Agenda Date: March 9, 2023

Item Number: A1

Docket: PG-220767

Company Name: McCain Foods USA, Inc.

Staff: Scott Rukke, Acting Pipeline Safety Director

Dennis Ritter, Acting Chief Engineer, Pipeline Safety

Recommendation

Based on the discussion below, Commission staff (Staff) finds that McCain Foods USA Inc. (McCain) use of ASTM D3035 polyethylene (PE) pipe in constructing a regulated hazardous gas pipeline is not in the public interest and therefore an exemption to minimum pipeline safety regulations should not be granted. McCain constructed the line prior to consulting with Staff to determine if the pipeline was regulated. Staff determined the line was regulated and should have been constructed using ASTM D2513 pipe which is required by code. All similarly situated operators of hazardous gas pipelines must use this pipeline material. Unfortunately, McCain believed the pipeline would be unregulated and while certainly an unfortunate mistake, it does not justify exemptions from portions of the pipeline from safety regulations.

Background

On October 19, 2022, McCain Foods USA Inc. requested from the Washington Utilities and Transportation Commission (Commission) an exemption (waivers)² of the following regulations in 49 CFR 192 for their 12-inch biogas pipeline in Othello, Washington:

- 192.59(a)(1),
- 49 CFR 192.59(d),
- 49 CFR 192.63(a)

These specific sections of Part 192 delineate with the manufacturing standards for polyethylene pipe, the materials used in manufacturing the pipe and the markings placed on the pipeline to identify as a gas pipeline. In 2019, McCain Foods began design and construction of a new potato processing facility and wastewater treatment plant in Othello, WA. The treatment plant has a covered anerobic lagoon to capture the biogas (65 percent methane) from the treatment plant. The gas is conveyed approximately 3,000 feet via a 12-inch-high density polyethylene (HDPE) pipeline to their new potato processing facility just east of N. Broadway Avenue. The biogas will be burned in the boiler to produce steam. In transit, the pipeline crosses the following properties not under the control of McCain Foods:

- The South Columbia Irrigation Canal (land is owned by McCain but under control of the irrigation district);
- The Burlington Northern Santa Fe Railroad (two tracks)

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¹ 49 CFR 192.59

²49 U.S. Code § 60118. Compliance and waivers, (c) Waivers by the Secretary

• The city of Othello's North Broadway Ave right-of-way.

The pipeline was constructed in 2021. McCain did not consult the Commission on potential jurisdictional issues until the line was almost completed. After consultation with the Commission and inspections of the site, Pipeline Safety determined that the line was jurisdictional because it crossed property not under the control of McCain Foods. Thus, McCain was engaged in the transportation of a hazardous gas for interstate commerce³ and Minimum Pipeline Safety Standards of 49 CFR 192 and WAC 480-93 apply. Typical expectations prior to construction would be that the operator and/or their contractors meet the minimum standards for constructing a regulated pipeline.

The following are Staff concerns not associated with the waivers related to construction (note Pipeline Safety Staff were not able to conduct inspections during construction):

- 1. The operator did not have an Operator Qualification program required under 49 CFR 192.805⁴ for personnel fusing the pipeline together. The quality and fitness of the fuses cannot be verified.
- 2. 49 CFR 192 319⁵ requires specific materials be used to both bed the pipeline and backfill the trench. As McCain Foods did not have an Operations and Maintenance Manual approved by the Commission when the line was constructed, and Staff did not inspect construction, it is unknown whether the operator used appropriate bedding and backfill material to prevent damage to the line.
- 3. 49 CFR 192.321⁶ requires plastic pipe to be installed to minimize undue stresses on the line. As Staff did not witness installation of the line, it cannot be determined if this part of the code was satisfied. The line was also placed without the required electrically conductive tracer wire used to locate underground plastic pipelines.

It should also be noted that McCain's jurisdictional boundaries will occur at the fence line to property controlled by McCain. This is similar to other industrial user pipelines which have processes inside the fence line which are not necessarily tied to regulated gas systems. This means that the pipeline on their own property is not subject to regulation by the Commission and they would not need to meet minimum standards of 49 CFR 192 and WAC 480-93.

Analysis

McCain is applying for an exemption from the requirements of 49 CFR 192.59(a)(1), 49 CFR 192.59(d), and 49 CFR 192.63(a) for the Othello 12" HDPE biogas pipeline. The Commission reviews exemptions from Commission rules under WAC 480-07-110 as follows:

(1) **Exceptions and modifications.** The commission, in response to a request or on its own initiative, may grant an exemption from, or modify the application of, any of its rules in individual circumstances if the exemption or modification is consistent with the public

³ 49 CFR 192.3 Definitions, Transportation and PHMSA Interpretations

⁴ 49 CFR 192.805 Qualification Program

⁵ 49 CFR 192.319.319(b)

⁶ 49 CFR 192.321 (c) and (e)

interest, the purposes underlying regulation, and applicable statutes. Consistent with due process and the public interest, the commission may modify the application of procedural rules in this chapter on its own initiative during a particular adjudication or other docket without following the process identified in subsection (2) of this section.

(2) **Process.**

- (a) How to request an exemption from, or modification to, a rule. To request a rule exemption or modification, a person must file with the commission a written petition identifying the rule for which the person seeks an exemption and providing a full explanation of the reason for requesting the exemption. Telecommunications companies, gas companies, or electric companies filing petitions for exemption under this section must provide an electronic copy of the request to the public counsel unit of the attorney general's office by email on the same day the request is filed with the commission.
- (b) Commission process. The commission will assign the petition a docket number if the request does not arise in an existing docket, and will schedule the petition for consideration at one of the commission's regularly scheduled open meetings or in an adjudicative proceeding if appropriate under chapter 34.05 RCW. The commission will notify the person requesting the exemption and other interested persons of the date of the open meeting or hearing when the commission will consider the petition.
- (c) Standard for determination. The commission uses the public interest standard to determine whether to grant an exemption from, or modification to, a commission rule. Factors the commission may consider in making this determination include whether the rule imposes an undue hardship on the requesting person of a degree or a kind different from hardships imposed on other similarly situated persons, and whether the effect of applying the rule to the requesting person would be contrary to the underlying purposes of the rule and the public interest.

The Standard for determination states the public interest standard is used to decide whether to grant an exemption. It also states the Commission may consider such factors as whether the rule imposes an undue hardship on the requesting person different from other similarly situated persons and whether the exemption would be contrary to the underlying purposes of the rule and public interest.

1) Waiver of 49 CFR 192.59(a)(1):

This request is asking the Commission to waive the requirement that a regulated pipeline be manufactured of materials identified in code as appropriate for gas pressure pipelines.

Code Citation

49 CFR 192.59 Plastic pipe

(a) New plastic pipe is qualified for use under this part if:

- (1) It is manufactured in accordance with a listed specification [a specification listed in section I of Appendix B of this part]
 I. List of Specifications...ASTM D2513 "Standard Specification for
 - I. List of Specifications...ASTM D2513 "Standard Specification for Polyethylene (PE) <u>Gas</u> Pressure Pipe, Tubing, and Fittings" (incorporated by reference, see §192.7)

Discussion

McCain did not use pipe manufactured to the material specification referenced in code, ASTM D2513. McCain used HDPE pipe manufactured to ASTM D3035 intended for use in the transport of water, municipal sewage, domestic sewage, industrial process liquids, effluents, and slurries. This polyethylene pipe standard is not specifically for gas pressure pipe and not referenced in Part 192. Staff did not review the relative merits of each standard in transporting hazardous gases but assumed the Pipeline and Hazardous Materials Safety Administration (PHMSA) conducted an analysis prior to determining an approved listing of plastic pipeline specifications. ASTM D3035 did not make the PHMSA list identified in Appendix B and although McCain Foods argues the pipe used in construction of their biogas pipeline "substantially meets the material properties required by ASTM D2513"8 it is not the same. Staff cannot determine why the ASTM D3035 standard is not allowed by code, but clearly PHMSA determined only ASTM D2513 materials be used. Staff believes, it is not an undue hardship on McCain to use this type of pipe as all similarly situated operators of PE hazardous gas pipelines have used it.

Further, Staff notes the ASTM D3035 pipe is apparently used in liquid and slurry applications, not gas. It may be suitable for gas applications, but Staff did not research the intricacies of ASTM material specifications and uses therein. ASTM D2513 is to be used specifically for gas pressure pipe, tubing, and fittings.

2) Waiver of 49 CFR 192.59(d):

This request is asking the Commission to waive the requirement that new polyethylene pipe installed for regulated gas service does not contain any regrind material. Regrind material is pipe material which does not fall within acceptable specifications following extrusion at the time of manufacture that can reused if it meets certain specifications. The manufacturer regrinds the pipe into suitable sized pellets and combines it with virgin PE material prior to extruding into new pipe.

⁷ ASTM D3035-21 Standard Specification for Polyethylene (PE) Plastic Pipe Based on Controlled Outside Diameter abstract, paragraph 1.

⁸ McCain Foods Request for Exemption for Othello 12" HDPE Biogas Pipeline, October 19, 2022, page 2, paragraph 2

⁹ 49 CFR Part 192 Amendment 192-119, Federal Register Volume 80 Number 2 (Monday, January 5, 2015. Rules and Regulations Pages 168-188, Supplementary Information, II Summary Review of Standard and Amendments, B. Standards Not Incorporated

Code Citation

49 CFR 192.59 Plastic pipe

Rework and/or regrind material is not allowed in plastic pipe produced after March 6, 2015 used under this part.

Discussion

The ASTM D3035 pipe used by McCain foods contains regrind material ¹⁰ which is specifically prohibited by code. The final rule containing the amendment to 49 CFR 192 prohibiting regrind was published in 2015. As noted in the publishing of the final rule, PHMSA was concerned with the introduction of contaminants compromising integrity (lack of uniformity, pinholes, etc.) during the extrusion process. 11 McCain points out in their request for an exemption, ¹² ASTM D2513 also allows regrind material as part of the specification. However, PHMSA specifically excepted Section 4.2 of the standard, "Rework Material" (rework and regrind are synonymous) when ASTM D2513-09a was adopted. 13 Therefore, all pipe used in jurisdictional pipelines does not contain regrind. As such, Staff believes, it is not an undue hardship on McCain to use this type of pipe as all similarly situated operators of hazardous gas pipelines must also use it.

Staff cannot determine if the ASTM D3035 pipe used by McCain is safe to use in hazardous gas applications as it contains regrind materials. McCain believes that because the line is operating at a lower pressure, risk of failure is minimal.¹⁴ While it typically is a valid statement that the lower the pressure the lower the risk, this analysis assumes the pipeline meets regulated standards. In this case, the pipeline does not. This in combination with the other factors identified earlier, no operator qualification plan for fusing the pipeline; no direct knowledge of bedding and backfill materials and the lack of construction inspection do not give staff sufficient confidence in the pipeline.

3) Waiver of 49 CFR 192.63:

This request is to waive the requirement of markings required by ASTM D2513,15 specifically, gas lines which are HDPE (HDPE lines are black) must have a yellow stripe to identify them as gas pipe.

¹⁰ McCain Foods Request for Exemption for Othello 12" HDPE Biogas Pipeline, October 19, 2022, page 2, paragraph 1

¹¹ 49 CFR Part 192 Amendment 192-119, Federal Register Volume 80 Number 2 (Monday, January 5, 2015. Rules and Regulations Pages 168-188, Supplementary Information, II Summary Review of Standard and Amendments, B. Standards Not Incorporated

¹² McCain Foods Request for Exemption for Othello 12" HDPE Biogas Pipeline, October 19, 2022, page

^{2,} paragraph 1

13 49 CFR Part 192 Amendment 192-119, Federal Register Volume 80 Number 2 (Monday, January 5, 2015. Rules and Regulations Pages 168-188, Supplementary Information, II Summary Review of Standard and Amendments, B. Standards Not Incorporated.

¹⁴ McCain Foods Request for Exemption for Othello 12" HDPE Biogas Pipeline, October 19, 2022, page 2, paragraph 1. ¹⁵ ASTM D2513-18a Section 7 Marking.

Code Citation

49 CFR 192.63 Marking of Materials

- (a) Except as provided in paragraphs (d) and (e) of this section, each valve, fitting, length of pipe, and other component must be marked as prescribed in the specification or standard to which it was manufactured.
- (b) Surfaces of pipe and components that are subject to stress from internal pressure may not be field die stamped.
- (e) All plastic pipe and components must also meet the following requirements:
 - (1) All markings on plastic pipe prescribed in the listed specification and the requirements of paragraph (e)(2) of this section must be repeated at intervals not exceeding two feet.
 - (2) Plastic pipe and components manufactured after December 31, 2019 must be marked in accordance with the listed specification.
 - (3) All physical markings on plastic pipelines prescribed in the listed specification and paragraph (e)(2) of this section must be legible until the time of installation.

Discussion

The ASTM D3035 pipe installed by McCain does not contain the required markings¹⁶ as identified in ASTM D2513.¹⁷ It should also be noted that the plastic line was also installed without trace wire. This makes it difficult to locate and identify the pipeline for any future excavation work near the pipeline. Pipeline markings and trace wire are very important safety requirements in the damage prevention sector of pipeline safety. McCain will patrol at intervals not exceeding 4½ months (quarterly) and will leak survey annually. Additionally, line markers could be employed at very frequent increments along the line. Joining the call before you dig program will allow for marking the line prior to any excavation.

Conclusion

Staff recommends the waiver request be denied. Staff believes, meeting minimum pipeline safety standards is not an undue hardship on McCain as all similarly situated operators of hazardous gas pipelines must meet this criteria. However, Staff does note that if McCain is required to remove the existing ASTM D3035 pipeline and replace it with ASTM D2513 pipeline for the reasons already mentioned, then this exemption request is moot as the new line will satisfy code requirement. McCain will install valves at their fence line on both the east side of N. Broadway Avenue (plant side) and on the west side of the SCIC canal (treatment side). These valves would establish the jurisdictional limits for the regulated portion of the pipeline.

¹⁶ McCain Foods Request for Exemption for Othello 12" HDPE Biogas Pipeline, October 19, 2022, page

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¹⁷ ASTM D2513-18a Section 7 Marking

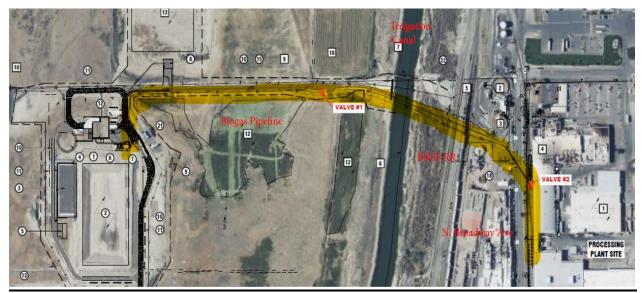


Figure 1-McCain Foods Pipeline-Location Map 18-the yellow highlighted area is the general location of the pipeline.

 $^{^{18}}$ McCain Foods Communication January 19, 2023.