NOTICE OF AMENDMENT

OVERNIGHT EXPRESS DELIVERY

June 8, 2017

James Roberts
Vice President of Environmental, Health, and Safety
Utica East Ohio Midstream LLC
600 Travis, Suite 5600
Houston, TX 77002

CPF 1-2017-6002M

Dear Mr. Roberts:

From August 10 to 14, 2015, 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 inspected certain procedures in Utica East Ohio Midstream LLC's (UEO) *Momentum Gas & Liquid Pipeline Integrity Management Program*, Last Revision Date July 2015 (*IMP*) and *Operation, Maintenance and Emergency Manual*, Revised July 2015 (*OM&E Manual*) in Salineville, Ohio.[1]

Based on the inspection, PHMSA has identified the apparent inadequacies found within UEO'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.

[1] UEO is a joint venture between Access Midstream Partners L.P. (Access) (Williams Partners L.P. merged with Access), M3 Midstream LLC (Momentum) and EV Energy Partners, L.P. *See*, William's website, available at http://investor.williams.com/press-release/access-midstream-partners-projects/utica-east-ohio-announces-major-expansion (last accessed May 10, 2017).

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedures for reviewing the manual at intervals not exceeding 15 months, but at least once each calendar year in accordance with §195.402(a) as prescribed in §195.402(c)(3). Specifically, the *OM&E Manual, Section 2 – Plan Review* did not include a clear, detailed process for reviewing the manual and documenting recommendations within the required interval.

Subsection 2.1 Manual Review 195.402(a) on page 1 of 3 states: "This plan will be evaluated for effectiveness every year (not to exceed 15 months) by the Vice President of Operations or his designee. The review designee should utilize the latest DOT Pipeline Standard Inspection Checklist… The DOT Pipeline Standard Inspection Checklist site is: https://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/PHMSA_Form_1_2009.pdf."

1. The "Inspection Checklist" referenced in the procedure is PHMSA standard inspection report of a gas transmission pipeline form rev. 03/23/09. This form is out-of-date and UEO had a liquid pipeline system. Therefore, the procedure did not include an applicable checklist or questionnaire to assist with determining needed changes or improvements in the manual. Moreover, the procedure did not include further instructions for reviewing the manual and determining whether changes or improvements are necessary.

2. The procedure did not provide details on documenting recommendations and justifications for changes or improvements in the manual.

3. *Section 2 – Plan Review* referenced *Form 20.2* to document the reviews and revisions. However, the form only had one column for a date – so it is unclear when a review or a revision occurred. In addition, the form did not require the review date to be month/day/year format to demonstrate manual review completed within the required interval.

Thus, the procedures were inadequate for reviewing the manual at intervals not exceeding 15 months, but at least once each calendar year in accordance with §195.402(a).

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…

(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:

(1) …

(2) Gathering of data needed for reporting accidents under subpart B of this part in a timely and effective manner.

UEO's manual had inadequate procedures for reporting accidents under subpart B of Part 195 in a timely and effective manner as prescribed in §195.402(c)(2). Specifically, the *OM&E Manual, Subsection 19.14 Telephonic Notification* did not identify who is responsible for making a notice in accordance with §195.52(a).[2]

According to §195.52(a), at the earliest practicable moment following discovery, of a release of the hazardous liquid or carbon dioxide transported resulting in an event described in §195.50, but no later than one hour after confirmed discovery, the operator of the system must give notice, in accordance with §195.52(b) of any failure that meets the criteria therein. Section 195.52(b) requires the notice to include the information listed under that paragraph to the National Response Center (NRC).

Subsection 19.4 Telephonic Notification did not state the person who is responsible for making the notice and giving the required information to the NRC. Therefore, the procedures were inadequate for reporting accidents under subpart B of Part 195 in a timely and effective manner in accordance with§195.52(a).

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…

(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:

(1) …

(2) Gathering of data needed for reporting accidents under subpart B of this part in a timely and effective manner.

UEO's manual had inadequate procedures for reporting accidents under subpart B of Part 195 in a timely and effective manner as prescribed in §195.402(c)(2). Specifically, the *OM&E Manual, Subsection 19.14 Telephonic Notification* did not require the minimum information in the notice in accordance with §195.52(b)(6).

According to §195.52(b)(6), the initial estimate of amount of product released must be included in the notice made to the National Response Center.

[2] Section 195.52(a) was in effect at the time of the PHMSA's inspection but subsequently amended, effective March 24, 2017. 82 Fed. Reg. 7999 (Jan. 23, 2017).

Subsection 19.14 Telephonic Notification required the following information:

1. Name and address of the operator.
2. Name and telephone number of the reporter.
3. The location of the failure.
4. The time of the failure.
5. The fatalities and personal injuries (if any).
6. All other significant facts known by the operator that are relevant to the cause of the failure or extent of the damages.

The procedure did not include the requirement for including the initial estimate of amount of product released in the notice.

Thus, the procedures were inadequate for reporting accidents under subpart B of Part 195 in a timely and effective manner in accordance with §195.52(b)(6).

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…

(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:

(1) …

(2) Gathering of data needed for reporting accidents under subpart B of this part in a timely and effective manner.

UEO's manual had inadequate procedures for reporting accidents under subpart B of Part 195 in a timely and effective manner as prescribed in §195.402(c)(2). Specifically, the *OM&E Manual, Subsection 19.14 Telephonic Notification* did not include a written procedure for calculating a reasonable initial release estimate in accordance with §195.52(c).

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…

(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:

(1) …

(2) Gathering of data needed for reporting accidents under subpart B of this part in a timely and effective manner.

UEO's manual had inadequate procedures for reporting accidents under subpart B of Part 195 in a timely and effective manner as prescribed in §195.402(c)(2). Specifically, the *OM&E Manual, Subsection 19.14 Telephonic Notification* did not include a process for revising or confirming its initial notice in accordance with §195.52(d).[3]

6. §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…

(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:

(1) …

(2) Gathering of data needed for reporting accidents under subpart B of this part in a timely and effective manner.

UEO's manual had inadequate procedures for reporting accidents under subpart B of Part 195 in a timely and effective manner as prescribed in §195.402(c)(2). Specifically, the *OM&E Manual, Subsection 19.15 Incident Written Notification* did not require accidents reports to be electronically filed as soon as practicable but not later than 30 days after discovery in accordance with §195.54(a).

According to the PHMSA F 7000-1 (Instructions for Form), accident reports must be submitted online through the PHMSA Portal unless an alternate method is approved.[4]

Subsection 19.15 Incident Written Notification on page 12 of 16 states in part: "Submit the Department of Transportation / Office of Pipeline Safety / Transmission Incident Report (RSPA 7100.2) within 30 days after discovery of the incident to the following to the written report addresses listed below: … Liquid Report PHMSA 7000-1.1." The procedures did not require electronic reporting.

In addition, for an accident that meets the criteria in §195.50, Form PHMSA F 7000-1 must be filed as soon as practicable but not more than 30 days after discovery of the accident as described in §195.54(a). The procedure did not require reports be filed "as soon as practicable."

Therefore, the procedures were inadequate for reporting accidents under subpart B of Part 195 in

[3] Section 195.52(d) was in effect at the time of the PHMSA's inspection but subsequently amended, effective March 24, 2017. 82 Fed. Reg. 7999 (Jan. 23, 2017).

[4] *See*, http://phmsa.dot.gov/pipeline/library/forms.

a timely and effective manner in accordance with §195.54(a).

7. §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…

(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:

(1) …

(2) Gathering of data needed for reporting accidents under subpart B of this part in a timely and effective manner.

UEO's manual had inadequate procedures for reporting accidents under subpart B of Part 195 in a timely and effective manner as prescribed in §195.402(c)(2). Specifically, the *OM&E Manual, Subsection 19.15 Incident Written Notification* did not require the supplemental report be filed within 30 days of receiving changes or additions to the originally reported information in accordance with §195.54(b).

Subsection 19.15 Incident Written Notification on page 13 of 16, states in part: "Where additional related information is obtained after a report is submitted as listed… must make a supplement report (as soon as practicable) with clear reference by date and subject to the original report (emphasis added)." The procedure did not give specific instructions to "submit" or "file" the supplemental report online through the PHMSA Portal within the 30-day timeframe.

Therefore, the procedures were inadequate for reporting accidents under subpart B of Part 195 in a timely and effective manner in accordance with §195.54(b).

8. §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…

(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:
(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had procedures that did not adequately require maintaining current maps and records of all crossings of public roads, railroads, rivers, buried utilities, and foreign pipelines in

accordance with §195.404(a)(2) as prescribed in §195.402(c)(3). Specifically, the *OM&E Manual, Subsection 5.4 Record Retention 195.404* did not include provisions to comply with §195.404(a)(2). In addition, *Section 5- Recordkeeping* did not describe the manner in which personnel must maintain records, for example hard copies, electronic files, intranet, etc.

9. §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…

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had procedures that did not adequately require maintaining current maps and records of the diameter, grade, type, and nominal wall thickness of all pipe in accordance with §195.404(a)(4) as prescribed in §195.402(c)(3). Specifically, the O*M&E Manual, Subsection 5.4 Record Retention 195.404* did not include provisions to comply with §195.404(a)(4). In addition, *Section 5- Recordkeeping* did not describe the manner in which personnel must maintain records, for example hard copies, electronic files, intranet, etc.

10. §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…

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedures for conducting inspections of rights-of-way (ROW) in accordance with §195.412(a), as prescribed in §195.402(c)(3). Specifically, the *OM&E Manual, Subsection 7.1 Pipeline Patrol 195.412* did not include guidance for ensuring mitigation measure will be taken when conditions are found along the ROW.

Subsection 7.1 Pipeline Patrol 195.412 referenced *Form 20.3* for documenting the ROW

inspection. Neither document gave instructions for documenting the actions taken to ensure safe operation of the pipeline when a condition is found along the ROW. In addition, *Subsection 7.1 Pipeline Patrol 195.412* did not specify who must receive notification of a condition found along the ROW such as a leak or soil erosion to inform them to take the appropriate action(s).

Thus, the procedures were inadequate for conducting inspections of rights-of-way (ROW) in accordance with §195.412(a).

11. §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. . .

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedures for inspecting each mainline valve to determine that it is functioning properly in accordance with §195.420(b) as prescribed in §195.402(c)(3). Specifically, the *OM&E Manual, Subsection 11.1 Valve Inspection 195.420* did not contain a detailed process for inspecting and maintaining mainline valves on its pipeline system.

Subsection 11.1 Valve Inspection 195.420 of the *OM&E Manual* did not include:

1. Guidelines on inspecting the general appearance of valves on its pipeline system, particularly, the paint and coating finish.

    a. The procedure states to prepare *Form 20.8* if there is evidence of corrosion but there was no guidance – no coating criteria or rating to determine next appropriate action(s) i.e. to prepare *Form 20.8*.

    b. The procedures refer to *Form 20.9* for documentation of valve inspection but the form did not have a place for recording the paint and coating condition. There is no connection between the *Form 20.8* and *Form 20.9*.

2. A specified timeframe to correct deficiencies identified during valve inspection and documenting remedial actions.

3. Guidance for maintaining valves on the pipeline system that have solar panels.

4. A process for the winterization of valves and making sure valves with an indicator, clearly show the valve position.

5. Instructions to safely inspect and maintain valves; for example, checking for vapors and gas level, removing hazards from valves before attempting an inspection or repair, and lockout/tagout practices.

The procedures did not reference other sections of the manual or documents (manufacturer's specifications) for additional guidance. Thus, the procedures were inadequate for inspecting each mainline valve to determine that it is functioning properly in accordance with §195.420(b).

12. §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…

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedures for inspecting and testing each highly volatile liquids (HVLs) pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment in accordance with §195.428(a) as prescribed in §195.402(c)(3). Specifically, the *OM&E Manual, Subsection 9.8 Pressure Limiting Devices Inspection 195.428* and *Forms 20.4(A)* and *(B)* did not include details such as:

1. Recording the "as found" and "as left" settings when inspecting overpressure safety devices except *Form 20.4 (B)*, this had a field for recording "as left" pressure.
2. Documenting calculations of capacities include the piping size and length associated with the relief device.
3. Establishing a schedule for repairing or replacing devices if capacity is not satisfactory.
4. Determining what is acceptable "as found" setting.

Thus, the procedures were inadequate for inspecting and testing each HVL pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment in accordance with §195.428(a).

13. §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…

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's had procedures that did not adequately require documents that support decisions and analyses, any modifications, justifications, deviations and determination made, variances, and actions taken to implement and evaluate each element of the integrity management program listed in §195.524(f) to be maintained for the useful life of the pipeline in accordance with §195.452(l)(1)(ii) as prescribed in §195.402(c)(3).

During this inspection, UEO presented *Section 1 Identification of Could Affect HCAs*, *Table 1.1 – Record Retention of its IMP* as the recordkeeping procedure for the integrity management program. Neither *Table 1.1* nor the *OM&E Manual* included specific instructions for maintaining the records listed in §195.452(l)(1)(ii).

14. 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…

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedures for requiring and verifying 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 in accordance with §195.555 as prescribed in §195.402(c)(3). Specifically, the *OM&E Manual, Section 10 Corrosion Control* did not explicitly address requirements for a supervisor to maintain knowledge and insure compliance with the corrosion control procedures.

Section 10 on page 1 of 12 states: "Corrosion control procedures required by this section (including those for the design, installation, operation and maintenance of cathodic protection systems), must be carried out by, or under the direction of, a person qualified in pipeline corrosion control methods. Qualification may include person certified by the National Association of Corrosion Engineers or other qualified persons identified in the Momentum Operator Qualification Program (emphasis added)."

First, the procedure did not address a supervisor. The procedure addressed "qualified personnel"

which is general. Second, the procedure said, "carried out by, or under the direction of" – this statement does not seem like it is meant for a supervisor. The supervisor is responsible for insuring compliance of the corrosion control procedures. Finally, the procedure did not state the qualification requirements for a supervisor to maintain knowledge of the corrosion control procedures. The procedure said, "qualification may include persons certified by [NACE] or other qualified persons identified in the Momentum Operator Qualification Program (emphasis added)." The procedure did not ensure the supervisor would be knowledgeable and educated and/or experienced in corrosion control.

Thus, the procedures were inadequate for requiring and verifying 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 in accordance with §195.555.

15. §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…

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedures for the protection of pipe at soil-to-air interfaces in accordance with §195.581(a), as prescribed in §195.402(c)(3). Specifically, the *OM&E Manual, Subsection 10.7 Atmospheric Corrosion 195.569* did not require cleaning and coating the pipe at soil-to-air interfaces that are exposed to the atmosphere.

Pursuant to §195.581(a), an operator must clean and coat each pipeline or portion of pipeline that is exposed to the atmosphere, except pipelines under §195.581(c). Section 195.581(c) provides exceptions to clean and coat each pipeline or portion of pipeline exposed to the atmosphere, which does not include pipe at soil-to-air interfaces. Accordingly, an operator must clean and coat the pipe at soil-to-air interfaces when exposed to the atmosphere.

Subsection 10.7 Atmospheric Corrosion 195.569, on page 1 of 12, states: "An operator need not comply with this paragraph if the operator can demonstrate by test, investigation, or experience in the area of application, that a corrosive atmosphere does not exist." The procedures did not require cleaning and coating pipe at soil-to-air interfaces when exposed to the atmosphere.

Thus, the procedures were inadequate for protecting the pipe at soil-to-air interfaces in accordance with §195.581(a).

16. §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…

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedures for monitoring atmospheric corrosion control in accordance with §195.583(b), as prescribed in §195.402(c)(3). Specifically, the *OM&E Manual, Subsection 10.7 Atmospheric Corrosion 195.569* did not include instructions for performing inspections of aboveground facilities at the specific areas described in §195.583(b).

Pursuant to §195.583(b), an operator must give particular attention to pipe at soil-to-air interfaces, under thermal insulation, under disbonded coatings, at pipe supports, in splash zones, at deck penetrations, and in spans during inspections.

Subsection 10.7 Atmospheric Corrosion 195.569, on page 8 of 12, states, "at interval not exceeding 3 years, reevaluate each pipeline that is exposed to the atmosphere and take remedial action whenever necessary to maintain protection against atmospheric corrosion." *Subsection 10.7 Atmospheric Corrosion 195.569* also states to "[v]isually inspect the condition of the coating [and that if] coating is disbonded, remove disbonded coating and inspected using the steps for uncoated pipe below." The procedures did not describe how to give particular attention to pipe at soil-to-air interfaces and pipe at pipe supports.

Therefore, the procedures were inadequate for monitoring atmospheric corrosion control in accordance with §195.583(b).

17. §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…

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedures for providing enough looping or slack so backfilling will not unduly stress or break the lead and the lead will otherwise remain mechanically secure and electrically conductive in accordance with §195.567(b)(2), as prescribed in §195.402(c)(3). Specifically, the *OM&E Manual, Subsection 10.5 Test Leads, 195.573, .567(b)* did not include sufficient details to ensure the test leads will remain mechanically secure and electrically conductive following backfilling.

Subsection 10.5 Test Leads, 195.573, .567(b), on page 7 of 12, restates the requirement in code section 195.567(b)(2). The procedure did not include details about measuring and documenting the pipe-to-soil reading to ensure conductivity between the wire and pipe following backfilling. In addition, the procedure did not include a process for backfilling to ensure that there are no disturbances to the test station and wire. The procedures did not reference other sections of the manual or documents for additional guidance.

Therefore, the procedures were inadequate for providing enough looping or slack so backfilling will not unduly stress or break the lead and the lead will otherwise remain mechanically secure and electrically conductive in accordance with §195.567(b)(2).

18. §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…

(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:

(1) …
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedures for preventing lead attachments from causing stress concentration on pipe in accordance with §195.567(b)(3), as prescribed in §195.402(c)(3). Specifically, the *OM&E Manual, Subsection 10.5 Test Leads, 195.573, .567(b)* did not include sufficient guidance for installing test leads.

Subsection 10.5 Test Leads, 195.573, .567(b) on page 7 of 12, restates the requirement in code section 195.567(b)(3). The procedure did not provide details about the method used to attach the test leads such as thermite welding, solder connection, and/or mechanical connection. The procedure did not reference another section of the manual or documents for additional guidance.

Thus, the procedures were inadequate for preventing lead attachments from causing stress concentration on pipe in accordance with §195.567(b)(3).

19. §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…

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedures for maintaining test lead in a condition that enables electrical measurements to determine whether cathodic protection complies with §195.571 in accordance with §195.567(c) as prescribed in §195.402(c)(3). Specifically, the *OM&E Manual, Subsection 10.5 Test Leads, 195.567(b)* did not include a process or a timeframe to repair a damaged or defective test lead.

Subsection 10.5 Test Leads, 195.567(b) on page 7of 12 states: "Existing test leads will be maintained so that adequate electrical measurements can be made to monitor each facility's cathodic protection…"

The procedure did not provide details such as:

1. Repairing the test leads.
2. Timeframe to repair the damaged or defective test leads.
3. Documentation of test lead repair.

Thus, the procedures were inadequate for maintaining test lead in a condition that enables electrical measurements to determine whether cathodic protection complies with §195.571 in accordance with §195.567(c).

20. §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…

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedures for the inspection of all external pipe coating required by §195.557 just prior to lowering the pipe into the ditch or submerging the pipe in accordance

with §195.561(a) as prescribed in §195.402(c)(3). Specifically, the *OM&E Manual, Subsection 10.2 External Corrosion 195.573* did not include a detailed process for inspecting the external pipe coating.

Subsection 10.2 External Corrosion 195.573, on page 3 of 12, states that "[i]f coated pipe is installed by boring, driving, or other similar method, precautions must be taken to minimize damage to the coating during installation and inspected prior to lowering the pipe in the ditch or submerging the pipe."
The procedure did not provide details such as:

1. Method for coating inspection such as visual and electrical testing (holiday detector/jeeping).
2. Inspection and calibration of equipment used for coating inspection, if any.

The procedures did not reference other sections of the manual or documents (manufacturer's specifications) for additional guidance. Thus, the procedures were inadequate for inspecting all external pipe coating required by §195.557 just prior to lowering the pipe into the ditch or submerging the pipe in accordance with §195.561(a).

21. §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…

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedures for examining exposed portions of pipe for evidence of external corrosion if the pipe is bare, or if the coating is deteriorated in accordance with §195.569 as prescribed in §195.402(c)(3). Specifically, the *OM&E Manual, Subsection 10.2 External Corrosion 195.573* did not include detailed instructions to clean the pipe for examination and determination of whether there is external corrosion.

Subsection 10.2 External Corrosion 195.573, on page 3 of 12, states in part:

> Whenever Momentum 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 is found… Momentum shall investigate circumferentially and longitudinally… (by visual examination, indirect method, or both).

The procedure did not provide details such as:

1. Instructions for cleaning the pipe before a close visual examination or indirect method.
2. A definition of external corrosion.
3. Criteria for determining when further investigation circumferentially and longitudinally beyond the exposed portion must be conducted.

Thus, the procedures were inadequate for examining exposed portions of pipe for evidence of external corrosion if the pipe is bare, or if the coating is deteriorated in accordance with §195.569.

22. 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…

(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:

(1) …
(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedures for retaining required corrosion control records or maps in accordance with §195.589(c) as prescribed in 195.402(c)(3). Specifically, the *OM&E Manual, Subsection 5.7 Corrosion Control Records 195.589* did not specifically require maintaining a record of each analysis, check, demonstration, examination, inspection, investigation, review, survey, and test required by subpart H in sufficient detail; and retaining records for §§195.569 and 195.573(a) and (b).

Pursuant to §195.589(c), an operator must retain these records for at least 5 years, except that records related to §§195.569, 195.573(a) and (b), and 195.579(b)(3) and (c) must be retained for as long as the pipeline remains in service.

Section 195.569 requires exposed pipeline to be examined for evidence of external corrosion. Section 195.573 (a) and (b) requires protected pipeline and unprotected pipe to be monitored for external corrosion control, respectively.

Subsection 5.7 Corrosion Control Records 195.589 states: "Momentum shall maintain a record of each test, survey, or inspection required… in sufficient detail to demonstrate the adequacy of corrosion control measures… Internal corrosion control records must be retained for a long as the pipeline remains in service." The procedure did not include examination of exposed pipe or external corrosion records related with §§195.569 and 195.573(a) and (b), respectively. Subsequently, *Section 10 – Corrosion Control* states, "Momentum will maintain records or maps… Each test, survey or inspection will be retained as required by 195.589. However, the procedure did not specifically require records of examination and other requirements in subpart H.

Thus, the procedures were inadequate for retaining required corrosion control records or maps in accordance with §195.589(c).

23. 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…

(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:

(1) …

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

UEO's manual had inadequate procedure for investigating the corrosive effect of the hazardous liquid or carbon dioxide on the pipeline and mitigating internal corrosion from the corrosive effect of the hazardous liquid or carbon dioxide on the pipeline in accordance with 195.579(a) as prescribed in 195.402(c)(3). Specifically, the *OM&E Manual, Subsection 10.1 Internal Corrosion 195.579* did not include a detailed process to determine if the hazardous liquid transported is corrosive.

Subsection 10.1 Internal Corrosion 195.579, on page 1 of 12, states, in part: "Momentum's corrosion control measures will be evaluated by an inspection and monitoring program. Coupons and/or spools will be utilized to monitor internal corrosion and will be removed and evaluated at periodic intervals."

The procedure did not include a process for determining:

1. Whether the hazardous liquid transported is corrosive and
2. Areas of pipe that may require particular attentions *e.g.* low points, bends, etc.

Thus, the procedures were inadequate for investigating the corrosive effect of the hazardous liquid or carbon dioxide on the pipeline and mitigating internal corrosion from the corrosive effect of the hazardous liquid or carbon dioxide on the pipeline in accordance with 195.579(a).

24. §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…

(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:

(1) …

(13) Periodically reviewing the work done by operator personnel to determine the effectiveness of the procedures used in normal operation and maintenance and taking corrective action where deficiencies are found.

UEO's manual had inadequate procedures for periodically reviewing the work done by operator to determine the effectiveness of the procedures used in normal operation and maintenance and taking corrective action where deficiencies are found as prescribed in §195.402(c)(13). Specifically, the *OM&E Manual, Subsection 1.11 Operating Personnel 195.402(c)(13)* did not provide sufficient guidance on how to determine the effectiveness of the procedures and correct deficiencies.

Subsection 1.11 states "[a]nnually (during operator qualification reviews), Momentum will review the work done by operator personnel to determine the effectiveness of the procedures used in normal operator and maintenance tasks" and that "[d]uring this evaluation Momentum will take corrective action if deficiencies are discovered."

The procedure did not provide details such as:

1. Documenting discussion during operator qualification reviews to validate which documents were reviewed.
2. Identifying the person responsible for review of work completed by operator personnel.
3. Defining "work done by operator personnel".
4. Requiring documentation of corrective actions.

During the inspection, UEO provided a copy of *Form 20.20 Review Work Performed by Operators* in response to showing a document for recording the review. However, the *OM&E* Manual did not reference this form.

Thus, the procedure were inadequate for periodically reviewing the work done by operator to determine the effectiveness of the procedures used in normal operation and maintenance and taking corrective action where deficiencies are found as prescribed in §195.402(c)(13).

25. §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…

(d) *Abnormal operation*. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded;

(1) Responding to, investigating, and correcting the cause of:

(i) Unintended closure of valves or shutdowns;

UEO's manual had inadequate procedures for responding to, investigating, and correcting the cause of an unintended closure of valves or shutdowns as prescribed in §195.402(d)(1)(i) were inadequate. Specifically, the *OM&E Manual, Section 13 – Abnormal Operations, Subsection 13.3* and *Subsection 13.4* contained general statements and provided insufficient guidance.

The procedure did not include details such as:

1. How and when controllers in the control room and field personnel communicate and coordinate with each other once an unintended valve closure or shutdown occurred.
2. Requirements for responding to the type (whether automatic or manual valves) and locations of the valve as well as the valve locking devices.
3. Guidance for monitoring an unintended valve closure or follow-up actions related to an unintended valve closure.
4. Specific titles or locations of the procedure
5. Requirements for investigating / correcting the cause of an unintended valve closure or shutdown.
6. Pipeline start-up procedures.

Thus, the procedures were inadequate for responding to, investigating, and correcting the cause of an unintended closure of valves or shutdown as prescribed in §195.402(d)(1)(i).

26. §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…

(d) *Abnormal operation*. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded:

(1) Responding to, investigating, and correcting the cause of:

(i) …

(ii) Increase or decrease in pressure or flow rate outside normal operating limits;

UEO's manual had abnormal operation procedures that were inadequate for responding to, investigating, and correcting the cause of an increase or decrease in pressure or flow rate outside normal operating limits as prescribed in §195.402(d)(1)(ii). Specifically, the *OM&E Manual, Section 13 – Abnormal Operations,* did not provide sufficient guidance for responding to, investigating, and correcting the cause of an increase or decrease in pressure or flow rate outside

normal operating limits.

Sections 13.4 and *13.5* did not provide details such as:

1. Instructions for communicating between control room and field personnel when an increase or decrease in pressure or flow rate outside normal operating limits occurred.
2. Roles and responsibilities of the field personnel and controllers in the control room.
3. Reference to other sections of the manual or documents for additional guidance.

In addition, the *OM&E Manual, Section 13 – Abnormal Operations*, *Subsection 13.1 Abnormal Operations*, states: "An abnormal operating condition is any condition occurring on a pipeline system which exceeds normal operating limits (emphasis added)." Thereafter, the procedure references the words "abnormal operating condition." However, abnormal operating condition is under the Operator Qualification Rule in subpart G of Part 195.

Pursuant to §195.402(d)(1)(ii) an operator must respond to, investigate, and correct the cause of an increase or decrease in pressure or flow rate outside normal operating limits (emphasis added). Therefore, a pipeline system does not have to exceed normal operating limits to be an abnormal operation.

An abnormal operation is defined under §195.402(d) which is any unintended closure of valves or shutdowns; increase or decrease in pressure or flow rate outside normal operating limits; loss of communications; operation of any safety device; any other malfunction of a component, deviation from normal operation, or personnel error which could cause a hazard to persons or property. The definition in the procedure was not accurate.

Thus, the procedures were inadequate for responding to, investigating, and correcting the cause of an increase or decrease in pressure or flow rate outside normal operating limits as prescribed in §195.402(d)(1)(ii).

27. §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…

(d) *Abnormal operation*. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded:

(1) Responding to, investigating, and correcting the cause of: …

(i) …

(iii) Loss of communications;

UEO's manual had abnormal operation procedures that were inadequate for responding to, investigating, and correcting the cause of cause of loss of communication as prescribed in §195.402(d)(1)(iii). Specifically, the *OM&E Manual, Section 13 – Abnormal Operations*, *Subsection 13.6* had insufficient guidance on how to communicate with someone if there is a loss of communications at the pipeline facilities, for example; communicate person-to-person, two-way radio, Supervisory Control and Data Acquisition, phone service, intranet/internet, or others. In addition, the procedure did not provide guidance on how to ensure that the communication methods are effective.

Thus, the procedures were inadequate for responding to, investigating, and correcting the cause of cause of loss of communication as prescribed in §195.402(d)(1)(iii).

28. §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…

(d) *Abnormal operation*. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded:

(1) Responding to, investigating, and correcting the cause of: …

(i) …

(v) Any other malfunction of a component, deviation from normal operation, or personnel error which could cause a hazard to persons or property.

UEO's manual had abnormal operation procedures that were inadequate for responding to, investigating, and correcting the cause of any other malfunction of a component, deviation from normal operation, or personnel error which could cause a hazard to persons or property as prescribed in §195.402(d)(1)(v). Specifically, the *OM&E Manual, Section 13 – Abnormal Operations*, *Subsection 13.8* did not give guidance on responding, investigating, and correcting this event.

The procedure did not provide details such as:

1. Guidance for dealing with vandalism – *e.g.* contact the appropriate authorities, conduct an investigation, and correct the event.
2. Methodology for determining the cause of an event
3. The procedures were too general to ensure compliance with requirements.

In addition, the *OM&E Section 13*, *Subsection 13.1* on page 1 of 7, included the list of abnormal operations under §195.402(d) except 13.8 which mentions "[a]ny other <u>foreseeable</u> malfunction

of a component (emphasis added)…" This statement did not adequately describe the requirement in §195.402 (d)(1)(v) because not all malfunctioned components are foreseeable. The word "foreseeable" is unnecessary.

Thus, the procedures were inadequate for responding to, investigating, and correcting the cause of any other malfunction of a component, deviation from normal operation, or personnel error which could cause a hazard to persons or property as prescribed in §195.402(d)(1)(v).

29. §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…

(d) *Abnormal operation*. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded:

(1) …

(2) Checking variations from normal operation after abnormal operation has ended at sufficient critical locations in the system to determine continued integrity and safe operation.

UEO's manual had abnormal operation procedures that were inadequate for checking variations from normal operation after abnormal operation has ended at sufficient critical locations in the system to determine continued integrity and safe operation as prescribed in §195.402(d)(2).

The *OM&E Manual*, *Section 13 – Abnormal Operations, Subsection 13.1 Abnormal Operations*, on page 1 of 7, states: "After an abnormal operating condition has been corrected, check variations from normal operation (at critical locations in the system) to determine continued integrity and safe operation."

The procedure did not provide details such as:

1. Methodology for following up and monitoring to ensure the event did not recur.
2. Location of critical locations. The Control Room Manual rev. July 17, 2015 had a list of all critical locations. However, the abnormal operation procedures and control room manual did not cross-reference each other.

Thus, the procedures were inadequate to determine continued integrity and safe abnormal operation has ended as prescribed in §195.402(d)(2).

30. §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…

(d) *Abnormal operation*. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded:

(1) …

(3) Correcting variations from normal operation of pressure and flow equipment and controls.

UEO's manual had abnormal operation procedures that were inadequate for correcting variations from normal operation of pressure and flow equipment and controls as prescribed in §195.402(d)(3).

The *OM&E Section 13 – Abnormal Operations, Subsection 13.1 Abnormal Operations* states: "After an abnormal operating condition has been corrected, check variations from normal operation (at critical locations in the system) to determine continued integrity and safe operation."

The procedure did not provide details such as:

1. Criteria for correcting the variation from normal operation of pressure and flow equipment and controls.
2. Guidance to determine the cause of the equipment variations and schedule a response to prevent recurrence of the event.

Thus, the procedures were inadequate for correcting variations from normal operation of pressure and flow equipment and controls as prescribed in §195.402(d)(3).

31. §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…

(d) *Abnormal operation*. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded:

(1) …

(4) Notifying responsible operator personnel when notice of an abnormal operation is received.

UEO's manual had abnormal operation procedures that were inadequate for notifying responsible operator personnel when notice of an abnormal operation is received as prescribed in §195.402(d)(4).

The *OM&E Section 13 – Abnormal Operations, Subsection 13.1 Abnormal Operations 195.402(d)* on page 1 of 7 states: "Should any of the above events occur; the Operator on duty will normally be the first person to become aware of the problem. The Operator should be then contact the Operations/District Manager. At this point, the Operations/District Manager will assume responsibility for investigating the incident, for determining what actions are required to correct the situation, and…"

Section 13 – Abnormal Operations did not address who should the controller in the control room notify when an abnormal operation is received.

In addition, *Subsection 1.7 Momentum Pipeline Organization Chart* of the *OM&E Manual* contains an outdated organizational chart that did not match the distribution list in *Subsection 2.4*.

Thus, the procedures were inadequate for notifying responsible operator personnel when notice of an abnormal operation is received as prescribed in §195.402(d)(4).

32. §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…

(d) *Abnormal operation*. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded:

(1) …

(5) Periodically reviewing the response of operator personnel to determine the effectiveness of the procedures controlling abnormal operation and taking corrective action where deficiencies are found.

UEO's manual had abnormal operation procedures that were inadequate for periodically reviewing the response of operator personnel to determine the effectiveness of the procedures controlling abnormal operation and taking corrective action where deficiencies are found as prescribed in

§195.402(d)(5).

The *OM&E Manual*, *Section 13 – Abnormal Operations, Subsection 13.9 Reviewing Abnormal Operation Response*, on page 7 of 7, states: "supervisor must periodically review the response of operator personnel to determine the effectiveness of the procedures controlling abnormal operation and taking corrective action where deficiencies are discovered."

The procedure did not provide details such as:

1. The definition of "periodically".
2. A detailed process for reviewing the response of operator personnel to determine the effectiveness of the procedures controlling abnormal operation and taking corrective action.
3. Record review requirements to confirm actions were timely and appropriate for the given abnormal operation. For instance, the procedure did not require logging the response activities and time (besides the notification time) for post review.
4. A process for recommendations or updates to procedures based on the review and actions taken.

Thus, the procedures were inadequate for periodically reviewing the response of operator personnel to determine the effectiveness of the procedures controlling abnormal operation and taking corrective action where deficiencies are found as prescribed in §195.402(d)(4).

33. §195.452 Pipeline integrity management in high consequence areas.

(a) …

(f) *What are the elements of an integrity management program?* An integrity management program begins with the initial framework. An operator must continually change the program to reflect operating experience, conclusions drawn from results of the integrity assessments, and other maintenance and surveillance data, and evaluation of consequences of a failure on the high consequence area. An operator must include, at minimum, each of the following elements in its written integrity management program:

(1) …

(5) A continual process of assessment and evaluation to maintain a pipeline's integrity (see paragraph (j) of this section);

UEO's *IMP* had inadequate procedures for a continual process of assessment and evaluation to maintain a pipeline's integrity (see paragraph (j) of section 195.452), as prescribed in §195.452(f)(5). Specifically, the *IMP, Section 7 Continual Process of Evaluation & Assessment* did not include a clear process to determine the frequency of the evaluation.

Pursuant to §195.452(j)(2), an operator must base the frequency, at which periodic evaluation are performed, on risk factors associated with the pipeline, including the factors listed in §195.452(e).

Subsection 7.01 Periodic Evaluation & Assessment Intervals of *Section 7* on page 7-2 states in part:

The re-evaluation recommendation will be based on:

- Risk factors identified in the Risk Model,
- Information concerning decisions about remediation following the baseline

assessment and future assessments,
- Additional required testing, and
- Any preventive and mitigation actions taken by Momentum as part of this program.
- Root cause analysis of the anomalies and hydrostatic test failures,

The procedures were inconsistent with the requirement in §195.452(j)(2). The procedures included information about preventive and mitigative measures, which are not risk factors. The procedures did not specifically instruct how to determine the frequency of the periodic evaluation in accordance with §195.452(j)(2).

Section 195.452(j)(2) also states an operator's periodic evaluation, at minimum, must consider the results of the baseline and periodic integrity assessment, information analysis, decision about remediation, and preventive and mitigative actions.

Subsection 7.01 Periodic Evaluation & Assessment Intervals of *Section 7* on page 7-2 describes the "process for annual re-evaluation." However, the procedure did not include all the considerations required in §195.452(j)(2).

Thus, the procedures for continual process of assessment and evaluation to maintain a pipeline's integrity (see paragraph (j) of section 195.452) as prescribed in §195.452(f)(5) were inadequate.

34. §195.452 Pipeline integrity management in high consequence areas.

(a) …

(f) *What are the elements of an integrity management program?* An integrity management program begins with the initial framework. An operator must continually change the program to reflect operating experience, conclusions drawn from results of the integrity assessments, and other maintenance and surveillance data, and evaluation of consequences of a failure on the high consequence area. An operator must include, at minimum, each of the following elements in its written integrity management program: …

(1) …

(3) An analysis that integrates all available information about the integrity of the entire pipeline and the consequences of a failure (see paragraph (g) of this section);

UEO's *IMP* had inadequate procedures for an analysis that integrates all available information about the integrity of the entire pipeline and the consequences of a failure, as prescribed in §195.452(f)(3). According to §195.452(g), an operator must analyze all available information about the integrity of the entire pipeline and consequences of a failure. The *IMP*, *Section 5 Risk Analysis* did not describe the technical justification for the analytical tools, models, or algorithms used to integrate information, and recognition of any limitations of these analytical methods.

Subsection 5.1 Approach, on page 5-1 states in part: "The risk analysis was developed as part of this IM Plan is an analytical subject matter expert (SME) process, by which Momentum has evaluated its pipeline, taking into consideration, the above guidance for . . . The process involves gathering data on design, construction, operation, maintenance, testing, inspection and other

information about the pipeline system." The procedure did not include the basis for the selection of a SME process. Therefore, it is unclear if the SME process is sufficient to recognize the highest risk. Consequently, the procedures did not provide information on the limitation of a SME process. Furthermore, the procedure did not give details on what qualifies an individual as a SME (*e.g.* knowledge and experience). It is unclear what type of person reviews and/or provides input in the risk analysis.

In addition, the *IMP Section 5* did not include information on where all risk model input data is gathered from (*e.g.* maps, database, hard copies records or spreadsheet). Furthermore, the *IMP Appendix I - Risk Analysis Table - Pipelines with HCAs* did not have guidelines for selecting a weighting factor each risk factor. For example, the risk factor "Diameter" did not have a selection for a weighting factor. Last of all, the *IMP Appendix I* did not require justification for selecting a weighting factor.

Thus, the procedures were inadequate for an analysis that integrates all available information about the integrity of the entire pipeline and the consequences of a failure (see paragraph (g) of section 195.452) as prescribed in §195.452(f)(3).

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 **120 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 UEO 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, Acting Director, PHMSA Eastern Region, 820 Bear Tavern Road, Suite 103, West Trenton, NJ 08628. Please refer to **CPF 1- 2017-6002M** on each document you submit, and whenever possible provide a signed PDF copy in electronic format. Smaller files may be emailed to robert.burrough@dot.gov. Larger files should be sent on a CD accompanied by the original paper copy to the Eastern Region Office.

Additionally, if you choose to respond to this (or any other case), please ensure that any response letter pertains solely to one CPF case number.

Sincerely,

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

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