



ENTERPRISE PRODUCTS PARTNERS L.P.
ENTERPRISE PRODUCTS HOLDINGS LLC
(General Partner)

ENTERPRISE PRODUCTS OPERATING LLC

January 30, 2019

Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
8701 S. Gessner, Suite 630
Houston, TX 77074

Attn: Ms. Mary McDaniel
Director, Southwest Region, PHMSA

Re: CPF 4-2018-5010M
Notice of Amendment
Enterprise Products Operating, LLC ("Enterprise")

Dear Ms. McDaniel,

Enterprise is in receipt of the above referenced "Notice of Amendment" (NOA) dated November 20, 2018 and PHMSA's subsequent December 26, 2018 letter granting Enterprise a response time extension to January 30, 2019. This letter constitutes Enterprise's timely response to the subject NOA.

NOA Item 1:

§195.505 Qualification Program

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

(i) After December 16, 2004, notify the Administrator or a state agency participating under 49 U.S.C. Chapter 601 if operator significantly modifies the program after the administrator or state agency has verified that it complies with this section. Notifications to PHMSA may be submitted by electronic mail to informationResourcesManager@dot.gov or by mail to ATTN: Information Resources Manager DOT/PHMSA? OPS, East Building, 2nd Floor, E22-321, New Jersey Avenue SE., Washington, DC 20590.

Enterprise's Operator Qualification Manual (OQ), Section 15, fails to define what is a significant modification to the OQ Plan and how to submit a notification to PHMSA. Enterprise's OQ Plan addresses what will be considered a significant modification requiring notification to PHMSA and/or appropriate state agencies.

Enterprise Response to NOA Item 1:

Since 2008 Enterprise has, on an annual basis, sent updated versions of the Company Operator Qualification program to the PHMSA office in Washington, DC and regional offices. This practice has been in place to ensure that the requirement to communicate significant changes was not violated. The term *significant* was believed to be somewhat ambiguous, subject to individual interpretation, and to avoid any confusion, Enterprise elected to submit the manual

annually. Enterprise has considered this practice to be above and beyond the regulatory requirement.

As a means of clarification, on August 2, 2017 Enterprise modified Appendix D – *Glossary* of the Company Operator Qualification Manual to include the term “Significant” with a definition that is set forth in PHMSA’s ADB-2009-0349 as required in 192.805(i), see Attachment 1 – OQ Manual Appendix D - Glossary. This definition will provide guidance to what changes are considered significant.

NOA Item 2:

2. §195.452 Pipeline integrity management in high consequence areas.

(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:

8) A process for review of integrity assessment results and information analysis by a person qualified to evaluate the results and information (see paragraph (h)(2) of this section).

Enterprise's Integrity Management Program, IM Process 4-00, fails to adequately describe what kind of training and qualifications are required for review of integrity assessment results and information analysis. Enterprise lists what positions are involved in reviewing ILI data. Enterprise needs to address what training and qualification is required for each position listed in IM Process 4-00. The rule requires that individuals who review assessment results and perform information analysis be qualified to do so. An effective operator program would be expected to require that appropriate means be taken to ensure the requisite level of qualification.

Enterprise Response to NOA Item 2:

The Agency alleges that “...Enterprise’s Integrity Management Program (IMP), IM Process 4-00, fails to adequately describe what kind of training and qualifications are required for review of integrity assessment results and information analysis (sic).”

IM Process 4-00 Section 4.1 lists job titles for the employees who may review and evaluate Integrity assessment results, see Attachment 2 – IM Process 4-00. IM Procedure 6-01L Information Analysis – Line Pipe identifies the job titles for who is responsible for reviewing information analysis data, making recommendations for preventive and mitigative measures, and determining re-assessment intervals, see Attachment 3 – IM Procedure 6-01L. Enterprise maintains job descriptions for each of these job titles that include the required training and qualifications for these job titles. Ongoing training requirements to maintain the qualifications listed in the job description were described in “PLI-PIE-400 Training and Qualification of Integrity Assessment Data Reviewers” which was also provided during the inspection, see Attachment 4 – PLI-PIE-400. Therefore, the job titles listed in IM Process 4-00 Section 4.1 and throughout IM Procedure 6-01L can be directly tied to training and qualification requirements. Enterprise is not

aware of any explicit regulatory requirements to list training and qualification requirements in its IMP. Section §195.452(f)(8) simply states “A process for review of integrity assessment results and information analysis by a person qualified to evaluate the results and information (see paragraph (h)(2) of this section).”

Because Enterprise identifies job titles for those who review assessment results within IM Process 4-00 and information analyses within IM Procedure 6-01L, maintains job descriptions that document training and qualification requirements for each of those job titles within PLI-PIE-400, and there is no explicit regulatory requirement for listing these training and qualification requirements directly in an IM Program document, Enterprise does not agree that it has violated the requirements of 49 CFR 195.452(f)(8). Therefore, Enterprise respectfully and formally requests that PHMSA withdraw Item 2 from this Notice of Amendment.

NOA Item 3:

3. §195.452 Pipeline integrity management in high consequence areas.

(h) What actions must an operator take to address integrity issues?

(4) Special requirements/or scheduling remediation-

(i) Immediate repair conditions. An operator's evaluation and remediation schedule must provide for immediate repair conditions. To maintain safety, an operator must temporarily reduce the operating pressure or shut down the pipeline until the operator completes the repair of these conditions. An operator must calculate the temporary reduction in operating pressure using the formulas referenced in paragraph (h)(4)(i)(B) of this section. If no suitable remaining strength calculation method can be identified, an operator must implement a minimum 20 percent or greater operating pressure reduction, based on actual operating pressure for two months prior to the date of inspection, until the anomaly is repaired. An operator must treat the following conditions as immediate repair conditions:

Enterprise's Integrity Management Program, IM Procedure 5-01L, section 5-01.2.1 Temporary Reduction of Operating Pressure, fails to require when Enterprise initiates a 20 percent pressure reduction when a remaining strength calculation method cannot be utilized, the pressure reduction be based on the actual operating pressure for two months prior to the date of inspection.

Also, the procedure references the code regulation to describe criteria for indications that meet the immediate repair criteria. Enterprise needs to state what is an immediate repair or reference where it is defined in their processes, not just reference the regulation code.

Enterprise Response to NOA Item 3:

The Agency alleges that “Enterprise’s Integrity Management Program, IM Procedure 5-01L, section 5-01.2.1 Temporary Reduction of Operating Pressure fails to require when Enterprise initiates a 20% pressure reduction when a remaining strength calculation method cannot be utilized, the pressure reduction be based on the actual operating pressure for two months prior to the date of inspection (sic).”

The requirement to base 20% pressure reductions on actual operating pressure for two months prior to the date of inspection was effective in Part 195.452 on October 1, 2015. In Enterprise’s

Integrity Standards & Guidelines document ENGR-PR-02 “Determination of Temporary Reduction to the Operating Pressure” dated 2/21/13, see Attachment 5 – ENGR-PR-02, Enterprise required that personnel determining pressure reductions must base pressure reductions, for immediate conditions that must take a 20% reduction, on highest operating pressure 60-days prior to an in-line inspection. These instructions can be found in Section 2.4.2 (and subsections) of this document. Section 2.4.1 (and subsections) of this document indicates that it is to be used to determine pressure reductions for immediate conditions and other pressure reductions required by indications that could affect an High Consequence Area (HCA).

Given that Enterprise has procedures that instructed personnel to base pressure reductions off of actual operating pressure for two months prior to the inspection and that PHMSA inspectors did not identify any pressure reductions that were *not* based on actual operating pressures for two months prior to an In-Line inspection, Enterprise does not agree with PHMSA’s allegation that it failed to require, when it initiates a 20% pressure reduction when a remaining strength calculation method cannot be utilized, the pressure reduction be based on the actual operating pressure for two months prior to the date of inspection.

Item #3 of the Notice of Amendment also asserts, “Also, the procedure references the code regulation to describe criteria for indications that meet the immediate repair criteria. Enterprise needs to state what is an immediate repair or reference where it is defined in their processes, not just reference the regulation code (sic).”

Enterprise describes the criteria for indications that meet the immediate repair criteria in IM Procedure 5-01L, see Attachment 6 – IM Procedure 5-01L, as follows:

5-01.2.1.2 When an indication that meets a criteria listed in 2.1.2 is discovered, a temporary shutdown of the line or reduction of the operating pressure shall be initiated by the Pipeline Integrity Engineer, Pipeline Integrity Engineering Supervisor, or the Pipeline Data Coordinator.

5-01.2.1.2.1 For indications that meet the immediate repair criteria per 195.452(h)(4)(i)(C), 452(h)(4)(i)(D) or 452(h)(4)(i)(E), the operating pressure shall be temporarily reduced by 20%.

5-01.2.1.2.2 For metal loss indications that meet the criteria of 195.452(h)(4)(i)(A) or 195.452(h)(4)(i)(B), a temporary operating pressure shall be established for the location of the indication by performing calculations based upon the formulae referenced in section 451.6.2.2(b) of ASME/ANSI B31.4 where applicable or by a pressure reduction of 20%.

49 CFR 195.452(h)(4)(i) “Special requirements for scheduling remediation – (i) Immediate repair conditions” identifies the criteria for indications that meet the immediate repair criteria as follows:

- 195.452(h)(4)(i)(A) Metal loss greater than 80% of nominal wall regardless of dimensions.
- 195.452(h)(4)(i)(B) A calculation of the remaining strength of the pipe shows a predicted burst pressure less than the established maximum operating pressure at the location of the anomaly.
- 195.452(h)(4)(i)(C) A dent located on the top of the pipeline (above the 4 and 8 o'clock positions) that has any indication of metal loss, cracking or a stress riser.

- 195.452(h)(4)(i)(D) A dent located on the top of the pipeline (above the 4 and 8 o'clock positions) with a depth greater than 6% of the nominal pipe diameter.
- 195.452(h)(4)(i)(E) An anomaly that in the judgment of the person designated by the operator to evaluate the assessment results requires immediate action.

Enterprise describes indications that meet immediate repair criteria in a document titled "Response Criteria for Liquid Worksheet," see Attachment 7 – Response Criteria for Liquid Worksheet, that was presented to PHMSA during the inspection, as follows:

- Condition #1, Code L1A – Metal Loss > 80%
- Condition #2 Code L1B – Predicted burst pressure < the established MOP at the location of the anomaly
- Condition #3 Code L1C – Top Side (above 4 & 8 o'clock) Dent with any indication of Metal Loss, Cracking, or Stress Riser
- Condition #4 Code L1D – Top Side (above 4 & 8 o'clock) Dent > 6% of nominal pipe diameter
- Condition #5 Code L1E – Other

This information demonstrates how Enterprise describes its criteria for indications that meet the immediate repair criteria by referencing specific sections of the 195.452 regulation which provide highly specific and defined criteria for indications that meet the immediate repair criteria and that the Enterprise "Response Criteria for Liquid Worksheet" document is in direct alignment with and provides an equivalent level of specificity as 195.452(h)(4)(i). Given this information, Enterprise does not agree with PHMSA's allegation that it is in violation of regulatory requirements as a result of its references to 195.452(h)(4)(i)(A), 452(h)(4)(i)(B), 452(h)(4)(i)(C), 195.452(h)(4)(i)(D), and 452(h)(4)(i)(E) when defining its criteria for indications that meet the immediate repair criteria and that it has not adequately defined its criteria for indications that meet the immediate repair criteria in its processes through these specific references in IM Procedure 5-01L.

In addition to the above, in September 2017, as part of a revision to its IM Program, Enterprise elected to combine certain liquid and gas IM procedures into a single procedure, IM Procedure 5-01. In this revised procedure it clarifies the requirements to base pressure reductions when a remaining strength calculation method cannot be utilized, on historical operating pressure 60 days before the in-line inspection; and, descriptions of the type of indications that would require pressure reductions, including immediate conditions, see Attachment 8 - IM Procedure 5-01 Rev. A.

Accordingly, Enterprise does not agree that it has violated the requirements of 49 CFR 195.452(h)(4)(i) and therefore, respectfully and formally requests that PHMSA withdraw Item 3 from this Notice of Amendment.

Should you have any questions, require further information in connection with the above or wish to discuss this matter in greater detail, please do not hesitate to contact our office. Enterprise welcomes the opportunity to work with PHMSA in the safe operations of our pipeline systems.

Sincerely,



Graham W. Bacon
Executive Vice President, Operations & Engineering

Attachments:

- Attachment 1 – OQ Manual Appendix D – Glossary
- Attachment 2 – IM Procedure 4-00
- Attachment 3 – IM Procedure 6-01L
- Attachment 4 – PLI-PIE-400
- Attachment 5 – ENG-PR-02
- Attachment 6 – IM Procedure 5-01L
- Attachment 7 – Response Criteria for Liquid Worksheet
- Attachment 8 – IM Procedure 5-01 Rev. A