency Response Training Plan did not incorporate a continuing training program to instruct emergency response personnel to carry out the emergency procedures established under §195.402 that relate to their assignments in accordance with §195.403(a)(1).

RNRC's Emergency Response Training Plan mostly paraphrases the Code and fails to identify training required to instruct emergency response personnel as required by §195.403(a)(1). In addition, it did not list established requirements and training intervals.

2. **§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.

RNRC's Emergency Response Training Plan did not incorporate a continuing training program to instruct emergency response personnel to know the characteristics and hazards of the hazardous liquid or carbon dioxide transported, including, in case of flammable HVL, flammability of mixtures with air, odorless vapors, and water action in accordance with §195.403(a)(2).

RNRC's Emergency Response Training Plan mostly paraphrases the Code and fails to identify training required to instruct emergency response personnel as required by §195.403(a)(2).

3. **§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.

RNRC's Emergency Response Training Plan did not incorporate a continuing training program to instruct emergency response personnel to recognize conditions that are likely to cause emergencies, predict the consequences of facility malfunctions or failures and hazardous or carbon dioxide spills, and take appropriate corrective actions in accordance with §195.403(a)(3).

RNCR 's Emergency Response Training Plan mostly paraphrases the Code and fails to identify training required to instruct emergency response personnel as required by §195.403(a)(3).

4. **§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.

RNRC's Emergency Response Training Plan did not incorporate a continuing training program to instruct emergency response personnel to learn the potential causes, types, sizes, and consequences of fire and the appropriate use of portable fire extinguishers and other on-site control equipment, involving, where feasible, a simulated pipeline emergency condition in accordance with §195.403(a)(5).

RNRC 's Emergency Response Training Plan mostly paraphrases the Code and fails to identify training required to instruct emergency response personnel as required by §195.403(a)(5).

5. **§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.

RNRC's Emergency Response Training Plan did not include the requirement that supervisors maintain a thorough knowledge of the emergency response procedures established under §195.402 for which they are responsible for and that this is verified in accordance with §195.403(c).

RNRC 's Emergency Response Training Plan fails to clearly identify what emergency response procedures training is required for supervisors as required by §195.403(c).

6. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written atmospheric corrosion control procedures for cleaning and coating each pipeline or portion of pipeline that is exposed to the atmosphere in accordance with §195.581(a). At the time of the inspection, it was noted that the procedure in the RNRC Manual only paraphrases the Code. Therefore, RNRC must modify their procedure to provide details on how to clean and coat each pipeline or portion of pipeline that exposed to the atmosphere as required by §195.581(a).

7. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written atmospheric corrosion control procedures for applying the coating material that must be suitable for the prevention of atmospheric corrosion in accordance with §195.581(b). At the time of the inspection, it was noted that the procedure in the RNRC Manual only paraphrased the Code. Therefore, RNRC must modify their procedure to provide details on how to apply the coating material that is suitable for the prevention of atmospheric corrosion as required by §195.581(b).

8. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written corrosion control procedures to address the qualifications for supervisors in accordance with §195.555. At the time of the inspection, it was noted that RNRC does not have a written procedure to require and verify that supervisors maintain a thorough knowledge of that portion of the corrosion control procedures established under §195.402(c)(3) for which they are responsible for insuring compliance as required by §195.555.

9. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written corrosion control procedures to address the corrective action in accordance with §195.573(e). At the time of the inspection, it was noted that RNRC does not have a written procedure for correcting any identified deficiency in corrosion control as required by §195.401(b) and in accordance with §195.573(e).

10. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written corrosion control procedures to address electrical isolation in accordance with §195.575(a). At the time of the inspection, it was noted that RNRC does not have a written procedure that provides adequate guidance for electrically isolating each buried or submerged pipeline from other metallic structures as required by §195.575(a).

11. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written corrosion control procedures to address the installation of the test leads in accordance with §195.567(b). At the time of the inspection, it was noted that RNRC does not have a written procedure that provides adequate instructions for the installation of cathodic protection test leads as required by §195.567(b).

12. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written corrosion control procedures for maintaining the test leads in accordance with §195.567(c). At the time of the inspection, it was noted that RNRC does not have a written procedure that requires and provides adequate instruction for maintaining test lead wires in a condition that enables obtaining electrical measurements to determine whether cathodic protection complies with §195.571 as required by §195.567(c).

- 13. §195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written corrosion control procedures to address the criteria for determining the adequacy of cathodic protection in accordance with §195.571. At the time of the inspection, it was noted that RNRC does not have a written procedure that provides an adequate method on how to comply with one or more of the applicable criteria and other considerations of cathodic protection, i.e. IR drop, as required by §195.571.

- 14. §195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written corrosion control procedures for monitoring external corrosion control in accordance with §195.573(a)(1). At the time of the inspection, it was noted that the procedure in the RNRC Manual only paraphrases the Code. Therefore, RNRC must modify their procedure to provide details on how to conduct tests on the protected pipeline at least once each calendar year, but with intervals not exceeding 15 months, as required by §195.573(a)(1).

- 15. §195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written corrosion control procedures for performing inspection of rectifiers and other devices in accordance with §195.573(c). At the time of the inspection, it was noted that the procedure in the RNRC Manual only paraphrases the Code. Therefore, RNRC must modify their procedure to provide details on how to perform inspection of rectifiers and other devices for proper performance as required by §195.573(c).

16. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written corrosion control procedures to address interference currents in accordance with §195.577(a). At the time of the inspection, it was noted that RNRC does not have a written procedure that provides sufficient guidance and detail for identifying and testing areas of potential stray current, and minimizing the detrimental effects of stray currents as required by §195.577(a).

17. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written corrosion control procedures to examine exposed portions of buried pipelines in accordance with §195.569. At the time of the inspection, it was noted that RNRC does not have a written procedure that requires existing coating be evaluated whenever the pipe is exposed, nor a procedure to require further examination of exposed buried pipe if corrosion is found as required by §195.569.

18. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written corrosion control procedures to address the discovery of coating damage in accordance with §195.561(b). At the time of the inspection, it was noted that RNRC does not have a written procedure that requires the deteriorated coating be repaired when found on exposed buried pipe as required by §195.561(b).

19. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written corrosion control procedures to determine the strength of corroded pipe in accordance with §195.587. At the time of the inspection, it was noted that RNRC does not have a written procedure that provides sufficient guidance for personnel to evaluate the remaining strength of externally corroded pipe as required by §195.587.

- 20. §195.402 Procedural manual for operations, maintenance, and emergencies.**
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

RNRC did not establish adequate written corrosion control procedures to correct corroded pipe in accordance with §195.585. At the time of the inspection, it was noted that RNRC does not have a written procedure that provides sufficient guidance for personnel to repair or replace pipe that is externally corroded to an extent that there is not sufficient remaining strength in the pipe wall as required by §195.585.

- 21. §195.505 Qualification program.**
Each operator shall have and follow a written qualification program. The program shall include provisions to:
(b) Ensure through evaluation that individuals performing covered tasks are qualified.

RNRC did not establish adequate written Operator Qualifications (OQ) program to address evaluation methods established and documented appropriate to each covered task in accordance with §195.505(b).

In addition, RNRC's OQ program requires that individuals performing covered tasks be qualified to recognize and react to Abnormal Operating Conditions (AOCs) is inadequate because RNRC fails to define Abnormal Operating Conditions for covered task.

- 22. §195.505 Qualification program.**
Each operator shall have and follow a written qualification program. The program shall include provisions to:
(c) Allow individuals that are not qualified pursuant to this subpart to perform a covered task if directed and observed by an individual that is qualified.

RNRC did not establish adequate written OQ program to define a span of control (number of non-qualified personnel who could be observed by a qualified person) for each covered task in accordance with §195.505(c).

- 23. §195.505 Qualification program.**
Each operator shall have and follow a written qualification program. The program shall include provisions to:

(f) Communicate changes that affect covered tasks to individuals performing those covered tasks.

RNRC did not establish adequate written OQ program to identify how changes to procedures, tools standards, and other elements used by individuals in performing covered tasks are communicated to the individuals, including contractor individuals, and how these changes are implemented in the evaluation method(s) in accordance with §195.505(f).

24. §195.505 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(g) Identify those covered tasks and the intervals at which evaluation of the individual's qualifications is needed.

RNRC's procedural manual for OQ program has a blanket statement in their program that states, "Resolute has established a maximum interval of three years for subsequent re-evaluation of each individual's qualification status for all covered tasks." However, RNRC did not establish adequate written procedure to describe how the operator established or justified the re-evaluation interval for each covered task in accordance with §195.505(g).

25. §195.505 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(h) After December 16, 2004, provide training, as appropriate, to ensure that individuals performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of pipeline facilities.

RNRC did not establish adequate written OQ program to assure that procedures on which a qualified vendor has evaluated qualified personnel are the same or consistent with those used by the operator for employees and contractors in the field in accordance with §195.505(h). In addition, the OQ program did not establish adequate written procedure for initial qualification, retraining and re-evaluation of individuals performing covered tasks.

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 sixty (60) 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 Resolute Natural Resources Company maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Kim West, Acting Director, Western Region, Pipeline and Hazardous Materials Safety Administration. In correspondence concerning this matter, please refer to **CPF 5-2018-5001M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Kim West
Acting Director, Western Region
Pipeline and Hazardous Materials Safety Administration

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

cc: PHP-60 Compliance Registry
PHP-500 D. Fehling (#155736)