



U.S. Department  
of Transportation

1200 New Jersey Avenue, SE  
Washington, DC 20590

**Pipeline and Hazardous  
Materials Safety Administration**

**April, 7, 2020**

Mr. Kevin Burke  
Sr. Director and GM South Texas District  
Buckeye Texas Processing, LLC  
7209 Up River Road  
Corpus Christi, TX 77406

Dear Mr. Burke:

This letter is being provided in response to supplemental information received from you relating to an interpretation response letter issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA) to Buckeye Texas Processing, LLC (Buckeye) on September 10, 2019 (September 10, 2019 Letter). This letter supersedes and replaces the prior interpretation; therefore, the September 10, 2019 Letter is withdrawn.

**Background**

By letter dated July 27, 2018, Buckeye requested an interpretation of the exception in 49 CFR § 195.1(b)(8) for transportation of hazardous liquid through refining facilities or storage or in-plant piping systems associated with such facilities. On September 10, 2019, after several communications with Buckeye, PHMSA responded to the company's request for interpretation. In October 2019, PHMSA met with Buckeye to discuss the September 10, 2019 Letter. At that meeting, Buckeye presented supplemental information. In response to Buckeye's presentation of new information, PHMSA posed several follow-up questions, which Buckeye provided written responses to on November 8, 2019. PHMSA reviewed the responses, held a teleconference with Buckeye on December 10, 2019, and sent follow-up questions to Buckeye on December 10, 2019. On January 29, 2020, Buckeye submitted responses to PHMSA's follow-up questions.

On February 13, 2020, Buckeye submitted a memorandum that clarified and categorized Buckeye's reconsideration request as it relates to two issues: (1) the refining exception of 49 CFR 195.1(b)(8) and its application at Buckeye's refining facility; and (2) the application of 49 CFR 195.1(b)(3)(ii) as it relates to the low stress pipelines (i.e. Modes A, B and C) serving the refining facility. Buckeye and PHMSA met again in Washington, D.C. on February 18, 2020, to discuss the memorandum.

**Analysis**

The Federal pipeline safety regulations apply to pipeline facilities and the transportation of hazardous liquids or carbon dioxide associated with those facilities. However, 49 CFR

195.1(b)(8) excepts from the Part 195 regulations the “transportation of hazardous liquids or carbon dioxide through onshore production (including flow lines), refining, or manufacturing facilities or storage or in-plant piping systems associated with such facilities.” In this exception, in-plant piping system means “piping that is located on the grounds of a plant and used to transfer hazardous liquid or carbon dioxide between plant facilities or between plant facilities and a pipeline or other mode of transportation, not including any device and associated piping that are necessary to control pressure in the pipeline under § 195.406(b).” In addition, Part 195 excepts low-stress pipelines that serve refining facilities, if the pipeline is less than one mile long and does not cross an offshore area or waterway currently used for commercial navigation. *See* § 195.1(b)(3)(ii).

In 1992, when PHMSA proposed the definition of in-plant piping, the agency explained that pressure control devices necessary to control pressure of a regulated pipeline would mark the limit of part 195 application inside a refining facility. If there is no pressure control device, such as on an un-regulated low-stress line, in-plant piping would extend to the plant boundary. *See* Regulatory Review: Hazardous Liquid and Carbon Dioxide Pipeline Safety Standards, 57 Fed. Reg. 56305, Nov. 27, 1992.

Buckeye owns and operates a crude oil refining facility located in Corpus Christi, Texas. The facility is served by crude oil pipelines identified by Buckeye as Mode A, Mode B, Mode C, Mode D, and Mode E. According to Buckeye, the refining facility includes storage and an in-plant piping system associated with the refining facility.

The September 10, 2019, Letter was based on the agency’s evaluation of the information Buckeye had provided at that time, which did not include information about low-stress pipelines. Since that time, Buckeye has presented additional information to PHMSA, which has changed the agency’s understanding of Buckeye’s refinery facility. Therefore, PHMSA provides the following revised interpretation.

With regard to the Mode A, Mode B and Mode C pipelines, Buckeye has asserted they are low-stress pipelines that meet the § 195.1(b)(3)(ii) exception and thus not required to have § 195.406 pressure control devices. As noted above, if the pipelines were regulated, the point of demarcation between these pipelines (i.e. Mode A, Mode B, and Mode C pipelines) and Buckeye’s in-plant piping system would be the pressure control device necessary to control pressure, or the facility boundary if there is no pressure control device on plant grounds. (*See* 57 Fed. Reg. 56305). Buckeye has indicated the current point of demarcation is the nearest valves downstream of the receivers for pipelines moving in crude oil (i.e. Mode A and Mode B), or upstream of the launchers for pipelines moving crude oil out (i.e. Mode B and Mode C). PHMSA believes these demarcation points are not inconsistent with § 195.1 for the Mode A, Mode B, and Mode C pipelines if they are unregulated low-stress pipelines.

With regard to the Mode D pipeline, which Buckeye acknowledges is subject to the regulations in Part 195, Buckeye indicated that it is operated by a third-party, who delivers crude oil inbound to the refinery from the third party’s terminal. Buckeye also stated that the pipeline pressure is limited using a pressure control device and associated surge relief piping. Specifically, the pressure relief valve and surge relief piping that leads to the refinery’s Tanks TK-1004, TK-

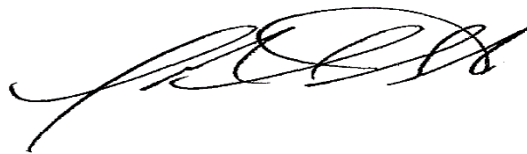
1005, and TK-1006 results in those tanks being characterized as breakout tanks, which would be regulated under Part 195. Buckeye further stated that since the emergency shutdown valve protects in-plant piping that could influence pressure on the Mode D pipeline, it determined the demarcation point between the Mode D pipeline, which would be regulated under Part 195, and the refinery's in-plant piping system to be the outlet flange of the valve located immediately downstream of the emergency shutdown valve. PHMSA believes Buckeye's chosen demarcation point is not inconsistent with § 195.1 for the Mode D pipeline. This includes the pressure relief valve and piping leading to the breakout tanks, including the breakout tanks, as well as the Mode D pipeline from the outlet flange downstream of the emergency shutdown valve.

Finally, with regard to the Mode E pipeline, which Buckeye acknowledges is subject to the regulations in Part 195, Buckeye indicated that a third-party operates the pipeline, transporting crude oil outbound from the refinery to a third-party refining facility. Buckeye also indicated that the pressure on the Mode E pipeline is limited by the combination of a pressure transmitter and a motor-operated valve located near the refinery's boundary. Consequently, Buckeye has determined that the demarcation point between the Mode E pipeline, which would be regulated under Part 195, and the refinery's in-plant piping system is the inlet flange of the motor-operated valve. PHMSA believes Buckeye's chosen demarcation point is not inconsistent with § 195.1 for the Mode E pipeline. The point of demarcation for the Mode E pipeline would be valve upstream of the pressure transmitter and the motor-operated valve as annotated in the piping and instrumentation diagram provided by Buckeye on November 8, 2019.

PHMSA provides this written interpretation of the Federal pipeline safety regulations in response to a specific request of interpretation, and reflects the agency's application of the regulations to the specific facts presented by the person requesting the clarification. If additional or differing facts are presented, PHMSA's interpretation may change.

If we can be of further assistance, please contact Tewabe Asebe at 202-366-5523.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. A. Gale', with a stylized, flowing script.

John A. Gale  
Director, Office of Standards  
and Rulemaking



## BUCKEYE TEXAS PROCESSING LLC

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7209 Up River Road  
Corpus Christi, TX 77406

NOV ' 8 2019

November 8, 2019

Office of Pipeline Safety (PHP-30)  
PHMSA  
U.S. Department of Transportation  
1200 New Jersey Avenue SE  
Washington, DC 20590-0001

Attn: Mr. Tewabe Asebe, Standards and Rulemaking (PHP-30)

**Re: Request for Written Regulatory Interpretation; Response to Inquiry**

Dear Mr. Asebe:

Buckeye Texas Processing LLC (BTP) appreciates the opportunity to meet with you, Mr. Fred, Mr. Gale and Mr. Nanney on October 21, 2019. This letter responds to the information request posed by Mr. Steve Nanney during that meeting.

During our meeting, Mr. Nanney inquired specifically of the manner in which the pipelines operating in Modes D and E tie-in to the crude oil in-plant piping system at the BTP refining facility, and requested a drawing depicting same.

The enclosed drawing, entitled "Buckeye Texas Processing Crude Oil In-Plant Piping System," is a piping and instrumentation diagram (P&ID) which is intended to respond to Mr. Nanney's request. Please note that BTP has used the same color-coding as was applied in BTP's June 6, 2019, response to PHMSA inquiry. We noted during the meeting that Mr. Nanney requested a simplified drawing, and we have endeavored to simplify the enclosed drawing as much as possible without obscuring relevant details.

In regards to the attached P&IDs, Buckeye would like to mention the additional information:

- The Inventory Control Meter Skid is not used for leak detection on any of the crude oil pipelines.

As you may recall, toward the end of our meeting, Mr. Fred inquired whether any aspect of the September 10, 2019, interpretation (PI-18-0017), other than the refining exception, deserved attention. BTP responded, yes, that the findings related to the low-stress pipelines (Modes A, B, and C) deserved a second look. In that regard, BTP would direct PHMSA's attention to the description of those pipelines found in BTP's June 6, 2019, response to PHMSA inquiry, at pages 1-2, in the paragraph beginning "Before turning to the April 29 discussion, ..." BTP would add that none of the low-stress pipelines operating in Modes A, B, and C crosses an offshore area,

Mr. Tewabe Asebe  
Office of Pipeline Safety (PHP-30)  
Buckeye Texas Processing, LLC  
Request for Written Regulatory Interpretation

November 8, 2019  
Page 2

nor do they cross any waterway currently used for commercial navigation (re: 49 C.F.R. § 195.1(b)(3)(ii)).

Our request for interpretation seeks confirmation that BTP has appropriately delineated between the crude oil pipeline system and the pipelines which move crude oil off the refining facility grounds.

Finally, BTP wishes to offer to you and to Messrs. Gale and Fred any follow-up information that might be helpful to your efforts in this regard. You may contact me with any such request.

Thank you for your time and for your attention to this matter.

Sincerely,



Kevin Burke  
Sr. Director & GM South Texas District

Enclosure

cc: John Gale, Director, Standards and Rulemaking  
Steve Nanney, PHMSA/OPS  
Meredith Wilson  
Claudia Pankowski  
Patrick Monaghan  
Vanessa Garcia-Silguero  
Vince Murchison





## BUCKEYE TEXAS PROCESSING LLC

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7209 Up River Road  
Corpus Christi, TX 77406

January 29, 2020

Office of Pipeline Safety (PHP-30)  
PHMSA  
U.S. Department of Transportation  
1200 New Jersey Avenue SE  
Washington, DC 20590-0001

Attn: Mr. Tewabe Asebe, Standards and Rulemaking (PHP-30)

**Re: Request for Written Regulatory Interpretation  
Interpretation Response PI-18-0017  
Response to Inquiry**

Dear Mr. Asebe:

This letter responds to your email dated December 8, 2019, which presented follow-up questions from our teleconference on December 3, 2019, same related to the request for written regulatory interpretation submitted by Buckeye Texas Processing (BTP), dated July 27, 2018. Reference is made to BTP's request, the corrected Exhibit C submitted July 31, 2018, and BTP's prior responses to information requests dated December 3, 2018, March 22, 2019, June 6, 2019, and November 8, 2019, as well as our teleconference discussion of April 29, 2019.

Set out below is each of your questions which is followed by BTP's response; for reference, we have attached a copy of the P&ID that was submitted November 8, 2019.

- *Why does Buckeye believe the line that is marked yellow (in the latest map) and runs from Mode A (Viking) to Mode C or to Mode B is in-plant piping. Interconnecting piping from pipeline to pipeline?*

The piping represented by the yellow line, which extends from Mode A to Mode C or Mode B, also serves the purpose of moving crude oil to tanks for storage prior to refining. Tanks 1001-1003 are the dedicated refining charge tanks, and crude oil is moved to and among Tanks 1001-1003 for ultimate movement to the refining units; therefore, since the subject piping is associated with refining, it is designated as in-plant piping pursuant to 49 C.F.R. §195.1(b)(8).

- *Where are pressure controls for Modes A, B, C, and D?*

Below, BTP responds to your inquiry by reviewing system design, then each of the four modes is addressed in turn. BTP believes that a description of system design is essential to interpreting the responses set out below.

In sum, pressure control is not active, using protective equipment, in the manner contemplated by 49 C.F.R. §195.406(b) and the definition of in-plant piping (49 C.F.R. §195.2); rather, pressure is managed passively by system design.

The maximum pressure that the crude oil pipelines (line pipe located outside of the BTP and BTH facilities) can withstand from a physical material perspective is higher than the maximum pressure than the system can deliver. The operating pressures are limited by the maximum output that can be produced by the pumps that are used to transfer along Modes A, B, C, and D. From an over-pressure protection standpoint, one must take into consideration that BTP and BTH are limited by the in-plant piping design (ANSI 150), thus resulting in the low-stress designation to the pipelines represented by Mode A, Mode B and Mode C which are excepted from Part 195 pursuant to 49 C.F.R. § 195.1(b)(3)(ii).

Below, BTP reviews for each of the Modes the factors required to be excepted as a low-stress pipeline pursuant to 49 C.F.R. § 195.1(b)(3)(ii), along with the means by which the pipelines are operated to maintain pressure below 20% specified minimum yield strength (SMYS).

#### Mode A:

The Mode A pipelines are 0.45 miles in length (measured outside facility grounds), do not cross an offshore area or a commercially navigable waterway, and serve to move crude oil inbound to a refining facility (BTP).

Pressure in the Mode A pipelines is maintained by way of pressure sensors and pump shutdown switches located at the upstream origin pump station. Those switches are set to shut down the pumps if pressure on the pipelines reaches 240 psig, which is approximately 12% of the SMYS.

#### Mode B:

The Mode B pipelines are approximately 0.69 miles in length (measured outside facility grounds); serve both a refining facility (BTP) and a vessel terminal facility (BTH); and do not cross an offshore area or a waterway currently used for commercial navigation.

Recalling that Mode B pipelines are bidirectional, maintenance of pressure below 20% SMYS is achieved separately for inbound and outbound movements. Pressure for movements inbound from BTH to BTP is maintained by the implementation of a pump permissive that is controlled by a pressure transmitter located upstream of the pipeline near the BTH fence line. In the event that the pressure reaches 150 psi, the pump permissive is removed and the BTH pumps will shut down. For these transfers, the pipelines are subject to pressures approximately 8% of the SMYS. Pressure for movements outbound from BTP to BTH is maintained by the implementation of pressure transmitters located directly downstream of the pumps and pump shutdown switches.

The pumps will shut down if pressure downstream of the pumps reaches 268 psi, which is approximately 14% of the SMYS.

Mode C:

The Mode C pipeline is approximately 0.79-miles in length (measured outside of facility grounds); serves both a refining facility (BTP) and a vessel terminal facility (BTH); and does not cross an offshore area or a waterway currently used for commercial navigation.

Pressure in the Mode C pipeline is maintained by the implementation of pressure transmitters located directly downstream of the pumps and pump shutdown switches. The pumps will shut down transfers if pressure downstream of the pumps reaches 268 psi, which is approximately 17% of the SMYS.

Given the foregoing, that the Mode A, Mode B, and Mode C pipelines are excepted from regulation under Part 195; and given that, as a result, no "device and associated piping that are *necessary* to control pressure" in the pipelines exists, long-standing precedent would place the end or the beginning, as the case may be, of the crude oil in-plant piping system at the facility boundary.<sup>1</sup> BTP, however, concurs with Mr. Steve Nanney in concluding that launchers and receivers should be part of the Mode A, Mode B, and Mode C pipelines. As such, BTP has established the beginnings and endings of the crude oil in-plant piping system at the last- or first-occurring block valves adjacent to piping which is connected to the launchers and receivers, as depicted in the November 8 drawing.

Mode D:

The pressure controls for the pipeline operating in Mode D are located within BTP. Those controls are in the form of a pressure control relief valve. That pressure control valve is owned and operated by Energy Transfer and is depicted in the November 8 drawing.

- *Why does Buckeye believe the line that is marked yellow (in the latest map) and runs from Mode D (ETC inbound 12") to the tanks is not all DOT regulated?*

The piping represented by the yellow line, which extends from Mode D to the tanks, also serves the purpose of moving crude oil to tanks for storage prior to refining. Tanks 1001-1003 are the dedicated refining charge tanks, and crude oil is moved to and among Tanks 1001-1003 for ultimate movement to the refining units; therefore, since the subject piping is associated with refining, it is designated as in-plant piping pursuant to 49 C.F.R. §195.1(b)(8).

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<sup>1</sup> *In-plant piping system* means piping that is located on the grounds of a plant and used to transfer hazardous liquid or carbon dioxide between plant facilities or between plant facilities and a pipeline or other mode of transportation, not including any device and associated piping that are necessary to control pressure in the pipeline under §195.406(b).; "If there is no such pressure control device on plant grounds, in-plant would extend to the boundary of plant grounds." Notice of Proposed Rulemaking, 57 Fed. Reg. 56304, 56305 9Nov. 27, 1992; "The NPRM explained that we would consider in-plant piping to extend to the plant boundary in the absence of a necessary pressure control device on plant grounds." 59 Fed. Reg. 33388, 33389 (June 28, 1994).



BTP acknowledges that a fair amount of data and facility knowledge underlies the information presented in this letter. As discussed on December 3, BTP suggests a follow-up, in-person meeting to allow further discussion and to address any additional questions that would be helpful to PHMSA's interpretation.

Thank you for your time and attention to this matter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kevin J. Burke".

Kevin Burke  
Sr. Director and GM South Texas District

Enclosure

cc: John Gale, Director, Standards and Rulemaking  
Steve Nanney, PHMSA/OPS  
Benjamin Fred  
Melanie Stevens  
Vanessa Garcia-Silguero  
Claudia Pankowski  
Vince Murchison



# Memo

To: Ben Fred  
Melanie Stevens

From: Vince Murchison

Date: February 13, 2020

Re: Buckeye Texas Processing, LLC; Interpretation Response PI-18-0017; The PSA Refining Exception

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## Introduction

This memorandum follows-on to my recent offer to characterize Buckeye Texas Processing, LLC's ("BTP's") refining facility under the refining exception to the federal pipeline safety regulations, 49 C.F.R. Part 195 ("Part 195"), which are promulgated pursuant to the Pipeline Safety Act, 49 U.S.C. § 60101, *et seq* ("PSA"). The refining exception is found in the PSA, 49 U.S.C. § 60101(a)(22)(B), and in Part 195, 49 C.F.R. § 195.1(b)(8). This memorandum is limited to the movement of crude oil into, within, and out of the refining facility; i.e., it does not address the movement of refined petroleum products.

To place the discussion into context, BTP requested PHMSA's interpretation of the physical locations which BTP had identified as the beginning or the end, as the case may be, of the refining facility crude oil in-plant piping system. This memorandum reviews the scope of the Pipeline Safety Act and the intended scope of the exception for refining facilities – and storage and in-plant piping systems associated with refining facilities – which necessarily brings into the discussion the promulgation of the defined term "in-plant piping system" (i.e., the determination of the physical extent of an in-plant piping system), as well as the meaning of the clause "associated with." Following that discussion is a section in which the refining exception is applied to the BTP refining facility. Finally, at the request of Melanie Stevens, BTP describes certain central issues which it believes attend the PHMSA interpretation response of September 10, 2019.<sup>1</sup>

## Background

BTP owns and operates a crude oil refining facility located in Corpus Christi, Texas. The refining facility is served by several crude oil pipelines, some of which are regulated under Part 195, but some of which are not. Crude oil is a hazardous liquid as defined by 49 C.F.R. 195.2. A total of seven crude oil pipelines serve the facility, and, given that certain of the pipelines are parallel and serve the same facilities, a total of five modes of operation exist. Those modes are designated Mode A, Mode B, Mode C, Mode D, and Mode E.<sup>2</sup>

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<sup>1</sup> PI-18-0017, Sep. 10, 2019.

<sup>2</sup> A description of the modes may be found in BTP's request for interpretation of July 27, 2018, at 2.

Two of the pipeline modes, Mode B and Mode C, serve a marine vessel terminal known as Buckeye Texas Hub (“BTH”).

The refining facility has a crude oil in-plant piping system on plant grounds, all of which system is associated with the refining facility, and which system moves crude oil between plant facilities (including storage tanks and the refining units) and between plant facilities and the inbound and outbound crude oil pipelines. The crude oil in-plant piping system was designed and constructed pursuant to ASME B31.3 – Process Piping. Further, the in-plant piping system is operated and maintained pursuant to a safety management system which conforms with the applicable regulations of OSHA and EPA.

BTP submitted an interpretation request on July 27, 2018, seeking PHMSA’s interpretation of BTP’s conclusions regarding the points of demarcation, identified by BTP, between the pipelines and the refining facility crude oil in-plant piping system. Subsequently, BTP responded to several agency requests for additional information. PHMSA and BTP held a teleconference on April 29, 2019, to review the refining facility layout and to respond to PHMSA inquiries. PHMSA’s interpretation response was issued on September 10, 2019. The parties met in Washington on October 21, 2019 to discuss certain questions relating to the interpretation response. BTP responded to a follow-up information request on January 29, 2020.

## The Refining Exception

### The Pipeline Safety Act

The stated purpose of the PSA “is to provide adequate protection against risks to life and property posed by pipeline transportation and pipeline facilities by improving the regulatory and enforcement authority of the Secretary of Transportation (“Secretary”).”<sup>3</sup> To achieve this purpose, the PSA directs that the Secretary “prescribe minimum safety standards for pipeline transportation and for pipeline facilities.”<sup>4</sup>

The PSA definition of “pipeline transportation,” as relevant, includes “transporting hazardous liquid,” as set out below:<sup>5</sup>

Transporting hazardous liquid –

(A) means–

- (i) the movement of hazardous liquid by pipeline, or the storage of hazardous liquid incidental to the movement of hazardous liquid by pipeline, in or affecting interstate or foreign commerce”<sup>6</sup>

\* \* \*

(B) but does not include moving hazardous liquid through—

\* \* \*

- (ii) onshore production, refining, or manufacturing facilities; or
- (iii) storage or in-plant piping systems associated with onshore production, refining, or manufacturing facilities.”<sup>7</sup>

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<sup>3</sup> 49 U.S.C. § 60102(a)(1) (2017).

<sup>4</sup> 49 U.S.C. § 60102(a)(2) (2017).

<sup>5</sup> 49 U.S.C. § 60101(a)(19) (2017).

<sup>6</sup> 49 U.S.C. § 60101(a)(22)(A)(i) (2017).

<sup>7</sup> 49 U.S.C. § 60101(a)(22)(B)(ii)-(iii) (2017).

Section 60101(a)(22)(B) reflects Congressional intent that neither (1) movement of hazardous liquid through refining facilities, nor (2) movement of hazardous liquid through (a) storage or (b) in-plant piping systems, same associated with refining facilities, falls within the scope of the PSA.

#### The Legislative History

The legislative history of the PSA illustrates Congressional intent regarding the scope of the refining exception. The exception for refining facilities and associated storage and in-plant piping initially was codified in the Hazardous Liquid Pipeline Safety Act of 1979 (“HLPsa”).<sup>8</sup> During the development of S. 411, the bill that eventually became the HLPsa, the Senate Committee on Commerce, Science, and Transportation (the “Committee”) narrowed the scope of the proposed legislation by amending previously proposed, broad language in S. 411, covering “all aspects of any pipeline transportation in or affecting interstate commerce,” to add the exception for onshore production, refining, or manufacturing facilities and associated storage or in-plant piping systems.<sup>9</sup> The Committee explained that “[o]n the basis of discussions with the Department of Transportation [(“DOT”)] and the affected industry, the Committee found that such an exemption was appropriate because such lines present insufficient risk to life and property to require regulation.”<sup>10</sup>

The hearing record of the Committee provides further evidence of Congress’s purpose for excluding refining facilities as a whole. In written answers to the Committee’s questions, DOT made it clear that, not only did the safety of refineries present different challenges than the safety of pipelines, but that OSHA already covered the safety of refining facilities.<sup>11</sup> In a series of written questions and answers, the Committee asked DOT, “[c]ould the proposed [HLPsa] of 1979’ (Title II of S. 411) be used to regulate the safety of refineries?”<sup>12</sup> DOT responded:

Title II of S. 411 was not intended to extend to the safety regulation of refineries. Like the [Natural Gas Pipeline Safety Act], Title II covers the transportation of hazardous liquid and the treatment of hazardous liquid in the course of transportation.

The knowledge and expertise necessary to address safety problem[s] in refineries is dissimilar to that necessary for addressing safety problems in pipeline transportation. It should be noted however, the OSHA has extensive occupational safety related requirements for refineries which go a long way to assuring the safe operation of such refineries.<sup>13</sup>

#### The Part 195 Refining Exception

The version of Part 195 that was published following passage of the HLPsa mirrored the refining exception of the HLPsa, excepting from Part 195 “[t]ransportation of a hazardous liquid through onshore production, refining, or manufacturing facilities or storage or in-plant piping systems associated with such facilities.”<sup>14</sup>

The current version of the refining exception reads virtually the same as the original, excepting from Part 195 “[t]ransportation of hazardous liquid or carbon dioxide through onshore production (including flow

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<sup>8</sup> Hazardous Liquid Pipeline Safety Act of 1979, Pub. L. No.96-129, § 203 (1979).

<sup>9</sup> S. Rep. 96-182, at 18 (1979).

<sup>10</sup> *Id.*

<sup>11</sup> Hearing on S. 411 Before the Senate Committee on Commerce, Science, and Transportation, 96th Cong. (1979).

<sup>12</sup> *Id.* at 45, question 51.

<sup>13</sup> *Id.*

<sup>14</sup> Transportation of Liquids by Pipeline; Final Rule, 46 Fed. Reg. 38357, 38361 (July 27, 1981).

lines), refining, or manufacturing facilities or storage or in-plant piping systems associated with such facilities.”<sup>15</sup>

The key question in the present context is determining the physical extent of an in-plant piping system which is associated with a refining facility and thereby excepted from Part 195 regulation. The BTP interpretation request is focused upon the refining facility crude oil in-plant piping system. BTP believes that no questions surround which crude oil storage tanks at BTP are breakout tanks and thereby subject to Part 195.

#### In-Plant Piping Systems

The term “in-plant piping system” was defined in 1994 as “piping that is located on the grounds of a plant and used to transfer hazardous liquid or carbon dioxide between plant facilities or between plant facilities and a pipeline or other mode of transportation, not including any device and associated piping that are necessary to control pressure in the pipeline under §195.406(b).”<sup>16</sup> The purpose for defining “in-plant piping system” was for a similar purpose as BTP’s interpretation request, to clarify “the physical distinction between a regulated pipeline serving a plant and unregulated in-plant piping.”<sup>17</sup> The term “in-plant piping system” has not been altered since it initially was promulgated.<sup>18</sup>

Notably, the Pipeline and Hazardous Materials Safety Administration (“PHMSA”), combined with its predecessor agencies, for decades has been quite consistent in applying the regulatory concepts for determining the extent of a refining facility in-plant piping system.<sup>19</sup> Prior to the promulgation of the definition of the term “in-plant piping system,” PHMSA established the points of demarcation between a regulated pipeline and an unregulated in-plant piping system in an interpretation provided to Conoco, Inc. (“Conoco”).

The Conoco interpretation stated that,

[F]or transfers of hazardous liquid from a refinery to a regulated pipeline, in-plant piping ends and the regulated pipeline begins

[A]t the inlet of each pressure control device on refinery grounds that is necessary for the operator to control pressure in the pipeline outside the refinery grounds [and that]

A similar demarcation applies to the transfer of hazardous liquid from a regulated pipeline to a refinery. The regulated pipeline ends and the in-plant piping begins at the outlet of each pressure control device on refinery grounds that is necessary for the operator to control pressure in the pipeline outside the refinery grounds [but that]

If the operator has adequate alternative means to control pressure in the pipeline outside the refinery grounds, then we consider the regulated pipeline to end at the boundary of the refinery grounds, which usually is marked by a fence.<sup>20</sup>

The exact same methodology that was applied in the Conoco interpretation was established as the basis for determining the extent of an in-plant piping system in the Notice of Proposed Rulemaking (“NPRM”) by which the definition of “in-plant piping system” was promulgated. The NPRM provided that:

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<sup>15</sup> 49 C.F.R. § 195.1(b)(8).

<sup>16</sup> Regulatory Review: Hazardous Liquid and Carbon Dioxide Pipeline Safety Standards; Final Rule, 59 Fed. Reg. 33388, 33395 (June 28, 1994).

<sup>17</sup> *Id.* at 33388.

<sup>18</sup> 49 C.F.R. § 195.2 (2018).

<sup>19</sup> PHMSA was preceded, in turn, by the Research and Special Programs Administration and the Materials Transportation Bureau.

<sup>20</sup> Interpretation 195.406 5; Conoco, Inc., March 25, 1991.



[T]he inlet of the pressure control device would demarcate in-plant piping if the pipeline is moving product away from plant grounds

[T]he outlet of the pressure control device if the pipeline is supplying the plant [and,]

If there is no such pressure control device on plant grounds, in-plant [piping] would extend to the boundary of plant grounds.”<sup>21</sup>

That methodology was confirmed by the Final Rule by which the term “in-plant piping system” was promulgated.<sup>22</sup>

PHMSA continued to apply the exact same methodology, in the wake of the promulgation of the term “in-plant piping system,” in a 1995 interpretation directed to Unifield Engineering (“Unifield”). The Unifield interpretation stated the points of demarcation as follows:

The in-plant and terminal piping exemption under § 195.1(b)(6) [now 195.1(b)(8)] [is] subject to the following ... interpretations:

If there is no pressure control device on plant grounds that is required by § 195.406(b) for safe operation of a jurisdictional pipeline serving the plant, in-plant piping extends to the plant boundary (57 FR 56305 and 59 FR 33389).

If there is such a device on plant grounds, Part 195 applies to the device and to plant piping that connects the device to the jurisdictional pipeline (57 FR 56305 and 59 FR 33389).<sup>23</sup>

A subtlety attends all three of the authorities which defined – and today define – the methodology for determining the extent of an in-plant piping system by identifying the end points or the beginning points of the in-plant piping system. The subtlety is that those authorities speak to the “pressure control device,” that which is necessary to control pressure in a regulated pipeline under 49 C.F.R. § 195.406(b), having an “inlet” or an “outlet.” Pressure control devices which have “inlets” and “outlets” typically are valves, specifically pressure control valves, pressure relief valves and motor-operated valves, which universally will have an inlet flange and an outlet flange; whether a given flange is the inlet flange or the outlet flange depends merely upon the direction of flow.

Agency intent appears rather clear – if a regulated pipeline entering or exiting a refining facility in fact has a pressure control device, a valve with inlet and outlet flanges, and the valve is *necessary* to control pressure in the *pipeline*, then that device would mark the end or the beginning, as the case may be, of the refining facility in-plant piping system. If no such valve were present, however, the beginning and the end of a refining facility in-plant piping system would be at the facility boundary.

#### Associated With vs. Exclusive Use

A degree of confusion might appear to surround the distinction between the concept of “associated with” and the concept of exclusive use. PHMSA has, however, recently issued relevant guidance in the context of the refining exception.

In the initial rendition of the refining exception, Congress provided that, to be excepted from the PSA, storage and in-plant piping systems need only be *associated with* a refining facility.<sup>24</sup> The initial Part 195

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<sup>21</sup> Regulatory Review: Hazardous Liquid and Carbon Dioxide Pipeline Safety Standards; NPRM, 57 Fed. Reg. 56304, 56305 (Nov. 27, 1992).

<sup>22</sup> 59 Fed. Reg. 33389 (“The NPRM explained that we would consider in-plant piping to extend to the plant boundary in the absence of a necessary pressure control device on plant grounds.”).

<sup>23</sup> Interpretation 195.1 75, at 1; Unifield Engineering, December 27, 1995.

<sup>24</sup> 49 U.S.C. 60101(a)(22)(B)(iii) (2017) (emphasis supplied).

version of the refining exception provided likewise, as is the case today.<sup>25</sup> If a term used in a regulation is not defined by that regulation, the term is to be construed according to its plain and ordinary meaning.<sup>26</sup>

The plain and ordinary meaning of “associated” may be derived from dictionary definitions. Merriam-Webster defines “associated” as “joined together often in a working relationship; related, connected, or combined together.”<sup>27</sup> MacMillan Dictionary defines “be associated with” as “to be connected with something in some way.”<sup>28</sup> As such, one may derive that the clause “associated with” lends itself to the concept of a connection, a relationship, a combination. And, while PHMSA has not clearly explained to the regulated community the meaning of “associated with,” PHMSA has explained what “associated with” does *not* mean.

In a 2013 interpretation, PHMSA found that the distinction between the so-called “terminals exception” and the refining exception needed explanation. For context, the terminals exception excepts from regulation under Part 195 “[t]ransportation of hazardous liquid ... [t]hrough facilities located on the grounds of a materials transportation terminal if the facilities are used *exclusively* to transfer hazardous liquid or carbon dioxide between non-pipeline modes of transportation or between a non-pipeline mode and a pipeline.”<sup>29</sup>

In a statutory interpretation issued by the PHMSA Chief Counsel to ONEOK, the PHMSA Chief Counsel, in distinguishing the terminals exception from the refining exception, confirmed that “the Production, Refining or Manufacturing Facility Exemption does not have the exclusivity requirement of the Terminals Exemption and that the former requires only that storage and in-plant piping be ‘*associated with*’ a production, refining, or manufacturing facility.”<sup>30</sup> As the Chief Counsel clearly stated, “associated with” does not mean used “*exclusively*,” to the conclusion that storage and in-plant piping systems associated with a refining facility need not be used *exclusively* for refining.

## The Low-Stress Pipelines

By letter dated January 29, 2020, BTP responded to several PHMSA inquiries. Among the information BTP provided were facts which support the conclusion that the pipelines operating in Mode A, Mode B, and Mode C are low-stress pipelines which are excepted from Part 195 regulation pursuant to 49 C.F.R. § 195.1(b)(3)(ii). In sum, the pipelines serve a refining facility or they serve both a refining facility and a vessel terminal facility; are less than one mile long (measured outside facility grounds); do not cross an offshore area or a waterway currently used for commercial navigation; and operate in their entirety at a stress level of 20 percent or less of the specified minimum yield strength of the line pipe.<sup>31</sup>

Given that the Mode A, Mode B, and Mode C pipelines are excepted from Part 195, the pipelines are not required to adhere to the minimum safety standards of Part 195, specifically in this context 49 C.F.R. § 195.406(b). That regulation provides that operators “provide adequate controls and protective equipment to control the pressure” within 110% of MOP. As indicated in BTP’s January 29 submittal, the pressure

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<sup>25</sup> Transportation of Liquids by Pipeline, 46 Fed. Reg. 38357, 38361 (July 27, 1981) (to be codified at 49 C.F.R. pt. 195.1(b)(8)).

<sup>26</sup> *In the matter of Butte Pipeline Co.*, CPF No. 5-2007-5008, 2009 WL 3190794, at \*5 (Dep’t of Transp. Aug 17, 2009) (invoking the “commonly understood (dictionary) meaning” to interpret meaning of language in Part 195 regulations).

<sup>27</sup> <https://www.merriam-webster.com/dictionary/associated>.

<sup>28</sup> <https://www.macmillandictionary.com/us/dictionary/american/be-associated-with>.

<sup>29</sup> 49 C.F.R. 195.1(b)(9)(iii) (2018) (emphasis supplied).

<sup>30</sup> Letter from PHMSA Chief Counsel, Vanessa Allen Sutherland, to Vince Murchison, Aug. 8, 2012, at 4, fn 13; PHMSA Docket #11-0012 (emphasis supplied).

<sup>31</sup> See 49 C.F.R. § 195.1(b)(3)(ii).

on the Mode A, Mode B, and Mode C pipelines is limited by the in-plant piping which was designed to the ANSI 150 standard.<sup>32</sup>

## Application of the Refining Exception to the BTP Refining Facility

Past PHMSA applications of the refining exception to refining facilities have presumed that the pipelines serving the facilities were regulated under Part 195. As to the pipelines operating in Mode D and Mode E, that is the case, those pipelines are regulated pursuant to Part 195. And, though the pipelines operating in Mode A, Mode B, and Mode C are not regulated under Part 195, the extent of the crude oil in-plant piping system nonetheless is explained in the discussion below.<sup>33</sup>

BTP has identified the physical extent of the crude oil in-plant piping system based upon the refining facility's design, its physical configuration, materials of construction, and pipeline connections, as well as considering the jurisdictional status of the low-stress pipelines, all by reference to the definition of "in-plant piping system" and agency guidance which explains the intended scope of an in-plant piping system. Set out below, for each mode, is a discussion of BTP's analysis. A helpful reference in this context would be the P&ID which BTP provided to PHMSA by letter dated November 8, 2019.

**Mode A:** Two parallel, low-stress pipelines operate in Mode A moving crude oil inbound to BTP from a third party terminal (designated pipeline PP999A1 and pipeline PP999A2). Since the pipelines are low-stress pipelines and thus excepted from Part 195, they are not required to have 195.406(b) pressure control devices. Due to design, the pipelines do not need and thus are not equipped with such devices. Pursuant to the historical application of the refining exception, informed by the rulemaking history of "in-plant piping system," the point of demarcation between the Mode A pipelines and the in-plant piping system would be the facility boundary. BTP, however, considers the pipeline receivers within the BTP refining facility to be a part of the Mode A pipelines. As such, the point of demarcation between the Mode A pipelines and the BTP in-plant piping system is at the nearest valves downstream, plant-side, of the receivers.

**Mode B:** Two parallel, bi-directional, low-stress pipelines operate in Mode B moving crude oil inbound to BTP from BTH, a marine vessel terminal, and conversely outbound from BTP to BTH (designated pipeline PP860HF and pipeline PP861HF). Since the pipelines are excepted from Part 195, they are not required to have 195.406(b) pressure control devices. Due to design, the pipelines do not need and thus are not equipped with such devices. Pursuant to the historical application of the refining exception, informed by the rulemaking history of "in-plant piping system," the point of demarcation between the Mode B pipelines and the BTP in-plant piping system would be the facility boundary. BTP, however, considers the pipeline receiver/launchers within the BTP refining facility to be a part of the Mode B pipelines. Based upon the foregoing, the point of demarcation between the Mode B pipelines and the BTP in-plant piping system is at the nearest valves downstream or upstream (depending upon whether the pipelines were moving crude oil inbound or outbound), plant-side, of the receiver/launchers.

**Mode C:** One low-stress pipeline operates in Mode C moving crude oil outbound from BTP to BTH, a marine vessel terminal (designated pipeline PP864HF). Since the pipeline is excepted from Part 195, it is not required to have 195.406(b) pressure control devices. Due to design, the pipeline does not need and thus is not equipped with such devices. Pursuant to the historical application of the refining exception, informed by the rulemaking history of "in-plant piping system," the point of demarcation between the pipeline and the BTP in-plant piping system would be the facility boundary. BTP, however, considers the pipeline launcher within the BTP refining facility to be a part of the Mode C pipeline. Based

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<sup>32</sup> BTP wishes to assure PHMSA and the Railroad Commission of Texas that all pipelines were constructed to ASME B31.3 or ASME B31.4 and are operated and maintained to a safety management system that mimics Part 195. Moreover, the below-grade portions of the Mode A, Mode B, and Mode C pipelines are constructed of 0.500" wall thickness, API 5L X42 pipe.

<sup>33</sup> Though the low-stress Mode A, Mode B and Mode C pipelines are excepted from Part 195 today, that may not always be the case.

upon the foregoing, the point of demarcation between the Mode C pipeline and the BTP in-plant piping system is at the nearest valves upstream, plant-side, of the launcher.

**Mode D:** One third party pipeline operates in Mode D moving crude oil inbound to BTP from a third party terminal. The Mode D pipeline is regulated under Part 195; as such, 49 C.F.R. § 195.406(b) applies. Pressure in the Mode D pipeline is limited through the use of a pressure relief valve (pressure control device) and associated surge relief piping (depicted on the November 8 P&ID). The pressure relief valve and surge relief piping lead to BTP Tanks TK-1004, TK-1005, and TK-1006, resulting in those tanks being characterized as breakout tanks.<sup>34</sup> As a result, the pressure relief valve and the piping leading to the breakout tanks, as well as the breakout tanks, are regulated under Part 195.<sup>35</sup> Further, since the emergency shutdown valve (“ESD”) depicted on the Mode D mainline (see the November 8 P&ID), which protects in-plant piping, could influence pressure on the Mode D pipeline, the point of demarcation between the Mode D pipeline and the BTP in-plant piping system is at the outlet flange of the valve located immediately downstream, plant-side, of the ESD.

**Mode E:** One third party pipeline operates in Mode E moving crude oil outbound from BTP to a third-party refining facility. The Mode E pipeline is regulated under Part 195; as such, 49 C.F.R. § 195.406(b) applies. Pressure on the Mode E pipeline is limited by the combination of a pressure transmitter and motor-operated valve (“MOV”) located near the BTP facility boundary. The MOV is depicted in the November 8 P&ID. Pursuant to the historical application of the refining exception, informed by the rulemaking history of “in-plant piping system,” the point of demarcation between the Mode E pipeline and the BTP in-plant piping system is at the inlet flange of the MOV.

## Interpretation Response PI-18-0017

Below, BTP summarizes the central issues it believes attend the PHMSA interpretation response of September 10, 2019.

1. **Issue:** The interpretation response concludes that “the § 195.1(b)(8) exemption for both in-plant piping and a refinery facility would not apply,” on the premise that “crude oil enters and exits the refinery without refining.”

**Response:** First, no statute and no regulation proscribe the movement of crude oil into and subsequently out of a refining facility. The PSA excludes from its scope both the movement of hazardous liquid through a refining facility, as well as movement of hazardous liquid through associated storage and in-plant piping systems. Second, the inference in the above conclusion is that, to be excepted from Part 195 by the refining exception, in-plant piping must be used *exclusively* for refining purposes; however, the refining exception requires *only* that an in-plant piping system be *associated with* a refining facility. The interpretation response provides no authority for its conclusion, and the interpretation response offers no analysis or discussion that provides a rational connection between the facts and the conclusion reached through application of the refining exception. Further, the interpretation response cites no precedential authority that would support the inferred conclusion that to be excepted piping must be used exclusively for refining. To the contrary, no precedent stands for the proposition that a refining facility in-plant piping system must be used exclusively for refining purposes, and, indeed, as the Chief Counsel has found, the refining exception simply is not attended with an exclusivity requirement. As such, the interpretation response should be re-visited to apply the refining exception pursuant to the long-standing, precedential, application of the refining exception, 49 C.F.R. § 195.1(b)(8). No statutory, regulatory, or policy change has occurred that would support any other agency action.

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<sup>34</sup> 49 C.F.R. § 195.2.

<sup>35</sup> See 49 C.F.R. § 195.1(c).

2. Issue: With regard to the pipelines operating in Mode A, Mode B and Mode C, the interpretation response concludes that those pipelines are “regulated” under Part 195.

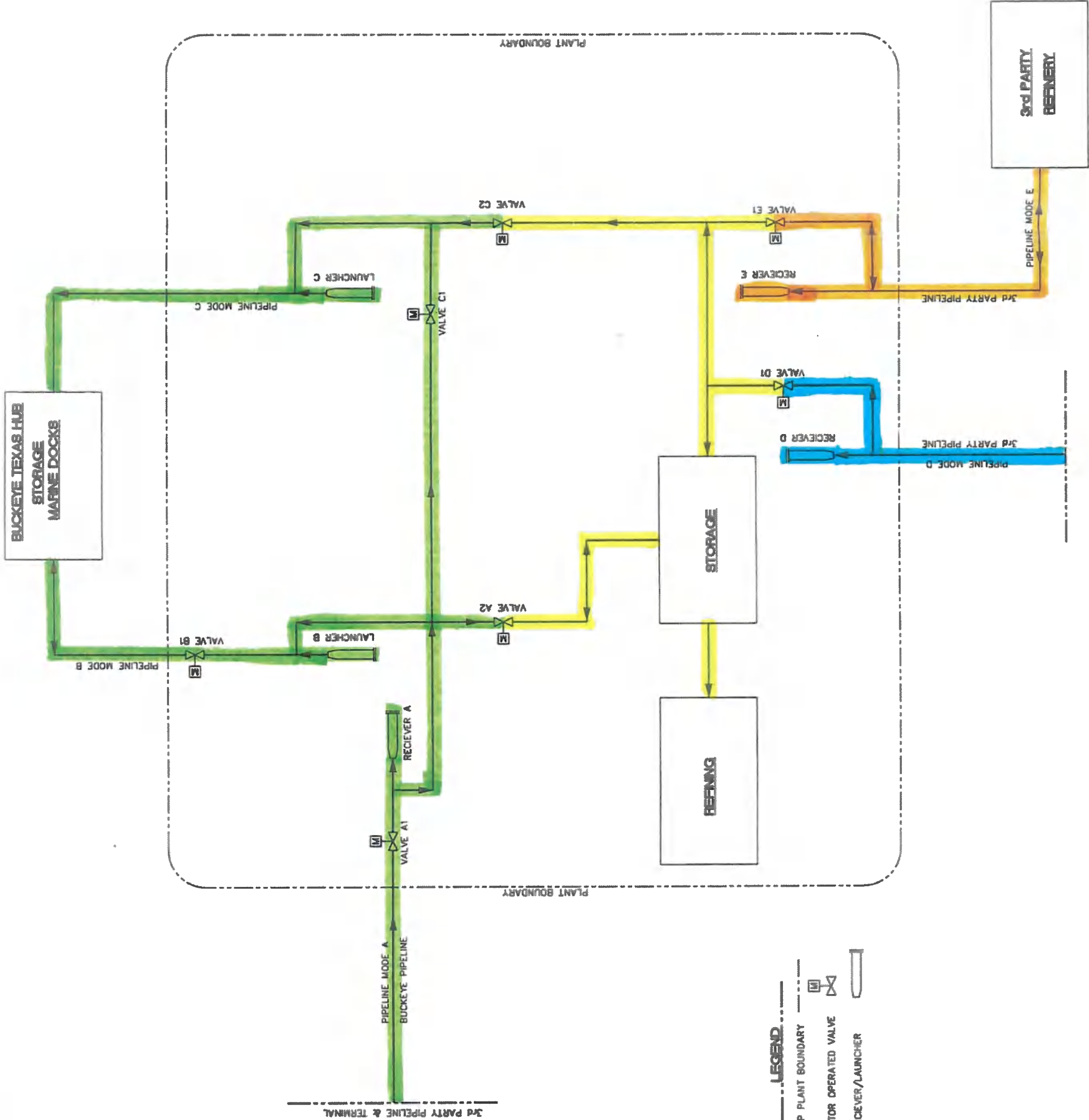
Response: As an initial matter, BTP did not request an interpretation relating to the jurisdictional status of any of the pipelines; rather, BTP requested an interpretation relating to the physical extent, i.e., the points of demarcation between, the ends and the beginnings of, the pipelines and of the BTP refining facility crude oil in-plant piping system. Nonetheless, BTP submitted to PHMSA, prior to issuance of the interpretation response, information that serves as the basis for those pipelines to be excepted from Part 195 as low-stress pipelines, pursuant to 49 C.F.R. § 195.1(b)(3)(ii). Though the interpretation response recites the facts necessary to conclude that the Mode A, Mode B and Mode C pipelines are low-stress pipelines, it appears to conclude that the low-stress pipelines are nonetheless regulated pursuant to 49 C.F.R. § 195.1(a). BTP maintains its position that the Mode A, Mode B, and Mode C pipelines are excepted from regulation under Part 195 pursuant to 49 C.F.R. § 195.1(b)(3)(ii).

## Conclusion

BTP believes that the foregoing presents a fair and reasonable analysis of the refining exception, as well as a fair and reasonable application of the refining exception to the BTP refining facility. As well, we believe the analysis and application of the refining exception address directly the perceived issues attending the interpretation response.

Given the complexity of the BTP refining facility and the various crude oil pipeline modes serving the facility, BTP requests the opportunity to meet with PHMSA to discuss the analysis and application of the refining exception to the BTP refining facility. BTP also would welcome discussion around the interpretation response. BTP also stands ready to provide any further information which PHMSA would wish to receive.





**LEGEND**

- BTP PLANT BOUNDARY
- ⊗ MOTOR OPERATED VALVE
- ▭ RECEIVER/LAUNCHER

CLIENT		Buckeye Texas Processing, LLC	
PROJECT TITLE		BUCKEYE TEXAS PROCESSING	
FACILITY NAME		PROCESS FLOW DIAGRAM PLANT	
DRAWING TITLE		REVISED EXHIBIT C	
CONTRACTOR PROJECT NO.	DRAWN BY:	GCT	CHECKED BY:
DATE:	SCALE	NONE	PAPER SIZE
DRAWING NO.	DATE	REV	DATE
DESCRIPTION	BY	DATE	APPRO
ISSUE NO.			