



1700 Broadway, Suite 2300, Denver, CO 80290-2300  
Phone: 303.837.1661 | FAX: 303.861.4023

---

June 25, 2015  
Belfield Oil PHMSA Inspection Response

PHMSA Pipeline Safety  
Attention Mr. Allan C. Beshore  
Director, Central Region, OPS  
Pipeline and Hazardous Materials Safety Administration  
901 Locust St., Suite 462  
Kansas City, MO 64106-2641

JUN 25 2015

Reference: CPF 3-2015-5005M – Response to a Notice of Amendment

Dear Mr. Beshore,

This letter is intended to notify you that Whiting Petroleum Corporation is not contesting the Notice of Amendment received on June 4, 2015. Whiting addresses the inadequacies that were identified in the Notice below.

In the Notice of Amendment, there are 29 items listed and are addressed individually and copies and/or amended procedures and forms are included.

1. 195.402(a) General.

*Reference Procedure P195.402 (a) DC Document Control.pdf*

Whiting Response: Whiting added language to Procedure P195.402 (a) DC, Document Control in Section 2.0 General Information to reflect the manual is kept in locations where the O&M activity is conducted.

2. 195.54 Accident reports.

*Reference Procedure P195.54 Incident Reporting.pdf*

Whiting Response: Whiting added language to Procedure P195.54 Incident Reporting, Section 6.5 Submission of supplemental incident reports that include the requirement to submit a supplemental report as soon as practicable but not to exceed 30 days.

3. 195.402(c)(3) Maintenance and normal operations

*Reference Procedure P195.422 Liquids Pipeline Repair.pdf*

Whiting Response: Whiting added sections to Procedure P195.422 Liquid Pipelines Repair, Section 10.1 Acceptable Repair Methods Summary for removing arc burns that include checking the arc burns with ammonium persulfate and rechecking the wall thickness and Section 13.2. Arc Burns, Grooves and Gouges.



---

4. 195.230 Welds

*Reference Procedure P195.214 General Pipeline Welding.pdf and 2015 Belfield Oil\_PSOM.pdf*

Whiting Response: Whiting added a new Procedure P195.214 General Pipeline Welding that is not a restatement of the code and added a reference to the Belfield Oil PSOM, in Section 8.3.4 Operations and Maintenance Records; B.

5. 195.234 Welds

*Reference Procedure P195.214 General Pipeline Welding.pdf and Form F195.234 (b)(1) Radiographic Procedure.pdf*

Whiting Response: Whiting updated Procedure P195.214 General Pipeline Welding Section 5.0 Welding Documentation to reference Form F195.234 (b)(1) that identifies what is required to qualify NDT personnel.

6. 195.402(c)(4) Emergency Response

*Reference 2015 Belfield Oil\_PSOM.pdf*

Whiting Response: Whiting updated the Belfield Oil PSOM, Section 5.2 Emergency Response Manual to reflect all areas of the pipelines are responded to in the same manner.

7. 195.402(c)(5) Field Preservation and Packaging of Failed Pipe

*Reference Procedure P195.402(c)(5)FP Field Preservation and Packaging of Failed Pipe.pdf, Form F195.402(c)(5) Chain of Custody.pdf and Form F195.402(c)(5) Photographic Log.pdf*

Whiting Response: Whiting updated the Procedure P195.402(c)(5)FP Field Preservation and Packaging of Failed Pipe, Section 5.0 Sample Preparation and 7.0 Chain of Custody Form to include preservation of the failure piece, custody of transfer and metallurgical protocols.

8. 195.402(c)(9) Safety and Security Devices

*Reference 2015 Belfield Oil\_PSOM.pdf*

Whiting Response: Whiting added language to the Belfield Oil PSOM, Section 1.5 Safety and Security Devices stating that the Facilities at Belfield and Skunk Hill are remotely monitored during receipt and delivery by Belfield Oil Control 24-hours-a-day, seven days a week.

9. 195.402(c)(11) Emergency Response

*Reference 2015 Pipeline Spill and Emergency Response Plan.pdf*

Whiting Response: Whiting updated the 2015 Pipeline Spill and Emergency Response Plan, Section 5.6 Vapor Control Procedures to add more detail for minimizing the accidental ignition of vapors.



10. 195.402(c)(12) Liaison with Public Officials

*Reference Procedure P195.402(c)(12) Liaison with Public Emergency Officials.pdf and Form F195.402(c)(12) Liaison with Public Officials.pdf*

Whiting Response: Whiting has sufficient language and detail in Procedure 195.402(c)(12) Liaison with Public Emergency Officials and on Form F195.402(c)(12) Liaison with Public Officials.

11. 195.402(e)(9) Emergency Response

*Reference 2015 Pipeline Spill and Emergency Response Plan.pdf*

Whiting Response: Whiting updated the Pipeline Spill and Emergency Response Plan, Section 12.3 Post-Incident Plan Review to add a requirement for Post-Incident Plan critique.

12. 195.402(a) General

*Reference 2015 Pipeline Spill and Emergency Response Plan.pdf*

Whiting Response: Whiting updated the Pipeline Spill and Emergency Response Plan, Section 10 Training Procedures and Section 12 Response Plan Review and Update Procedures to meet the requirements of the regulation.

13. 195.404(a)(2) Maps and Records

*Reference Procedure P195.404 (a)(2) Pipeline Crossings.pdf and Form F195.404 (a)(2) Pipeline Crossings.pdf*

Whiting Response: Whiting updated Procedure P195.404 (a)(2) Pipeline Crossings and Form F195.404 (a)(2) Pipeline Crossings to ensure that any foreign utility crossing the pipeline is tracked and mapped.

14. 195.404(b)(1) Maps and Records

*Reference 2015 Belfield Oil\_PSOM.pdf*

Whiting Response: Whiting updated the Belfield Oil PSOM, Section 8.3.4 Operation and Maintenance Records; C to indicate that at least 5 years of discharge records must be kept, even though the regulation states 3 years.

15. 195.424 Pipe Movement

*Reference Procedure P195.424 Pipe Movement.pdf*

Whiting Response: Whiting has a procedure for Pipe Movement; this was unnoticed at the inspection.

16. 195.428 Overpressure safety devices and overflow protection systems

*Reference Procedures P195.428 Overpressure Safety Devices.pdf and P195.446 (e)(1) Alarm Set Point.pdf*

Whiting Response: Whiting updated Procedure P195.428 Overpressure Safety Devices to give a more detailed step-by-step guidance on how to check the regulating and



---

overpressure protection for the system. Whiting also added Procedure P195.446 (e)(1) SP Alarm Set Point Determination and Testing for reference.

17. 195.428(d) Overpressure safety devices and overflow protection systems

*Reference Procedures P195.428 Overpressure Safety Devices.pdf and Form F195.428 Overpressure Safety Device and Overflow Protection Systems.pdf*

Whiting Response: Whiting updated Procedure P195.428 Overpressure Safety Devices and Form F195.428, Overpressure Safety Devices and Overflow Protection Systems that includes detailed guidance on what needs to be done and documented.

18. 195.432(b) Inspection of in-service breakout tanks

*Reference Procedure P195.432 Inspection of In-Service Breakout Tanks.pdf*

Whiting Response: Whiting updated Procedure P195.432 Inspection of In-Service Breakout Tanks, Section 6.4 External Inspections to reference the inspections will be performed every five years. See Section 7.1 Summary Table 1 for Inspections Frequency.

19. 195.436 Security of facilities

*Reference 2015 Belfield Oil\_PSOM.pdf*

Whiting Response: Whiting added a section to the Belfield Oil PSOM. Section 1.5 Safety and Security Devices states the facilities at Belfield and Skunk Hill are remotely monitored during receipt and delivery by Belfield Oil Control 24-hours-a-day, seven days a week. For the purpose of securing facilities for remote (rural) locations, fencing and/or cameras may be in use that is observed 24/7 to protect from vandalism and unauthorized entry.

20. 195.440 Public Awareness

*Reference 2015 Corporate Wide Public Awareness Plan.pdf*

Whiting Response: Whiting updated the Corporate Wide Public Awareness Plan; Section 2.1 Public Awareness Objective to outline the “Response” is the objective of communicating to the public the appropriate steps to take into account in the event of a pipeline release or emergency. Whiting’s objectives are identified and communicated to the following stakeholder audiences: Affected Public, Public Officials, Excavators, Emergency Officials and School Districts.

21. 195.442(c)(3)(4)(5) Damage Prevention Program

*Reference Procedure P195.442 (b) Requesting Line Locates.pdf and the One-Call Practices for Disturbance of Soils.pdf*

Whiting Response: Whiting updated Procedure P195.442 (b) Requesting Line Locates to eliminate the reference to Section 8. Whiting added reference to the One-Call Practices for Disturbance of Soils Document to section 3.1 One Call Coordinator Responsibilities, and Section 4.0 First Locate Request Responsibilities.



---

22. 195.452(f)(1) Pipeline integrity management in high consequence areas

*Reference 2014 HL IMP v1-2.pdf (Integrity Management Program)*

**Whiting Response:** Prior to addressing individual items discussed during the inspection, Whiting would like to clarify the program scope. In order to meet the true intent of risk ranking and prioritization of the integrity management requirement, the Whiting Hazardous Liquid Integrity Management Program is applicable to any and all hazardous liquid pipelines Whiting operates. Whiting's Integrity Management Program is a corporate program, written and administered for the entire company. Based on this premise, the program is intended to be used for a diverse range of pipeline locations and products. This program is not intended to apply solely to the Belfield Oil Pipeline.

Section 2.2, Process Overview, states, "Indirect impact analysis identifies locations at which the pipeline is in proximity to an HCA. This analysis involves calculating a rupture volume based buffer. Rupture volume determinations are based on conservative worst case release (full guillotine rupture) scenarios. When determining rupture volume, Whiting employs a conservative 15 minute (detect and isolate) shutdown time.

Furthermore, the locations of emergency flow restricting devices (e.g. check valve, motor operated valve) are also considered in making rupture volume determinations."

Further down in Section 2.2, *Process Overview*, facilities are discussed, "Whiting's could affect facility analysis is similar to the could affect segment analysis. Differences include the use of a facility polygon rather than a centerline shapefile, and calculation of potential release volume based on the contents of DOT-jurisdictional breakout tanks or storage facilities in addition to pipeline contents."

The HCA analysis documents for pipeline and facilities have been included as a new Appendix E and referenced at the bottom of Section 2.2, *Process Overview*.

Section 2.9 Overland Spread of Liquid Pool, The HCA analysis documents for pipeline and facilities have been included as a new Appendix E, *Belfield HCA Analysis*, and referenced in Section 2.9, *Overland Spread of Liquid Pool*. Additionally, documentation specifications can be found in Section 2.14, *Documentation*. Section 2.9.3, *Terrain Analysis*, has been updated to include the following statement: "Results identifying portions of the pipeline that could affect a HCA include GIS shapefiles and data tables displaying pipeline stationing."

Section 2.10, Water Transport Analysis, The National Hydrography Dataset (NHD) (<http://nhd.usgs.gov/>), by definition, includes stream properties such as stream and flow characteristics. The NHD is incorporated with USGS National Elevation Dataset (NED) (<http://ned.usgs.gov/about.html>) during the GIS modeling process as discussed in Sections 2.9.3 and 2.10. Sections 2.2, *Process Overview*, and Section 2.10.2, *Indirect Watershed Analysis*, both identify the distance of 35 downstream miles as a conservative estimate based on national average stream flow conditions. Whiting believes this estimate takes into account a range of seasonal and topographic conditions. In addition to NHD



---

inputs to identify waterways, Whiting employs local knowledge from field personnel to modify existing datasets as needed for actual, field-observed conditions. The HCA analysis documents for pipeline and facilities have been included as a new Appendix E, *Belfield HCA Analysis*, and referenced in Section 2.10, *Water Transport Analysis*.

Section 2.11 Air Dispersion Analysis, Whiting's Integrity Management Program is a corporate program, written and administered for the entire company. At the time of Program development, Whiting operated HVL pipelines, and Whiting may plan to operate other HVL pipelines in the foreseeable future. Therefore, Whiting does not feel that it is appropriate to remove HVL pipelines from the Hazardous Liquid Integrity Management Program at this time. Furthermore, Whiting provides information on specific pipelines in the analyses reports and program appendices, thus providing for company-wide implementation without confusion across different operating regions. Specific mention to pipelines and products is deliberately excluded from the program.

Section 2.12 Indirect Analysis; Section 2.2, *Process Overview*, discusses Whiting's process overview, including the paragraph:

*"Indirect impact analysis identifies locations at which the pipeline is in proximity to an HCA. This analysis involves calculating a rupture volume based buffer. Rupture volume determinations are based on conservative worst case release (full guillotine rupture) scenarios. When determining rupture volume, Whiting employs a conservative 15 minute (detect and isolate) shutdown time. Furthermore, the locations of emergency flow restricting devices (e.g. check valve, motor operated valve) are also considered in making rupture volume determinations."*

In Section 2.12, Indirect Analysis, Whiting identifies the buffer distance methodology for indirect analysis as:

*"Whiting's buffer distance is based on an industry accepted and commonly used assumption of a one-inch deep product spread. The buffer is calculated assuming a one-inch deep product spread from the centerline ignoring terrain restrictions until the maximum release volume is consumed."*

To paraphrase, Whiting identifies a radius from the pipeline that would be impacted should a release occur on completely flat terrain and product is allowed to flow, uniformly, away from the pipeline. Additional transport analyses to account for terrain and waterway features are included in Sections 2.9, *Overland Spread of a Liquid Pool*, and 2.10, *Water Transport Analysis*. The HCA analysis documents for pipeline and facilities have been included as a new Appendix E, *Belfield HCA Analysis*, and referenced in Section 2.9, *Overland Spread of Liquid Pool*. Additionally, documentation specifications can be found in Section 2.14, *Documentation*.



---

The HCA analysis documents for pipeline and facilities have been included as a new Appendix E, *Belfield HCA Analysis*, and referenced at the bottom of Section 2.10.2, *Indirect Watershed Analysis*.

Section 2.3.3 Management of Change Related HCA Analyses. In this section, Whiting states “*For new construction, analysis is completed and results are communicated prior to beginning operation of the line.*”

23. 195.452(f)(6) Pipeline IMP in high consequence areas  
*Reference 20141107\_BFHL\_CRM Program.pdf (Belfield Control Room Management) and F195.452-71 Leak Detection Evaluation – Belfield.pdf*

Whiting Response: In performing leak detection evaluations, Whiting employs Form F195.452-71, Leak Detection Evaluation. This form contains detailed instructions and overall process guidance for the IMP Team and Whiting SMEs to conduct comprehensive evaluations. In addition to the evaluation factors contained in the evaluation, Whiting recognizes that the implementation of the Control Room Management regulations codified in 49 CFR 195.446 provides a more systematic and repeatable understanding of controller operator responses in responding to emergencies. Specifically, Whiting’s Control Room Manual contains provisions for:

- Assuring Controller Operators have the authority and responsibility to make decisions pertaining to pipeline operations (Control Room Management Program; Section 6.2, *Roles and Responsibilities* and Control Room Management Procedures),
- Sufficient training to recognize and respond to abnormal and emergency conditions in an appropriate manner (Control Room Management Program; Section 11, *Training*),
- Troubleshooting activities to investigate abnormal and emergency conditions (Control Room Management Program; Section 10.1, *Review Whether Control Room Actions Contributed to Reportable Incidents* and Control Room Management Procedures)
- Guidance for communicating with field operations personnel (Control Room Management Program; Section 6.2.1, #3 and Control Room Management Procedures).

24. 195.561 Corrosion

*Reference Procedure P195.557 Coating below Grade Pipelines.pdf*

Whiting Response: Whiting updated Procedure P195.557 Coating below grade pipelines to include Jeep/Jeeping in Section 4.0 Definitions and added more details on properly repairing holidays in Section 9.0 Inspection Procedure, Section 10.0 Repairs, Section 10.1 Repairs of FBE and Two Component Coating and Section 10.2 Repairs to Existing Coal Tar Enamel and Tape Coatings.



25. 195.567(c) Maintenance

*Reference P195.567(c) Installation of Test Leads.pdf*

Whiting Response: Whiting added language to the Procedure P195.567(c) Installation of Test Leads, Section 4.0 Maintenance that includes the requirement that all test points leads will be maintained to ensure electrical conductivity.

26. 195.573(c) Breakout tanks

*Reference Procedure P195.432 Inspection of In-Service Breakout Tanks.pdf*

Whiting Response: Whiting updated Procedure P195.432 Inspection of In-Service Breakout Tanks, Section 6.9 Cathodic Protection Surveys with more detail on meeting the requirement to monitor the cathodic protection of tank bottoms.

27. 195.575(b) Corrosion

*Reference Procedure P195.557, 563 General Corrosion Control Requirements.pdf*

Whiting Response: Whiting updated Procedure P195.557, 563 General Corrosion Control Requirements, Section 12.0 Installation and Maintenance of Insulating Kits to include guidance on the installation and maintenance of the insulating devices.

28. 195.585(a)(1)(2)(b) Corrosion

*Reference Procedure P195.422 Liquids Pipeline Repair.pdf*

Whiting Response: Whiting updated Procedure 195.422 Liquids Pipeline Repair, Section 9.0 Liquids Pipelines Temporary Pressure Reduction to include more detail on what needs to be done to reduce the MOP due to localized and general corrosion.

29. 195.575(a)(b)(c) Corrosion

*Reference Procedure P195.557, 563 General Corrosion Control Requirements.pdf*

Whiting Response: Whiting updated Procedure P195.557, 563, Section 10.0 Design of Cathodic Protection Systems to address electrical isolation.

**Attachments:**

Procedures

P195.54 Incident Reporting.pdf

P195.214 General Pipeline Welding.pdf

P195.402 (a) PA Contractor Procedure Assessment.pdf

P195.402 (a) DC Document Control.pdf

P195.402(c)(5)FP Field Preservation and Packaging of Failed Pipe.pdf

P195.402(c)(12) Liaison with Public Emergency Officials.pdf

P195.404 (a)(2) Pipeline Crossing Records.pdf

P195.422 Liquids Pipeline Repair.pdf

P195.424 Pipe Movement.pdf

P195.428 Overpressure Safety Devices.pdf

P195.432 Inspection of In-Service Breakout Tanks.pdf



1700 Broadway, Suite 2300, Denver, CO 80290-2300  
Phone: 303.837.1661 | FAX: 303.861.4023

---

P195.442 (b) Requesting Line Locates.pdf  
P195.446 (e)(1) Alarm Set Point Determination and Testing.pdf  
P195.452 (j)(5) Inline Inspection Tool Selection and Data Quality Assurance.pdf  
P195.557 563 General Corrosion Control Requirements.pdf  
P195.557 Coating below Grade Pipelines.pdf  
P195.567(c) Installation of Test Leads.pdf

Forms

F195.234 (b)(1) Radiographic Procedure.pdf  
F195.402(a) PA Checklist for Accepting Contractor Procedures.pdf  
F195.402(c)(5) CC Chain of Custody.pdf  
F195.402(c)(5) Photographic Log.pdf  
F195.402(c)(12) Liaison with Public Officials.pdf  
F195.404 (a)(2) Pipeline Crossings.pdf  
F195.428 Overpressure Safety Devices and Overfill Protection Systems.pdf  
F195.557 195.581 Coating Inspection.pdf  
F195.452-71 Leak Detection Evaluation – Belfield.pdf  
F195.573 (a) Cathodic Protection Survey

If you have any questions, please don't hesitate to contact me at (303) 390-1333 or [kelli.graff@whiting.com](mailto:kelli.graff@whiting.com).

Regards,

*Kelli Graff*

Kelli Graff  
Pipeline Compliance Specialist  
Whiting Petroleum Corporation