



U.S. Department  
of Transportation

Pipeline and Hazardous  
Materials Safety  
Administration

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

JUL 23 2013

Mr. Robert L. Rose  
President  
Tampa Bay Pipeline Corporation  
P. O. Box 35236  
Sarasota, Florida 34242


**Re: CPF No. 2-2012-6005M**

Dear Mr. Rose:

Enclosed please find the Order Directing Amendment issued in the above-referenced case. It makes findings of inadequate procedures and requires that Tampa Bay Pipeline Corporation amend certain procedures of its Integrity Management Plan. When the amendment of procedures has been completed, as determined by the Director, Southern Region, this enforcement action will be closed. Service of the Order Directing Amendment by certified mail is deemed effective upon the date of mailing, or as otherwise provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

  
Jeffrey D. Wiese  
Associate Administrator  
for Pipeline Safety

Enclosure

cc: Mr. Wayne T. Lemoi, Director, Southern Region, OPS  
Mr. Alan Mayberry, Deputy Associate Administrator for Field Operations, OPS

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

**U.S. DEPARTMENT OF TRANSPORTATION  
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION  
OFFICE OF PIPELINE SAFETY  
WASHINGTON, D.C. 20590**

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<b>In the Matter of</b>	)	
	)	
<b>Tampa Bay Pipeline Corporation,</b>	)	<b>CPF No. 2 -2012-6005M</b>
	)	
<b>Respondent.</b>	)	
	)	

**ORDER DIRECTING AMENDMENT**

From September 12-16, 2011, pursuant to 49 U.S.C. § 60117, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted an inspection of the Integrity Management Plan (IMP)<sup>1</sup> of Tampa Bay Pipeline Corporation (TBPL or Respondent) in Tampa, Florida. Respondent operates approximately 100 miles of pipeline transporting anhydrous ammonia, a highly volatile liquid (HVL), and approximately 10 miles of hazardous liquid pipeline transporting refined petroleum products, all within the State of Florida.<sup>2</sup>

As a result of the inspection, the Director, Southern Region, OPS (Director), issued a Notice of Amendment to Respondent, dated February 22, 2012 (Notice). The Notice alleged certain inadequacies in Respondent's IMP procedures and proposed, in accordance with 49 C.F.R. § 190.237, that Respondent amend its IMP procedures to comply with the requirements of 49 C.F.R. § 195.452.

<sup>1</sup> The purpose of IMP programs is to enhance safety by identifying, assessing, and reducing pipeline integrity risks and providing enhanced protection for defined High Consequence Areas (HCAs). An HCA is defined as: (1) a commercially navigable waterway, which means a waterway where a substantial likelihood of commercial navigation exists; (2) a high population area, which means an urbanized area, as defined and delineated by the Census Bureau, that contains 50,000 or more people and has a population density of at least 1,000 people per square mile; (3) and other populated area, which means a place containing a concentrated population, such as an incorporated or unincorporated city, town, village, or other designated residential or commercial area; and (4) an unusually sensitive area, as defined in § 195.6. See 49 C.F.R. § 195.450.

<sup>2</sup> The Notice contained a typographical error, listing Respondent as Tampa Bay Pipeline Company. The Respondent is Tampa Bay Pipeline Corporation. According to Articles of Merger filed with the Secretary of State of the State of Florida, Tampa Pipeline Limited Partnership merged with Tampa Pipeline Corporation on or around September 30, 2001. Tampa Pipeline Corporation and its related companies operate pipelines providing jet fuel to various airports: St. Louis Pipeline Corporation (St. Louis Pipeline); Illinois Petroleum Supply Corporation (Illinois Petroleum Supply); Illinois Pipeline Corporation (Illinois Pipeline); Idaho Pipeline Corporation (Idaho Pipeline); Tampa Airport Corporation (Tampa Airport Pipeline); San Antonio Pipeline Corporation (San Antonio Pipeline); and Pipelines of Puerto Rico, Inc. (San Juan Pipeline). <http://www.sunbiz.org/corloff.html> (last accessed 3/28/2013)

TBPL responded to the Notice by letter dated March 22, 2012, and agreed to amend its procedures (Response). Under the terms of the Notice, Respondent had 60 days from receipt of the Notice to submit revised procedures. When TBPL failed to submit amended procedures within the 60-day period, the Director, on May 3, 2012, requested an in-person meeting with Respondent. Then on May 6, 2012, the Southern Region, OPS, emailed Respondent to request the status of TBPL's amended procedures. TBPL responded by email dated May 9, 2012, submitting four procedures and requesting an extension of time (Supplemental Response).

On June 19, 2012, the Southern Region met with TBPL personnel to explain its position that the four revised procedures were still inadequate because they were substantively unchanged from the original version. On July 2, 2012, the Director granted TBPL an extension of time until August 31, 2012, and continued to communicate with TBPL through email and telephone calls to facilitate the revisions. Subsequently, Respondent requested and was granted a second extension to submit its revised procedures by September 15, 2012. To date, Respondent has not submitted any further revisions of its IMP procedures.

### STANDARD OF REVIEW

After considering all material presented by an operator in response to a Notice of Amendment, the Associate Administrator, OPS, shall determine whether the plans or procedures are inadequate as alleged and order the required amendment if they are inadequate, or withdraw the Notice if they are adequate. In determining the adequacy of an operator's plans or procedures, the Associate Administrator shall consider: relevant available pipeline safety data; whether the plans or procedures are appropriate for the particular type of pipeline transportation or facility and for the location of the facility; the reasonableness of the plans or procedures; and the extent to which the plans or procedures contribute to public safety, in accordance with 49 C.F.R. § 190.237.<sup>3</sup> For the reasons discussed below, I find the amended procedures do not adequately address Items 1-7 in the Notice.

### FINDINGS OF INADEQUATE PROCEDURES

**Item 1:** The Notice alleged that Respondent's written procedures are inadequate to assure safe operation of its pipeline facilities because they fail to address 49 C.F.R. § 195.452(g)(1)-(4), which states:

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

(a) ...

(b) *What program and practices must operators use to manage pipeline integrity?* Each operator of a pipeline covered by this section must:

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<sup>3</sup> 49 C.F.R. § 190.237(a) and (b). Paragraph (b) provides that an order directing amendment of an operator's plans or procedures under paragraph (a) is in addition to, and may be used in conjunction with, other appropriate enforcement actions prescribed in Part 190.

(1) Develop a written integrity management program that addresses the risks on each segment of pipeline. . .

(g) *What is an information analysis?* In periodically evaluating the integrity of each pipeline segment (paragraph (j) of this section), an operator must analyze all available information about the integrity of the entire pipeline and the consequences of a failure. This information includes:

(1) Information critical to determining the potential for, and preventing, damage due to excavation, including current and planned damage prevention activities, and development or planned development along the pipeline segment;

(2) Data gathered through the integrity assessment required under this section;

(3) Data gathered in conjunction with other inspections, tests, surveillance and patrols required by this Part, including, corrosion control monitoring and cathodic protection surveys; and

(4) Information about how a failure would affect the high consequence area, such as location of the water intake.

The Notice alleged that TBPL's IMP procedures, entitled *Section 7.0 Integrity Assessment Results Review (Section 7.0)*, were inadequate because they did not contain a process or procedure to perform the required analysis of all available information about the integrity of the entire pipeline and the consequences of a failure. The Notice also alleged that TBPL's IMP did not have fully-developed written procedures for the Plan's implementation, as they failed to provide sufficient detail to explain how the company would meet the requirements of 49 C.F.R. § 195.452(g)(1)-(4).

Specifically, the Notice alleged that rather than having a *bona fide* procedure, the company merely described what TBPL had done regarding its information analysis, both prior to an External Corrosion Direct Assessment (ECDA) of the pipeline and during the data analysis phase of the ECDA. A description of such assessment results is neither a procedure nor a process for gathering and analyzing data. In addition, the Notice alleged that *Section 7.0* merely restated two of PHMSA's IMP guidance documents: (1) *Protocol #3.04 - Integrity Assessment Results Review: Integration of Other Information with Assessment Results (Protocol #3.04)*; and (2) *Protocol #3.06 - Integrity Assessment Results Review: Hydrostatic Pressure Testing (Protocol #3.06)*. These two guidance documents describe how an operator should develop a procedure or process to address the unique risks potentially posed by its pipeline to HCAs.<sup>4</sup>

The Notice cited two examples. First, it alleged that *Section 7.0* failed to set forth a procedure for integrating information in its information analysis but simply combined PHMSA guidance with an account of what the company had previously done. The following excerpt shows in bold text the paraphrased language from PHMSA *Protocols #3.04* and *#3.06* and in underlined text those actions taken by the company in conducting an ECDA assessment:

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<sup>4</sup> Integrity Management Inspection Protocols for Integrity Management Program, 49 C.F.R. § 195.452, dated December 2007. See <http://primis.phmsa.dot.gov/iim/protocols.htm>.

TBPL IMP, Section 7.0 Integrity Assessment Results Review

Title 49 CFR Part 195.452 requires that TBPLs integrate assessment results with other pertinent information about the risk conditions of the pipeline to uncover integrity issues that might not be evident from the assessment data alone. TBPL's program will have the following characteristics:

**1. A process to ensure that the analyst is aware of and uses other sources of data in order to make the best integrity decisions (e.g., corrosion control data such as rectifier readings, close interval surveys, or corrosion coupon results).**

A review of all pertinent data including corrosion surveys, leak history, atmospheric corrosion surveys, coupon reports, ILI [In-line Inspections (ILI)] runs, pressure tests, and other maintenance history was reviewed prior to assessment and again during the data analysis phase of ECDA. Industry data concerning incidents and new technologies was reviewed during the pre-assessment phase of ECDA.

**2. A documented process by which data is collected and disseminated to persons evaluating assessment results. The data used in the assessment process was collected during the pre-assessment phase of ECDA.**

The direct examination of the segments revealed good correlation with the indirect inspection tools and did not reveal any third party damage or other threats to the pipeline. The following summary is an analysis of the survey results:

• For the subject pipeline, with IR error considered, potentials are indicative of adequate levels of protection. This indicates generally good coating condition and no electrical shorts.

• CIPS data was statistically consistent, with only a few minor problems with loss of electrode contact or pipe disconnects.

There were zero locations with less than -0.850 volts instant off readings.

• The DCVG survey data identified several significant coating faults....<sup>5</sup>

In the second example, the Notice alleged that *Section 7.0* failed to set forth the specific procedures the company used to perform the required information analysis. Although TBPL's procedure stated that the company used hydrostatic pressure testing to assess the integrity of its pipeline, its IMP procedure stated "[i]f in the future TBPL wishes to use hydrostatic pressure test as a means of assessment, the program will have the following characteristics...."<sup>6</sup> Not only is this statement not a procedure, but it shows the company had not yet developed a process for the use of hydrostatic pressure testing and is inconsistent with the company's stated result that it had assessed parts of its pipeline using hydrostatic testing.

More specifically, the following excerpt from *Section 7.0* of the company's procedures shows in

<sup>5</sup> Supplemental Response, p 125-126; TBPL IMP, Section 7.0, Integrity Assessment Results Review, pgs. 3-4.

<sup>6</sup> Supplemental Response, p 127-128; TBPL IMP, Section 7.0, Integrity Assessment Results Review, pgs. 5-6.

bold text the paraphrased language from PHMSA's *Protocol #3.06*:

TBPL IMP, Section 7.0 Integrity Assessment Results Review, pages 5 and 6

If in the future TBPL's wishes to use hydrostatic pressure test as a means of assessment the program will have the following characteristics:

**1. Documentation of test records sufficient to allow compliance with Subpart E of Title 49 CFR Part 195 requirements to be verified.**

**2. Test procedures and records that document the basis for test acceptance and test validity.**

**3. Documentation and evaluation of hydrostatic pressure test failures to understand the cause of the failure (e.g., was the failure due to hook cracks, selective seam corrosion, internal corrosion, etc?).**

**4. Metallurgical evaluation of test failures, as required, to assure a full understanding of test failures.**

**5. Documented evidence that the operator has an effective corrosion control program and that corrosion control is being effectively applied to the assessed pipeline.**

**6. Identification, documentation, and analysis of pressure reversals to determine the cause of pressure reversals and identify any integrity threats indicated by the pressure reversals.**

A document that simply paraphrases PHMSA regulations and guidance and describes an operator's IMP only in general terms does not constitute an adequate procedure. Accordingly, I find that TBPL's revised IMP procedures are inadequate to assure safe operation of its pipeline because they fail to provide a written procedure or process for conducting a proper information analysis under 49 C.F.R. § 195.452(g)(1)-(4).

**Item 2:** The Notice alleged that Respondent's written IMP procedures are inadequate to assure safe operation of its pipeline facilities because they fail to address 49 C.F.R. § 195.452(i)(1), which states:

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

(a) ...

(b) *What program and practices must operators use to manage pipeline integrity?* Each operator of a pipeline covered by this section must:

(1) Develop a written integrity management program that addresses the risks on each segment of pipeline. . .

(i) *What preventive and mitigative measures must an operator take to protect the high consequence area?*—(1) *General requirements.* An operator must take measures to prevent and mitigate the consequences of a pipeline failure that could affect a high consequence area. These measures include conducting a risk analysis of the pipeline segment to identify additional actions to enhance public safety or environmental protection. Such actions may include, but are not limited to, implementing damage prevention best practices, better monitoring of cathodic protection where

corrosion is a concern, establishing shorter inspection intervals, installing EFRDs on the pipeline segment, modifying the systems that monitor pressure and detect leaks, providing additional training to personnel on response procedures, conducting drills with local emergency responders and adopting other management controls.

The Notice alleged that TBPL's IMP procedures, entitled *Section 10.0, Preventive and Mitigative Measures (Section 10.0)*, were inadequate because they did not establish a process for taking preventive and mitigative measures (PMMs). Specifically, the Notice alleged that TBPL's IMP procedures merely re-stated PHMSA regulations and guidance on the subject and described in only general terms the characteristics of the company's IMP. The Notice further alleged that Respondent failed to have fully developed written IMP procedures that identified the PMMs for HCAs, described how such PMMs would be identified, and the PMM actions it would take to protect HCAs under 49 C.F.R. § 195.452(i)(1).

In the example cited in the Notice, *Section 10.0* allegedly failed to set forth a procedure for identifying the company's process for PMMs but simply combined an account of what the company had previously done with restated PHMSA guidance. The following excerpt from *Section 10.0* shows in bold text the paraphrased language from PHMSA Protocols #6.01 - *Preventive & Mitigative Measures: Actions Considered (Protocol #6.01)*; #6.02 - *Preventive & Mitigative Measures: Risk Analysis Application (Protocol #6.02)*; # 6.03 - *Preventive & Mitigative Measures: Decision Basis (Protocol #6.03)*;<sup>7</sup> and 49 C.F.R. §§195.452(i)(1) and (2). Similarly, the underlined bold text is language from 49 C.F.R. §§195.452(i)(1) and (2), and the underlined text shows what the company will do in the future, not an existing procedure or process:

TBPL IMP, Section 10.0, Preventive and Mitigative Measures

**“The integrity management rule requires operators to “take measures to prevent and mitigate the consequences of a pipeline failure that could affect a high consequence area”.** A part of the Preventive and Mitigative Measures includes communication with the public in the areas of an HCA to ensure that the public understand how to identify an emergency and what to do in case of an emergency. Since the entire system is considered in an HCA, the public along the pipelines will be communicated in accordance with TBPL's Public Awareness Plan. TBPL's program will have the following characteristics:

1. **Identification of the most significant causes/drivers of segment-specific risk (e.g., third-party damage, internal corrosion, etc.) when evaluating additional preventive and mitigative actions.** TBPL considers third party damage and external corrosion as the highest risk factors to the system. TBPL has implemented a tracking of damage prevention tickets and locates to track the activity of third

<sup>7</sup> The protocol questions paraphrased in TBPL's IMP are from PHMSA's Integrity Management Program, 49 CFR §195.452: Integrity Management Inspection Protocols, revised December 20, 2007. <http://primis.phmsa.dot.gov/iim/protocols.htm>

parties along the system. TBPL has had a corrosion audit/survey conduct[ed] by a third party to ensure that the CP system is working adequately.

**2. Identification of potential preventive and mitigative actions that address the most significant segment specific risks, including consideration of preventive and mitigative actions listed in Title 49 CFR Part 195.452(i)(1).**

TBPL will take measures to prevent and mitigate the consequences of a pipeline failure that could affect a high consequence area. **These measures include conducting a risk analysis of the pipeline segment to identify additional actions to enhance public safety or environmental protection. Such actions may include, but are not limited to, implementing damage prevention best practices, better monitoring of cathodic protection where corrosion is a concern, establishing shorter inspection intervals, installing EFRDs on the pipeline segment, modifying the systems that monitor pressure and detect leaks, providing additional training to personnel on response procedures, and adopting other management controls**”...

A document that simply paraphrases PHMSA regulations and guidance and does not describe how the company would identify PMMs or the unique features of an operator’s pipeline system facilities does not constitute an adequate procedure. In a previous enforcement action brought by PHMSA, TBPL was told that paraphrasing or simply repeating PHMSA’s guidance does not equate to adequate procedures.<sup>8</sup> Accordingly, I find Respondent’s procedures are inadequate because they do not establish a process or procedures to evaluate PMMs that could prevent a pipeline failure or mitigate its consequences, as required under 49 C.F.R. § 195.452(i)(1).

**Item 3** in the Notice alleged that Respondent’s written IMP procedures are inadequate to assure safe operation of its pipeline facilities because they fail to address 49 C.F.R. § 195.452(i)(3), which states:

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

(a) ...

(b) *What program and practices must operators use to manage pipeline integrity?* Each operator of a pipeline covered by this section must:

(1) Develop a written integrity management program that addresses the risks on each segment of pipeline. . .

(i) *What preventive and mitigative measures must an operator take to protect the high consequence area?*

(1) ...

(3) *Leak detection.* An operator must have a means to detect leaks on its pipeline system. An operator must evaluate the capability of its leak detection means and modify, as necessary, to protect the high consequence

<sup>8</sup> *In the Matter of Tampa Pipeline Corporation*, Final Order, CPF No. 2-2012-6008, (September 14, 2012) (available at: <http://www.phmsa.dot.gov/pipeline/enforcement>).



area. An operator's evaluation must, at least, consider, the following factors—length and size of the pipeline, type of product carried, the pipeline's proximity to the high consequence area, the swiftness of leak detection, location of nearest response personnel, leak history, and risk assessment results.

The Notice alleged that TBPL's IMP procedures, entitled *Section 10.0, Preventive and Mitigative Measures (Section 10.0)*, were inadequate because they did not establish a process to evaluate the capability of Respondent's leak detection system. Specifically, rather than having a process or procedure, the company merely described what TBPL had done regarding its leak detection in general, with no detailed evaluation of the company's capability or means of detecting leaks on the pipeline or determining what modifications would be necessary to protect HCAs. The Notice alleged that *Section 10.0* merely restated two of PHMSA's IMP guidance documents: (1) *Protocol #6.04 - Leak Detection Capability Evaluation: Evaluation Factors (Protocol #6.04)*; and (2) *Protocol #6.05 - Leak Detection Capability Evaluation: Operator Actions/Reactions (Protocol #6.05)*.<sup>9</sup> These two guidance documents describe how an operator should develop a procedure or process to address the unique risks potentially posed by its pipeline to HCAs.

On May 9, 2012, TBPL submitted revisions to *Section 10.0*, but the revisions did not address the alleged inadequacies.<sup>10</sup> TBPL had moved pages 5-12 from the end of the document to the beginning<sup>11</sup> and made minor changes in the language addressing the evaluation of the leak detection system by inserting the sentence, "The SCADA<sup>12</sup> system has alarms to alert operators of any abnormal conditions."

As noted above, the Notice alleged that *Section 10.0* failed to set forth a procedure to evaluate the leak capability of TBPL's system or to note what modifications might be necessary to protect HCAs, but simply combined PHMSA guidance with an account of what the company had previously done.<sup>13</sup> The following excerpt shows in bold text the paraphrased language from PHMSA's *Protocol #6.04* and *Protocol #6.05*, in underlined text the company's past actions, and in bold underlined text the regulatory language from 49 C.F.R. §195.452(i)(3):

TBPL IMP, Section 10.0 Preventive and Mitigative Measures

As part of the leak detection-specific portion of the preventive and

<sup>9</sup> PHMSA's Integrity Management Inspection Protocols for Integrity Management Program, 49 CFR § 195.452, dated December 2007, *supra*.

<sup>10</sup> Some of the minor language changes included, "A systematic The decision-making process involving included input from relevant parts of the organization such as operations, maintenance, engineering, corrosion control, etc., that considers the results of the risk analysis along with other information in making decisions about which preventive and mitigative actions to implement. The decision to take preventive actions ~~discussed above~~ were based on relevant input from appropriate personnel within the organization and third party consultants."

<sup>11</sup> Supplemental Response.

<sup>12</sup> Supervisory Control and Data Acquisition.

<sup>13</sup> Supplemental Response 2<sup>nd</sup> email, p. 3-5; TBPL IMP, Section 10.0, Preventive and Mitigative Measures, page 6.

mitigative section of the integrity management rule, a number of factors are required to be part of the evaluation. In addition to the required set of factors, there are other factors that are relevant to the evaluation of the leak detection capability. TBPL's program will have the following characteristics:

**1. Inclusion of all eight of the required §195.452(i)(3) evaluation factors, including risk assessment results. If all required factors are not considered, a documented basis for the exclusion of certain listed factors.** TBPL has means to detect leaks on its pipeline system. **TBPL evaluates the capability of its leak detection means and modify, as necessary, to protect the high consequence area.** TBPL's evaluation, **at least, considers the following factors:**

- **length and size of the pipeline,**
- **type of product carried,**
- **the pipeline's proximity to the high consequence area,**
- **the swiftness of leak detection**
- **location of nearest response personnel,**
- **leak history, and**
- **risk assessment results.**

All of these elements were considered and are a part of the Risk Assessment. Adequate means to detect a leak exist in the system and no other measures are required.

**2. Identification and evaluation of a sufficient spectrum of leak scenarios to adequately determine the overall effectiveness of leak detection capability (e.g., "most likely" in addition to "maximum possible").** The most likely leak is a seal failure at one of the above ground facilities. These are not in congested areas and are visited almost daily.

**3. Consideration of additional evaluation factors such as:**

- **current leak detection method for the HCA areas,**
- **use of SCADA,**
- **thresholds for leak detection,**
- **flow and pressure measurement,**
- **specific procedures for lines that are idle but still under pressure,**
- **additional leak detection means for areas in close proximity to sole source water supplies, and:**
- **leak detection testing (such as physical removal of product from the pipeline).**

All of the above issues were considered. Monitoring of casing vents for leaks, daily inspections and meter in/out matching were started as additional measures.

**4. Evaluation of all modes of line operations including slack line, idled line, and static conditions.** TBPL has several idle pipelines including Segments 5, 11, and 14. These lines continue to be maintained as outlined in TBPL's O&M plan.

A document that simply paraphrases PHMSA regulations and guidance and lacks the specificity necessary to show consideration of the unique features of an operator's system does not constitute an adequate procedure. Accordingly, I find Respondent's procedures are inadequate because they lack sufficient detail to establish a procedure to evaluate the capability of TBPL's leak detection system, as required under 49 C.F.R. § 195.452(i)(3).

**Item 4** in the Notice alleged that Respondent's written IMP procedures are inadequate to assure safe operation of its pipeline facilities because they fail to address 49 C.F.R. § 195.452(i)(4), which states:

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

- (a) ...
  - (i) *What preventive and mitigative measures must an operator take to protect the high consequence area?*
    - (1) ...
      - (4) *Emergency Flow Restricting Devices (EFRD)*. If an operator determines that an EFRD is needed on a pipeline segment to protect a high consequence area in the event of a hazardous liquid pipeline release, an operator must install the EFRD. In making this determination, an operator must at least consider the following factors—the swiftness of leak detection and pipeline shutdown capabilities, the type of commodity carried, the rate of potential leakage, the volume that can be released, topography or pipeline profile, the potential for ignition, proximity to power sources, location of nearest response personnel, specific terrain between the pipeline segment and the high consequence area, and benefits expected by reducing the spill size.

The Notice alleged that TBPL's IMP procedures, entitled *Section 10.0 Preventive and Mitigative Measures (Section 10.0)*, were inadequate because they did not include a process for determining the need for Emergency Flow Restricting Devices (EFRDs) on its pipeline to protect an HCA in the event of a hazardous liquid pipeline release and did not evaluate the need for installing EFRDs. PHMSA asserted that during the OPS inspection, TBPL's General Manager described a process used to determine whether EFRDs were needed on the pipeline. However, that process was not included in the company's written procedures.

The Notice further alleged that *Section 10.0* merely restated a portion of PHMSA's IMP guidance document, *Protocol #6.06 - EFRD Need Evaluation: Factors (Protocol #6.06)* and language from § 195.452(i)(4). For example, the Notice pointed out that *Section 10.0*, failed to set forth a procedure for identifying whether EFRDs were needed on a pipeline segment but simply combined PHMSA guidance with an account of what the company had previously done.<sup>14</sup> The following excerpt shows in bold text the paraphrased language from *Protocol #6.06*, the underlined language indicates the results of what TBPL had done, and the bold underlined text shows regulatory language from 49 C.F.R. §195.452(i)(4).

<sup>14</sup> Supplemental Response 2<sup>nd</sup> email, p 12; TBPL IMP, Section 10.0 Preventive and Mitigative Measures, page 10.

TBPL IMP, Section 10.0 Preventive and Mitigative Measures

“As part of the EFRD-specific portion of the preventive and mitigative section of the integrity management rule, a number of factors are required to be part of the evaluation. In addition to the required set of factors, there may be other factors that are relevant to the evaluation of the need for additional EFRDs. TBPL’s program would be expected to have the following characteristics:

**1. Inclusion of all ten of the required §195.452(i)(4) evaluation factors, including consideration of the benefits of reduced consequences expected due to reducing spill size. If all required factors are not considered, a documented basis provided for the exclusion of certain listed factors.**

If TBPL determines that an EFRD is needed on a pipeline segment to protect a high consequence area in the event of a hazardous liquid pipeline release, TBPL must install the EFRD. **In making this determination, TBPL will, at least, consider the following factors:**

- **the swiftness of leak detection and pipeline shutdown capabilities,**
- **the type of commodity carried,**
- **the rate of potential leakage,**
- **the rate of potential leakage,**
- **the volume that can be released,**
- **topography or pipeline profile,**
- **the potential for ignition,**
- **proximity to power sources,**
- **location of nearest response personnel,**
- **specific terrain between the pipeline segment and the high consequence area, and**
- **benefits expected by reducing the spill size.**

TBPL has tried EFVs and had problems with them and removed them from the system. After considering all of the factors above TBPL does not believe EFRDs are necessary.

**2. Consideration of any additional relevant line-specific factors beyond those listed in §195.452(i)(4) (e.g., the relative reliability of existing or proposed EFRDs, any relevant operating modes beyond nominal full flow conditions, etc.). After consideration of all factors, TBPL does not believe EFRDs are necessary for its system.**

As discussed above, a document that simply paraphrases PHMSA regulations and guidance and fails to provide a written procedure or process for determining the need for installation of EFRDs does not constitute an adequate procedure. Accordingly, I find that TBPL’s IMP procedures are inadequate to assure safe operation of its pipeline because they fail to provide a written procedure or process for determining the need for and installation of EFRDs on its pipeline to protect an HCA, as required under of 49 C.F.R. § 195.452(i)(4).

**Item 5** in the Notice alleged that Respondent's written IMP procedures are inadequate to assure safe operation of its pipeline facilities because they fail to address 49 C.F.R. § 195.452(j)(2), which states:

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

(a) ...

(j) *What is a continual process of evaluation and assessment to maintain a pipeline's integrity?--...*

(2) *Evaluation.* An operator must conduct a periodic evaluation as frequently as needed to assure pipeline integrity. An operator must base the frequency of evaluation on risk factors specific to its pipeline, including the factors specified in paragraph (e) of this section. The evaluation must consider the results of the baseline and periodic integrity assessments, information analysis (paragraph (g) of this section), and decisions about remediation, and preventive and mitigative actions (paragraphs (h) and (i) of this section).

The Notice alleged that TBPL's IMP procedures, entitled *Section 11.0 Evaluation and Assessment, Section 11.0*, were inadequate because they did not establish a procedure for conducting periodic evaluations of its line pipe as frequently as needed to assure pipeline integrity. Specifically, the Notice alleged that Section 11.0 merely restated one of PHMSA's IMP guidance documents, *Protocol #7.01 - Continual Process of Evaluation and Assessment: Periodic Evaluation (Protocol #7.01)*. The Notice also alleged that TBPL's IMP did not address the factors referenced in 49 C.F.R. §195.452(j)(2) or establish a process for the company's overall assessment program.

The example cited in the Notice shows that *Section 11.0* does not set forth a procedure for periodic evaluation of the pipeline but merely cobbles together PHMSA guidance and regulatory language. Rather than a procedure, the company described in general terms the processes and characteristics of its IMP. The following excerpt shows in bold text the paraphrased language from PHMSA's *Protocol #7.01* and in bold underlined text the regulatory language from 49 C.F.R. §195.452(j)(1-2):

TBPL IMP, Section 11.0 Evaluation and Assessment:

TBPL has an approach to periodically evaluate pipeline integrity. The periodic evaluation process includes the following provisions:

**1. An evaluation of pipeline integrity that is performed periodically to update the understanding of pipeline condition and the segment-specific integrity threats for segments that can affect HCAs.**

**2. Periodic evaluation intervals that are based on risk factors associated with the pipeline, including those specified in Title 49 CFR Part §195.452 (e).**

**3. Consideration of the results of baseline and re-assessments.**

**4. Consideration of the information analysis (risk analysis) required by paragraph Title 49 CFR Part §195.452 (g).**

**5. Consideration of remediation actions taken; and**

6. Consideration of **prior and pending decisions about preventive and mitigative actions.**

**After completing the baseline integrity assessment, TBPL will continue to assess the line pipe at specified intervals and periodically evaluate the integrity of each pipeline segment that could affect a high consequence area.**

**TBPL will conduct a periodic evaluation as frequently as needed to assure pipeline integrity. The frequency of evaluation will be based on risk factors specific to its pipeline. The evaluation must consider the results of the baseline and periodic integrity assessments, information analysis, and decisions about remediation, and preventive and mitigative actions.**

As noted above, a document that simply paraphrases PHMSA regulations and guidance does not constitute an adequate procedure. Accordingly, I find the procedures are inadequate because they fail to establish a procedure for conducting periodic evaluations of TBPL's line pipe as frequently as needed to assure pipeline integrity. I also find that the procedures fail to address the factors referenced in 49 C.F.R. § 195.452(j)(2) or all of TBPL's assessment methods and take into account the unique circumstances of TBPL's particular system to meet the requirements of 49 C.F.R. § 195.452(j)(2).

**Item 6** in the Notice alleged that Respondent's written IMP procedures are inadequate to assure safe operation of its pipeline facilities because they fail to address 49 C.F.R. § 195.452(j)(3), which states:

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

(a) ...

(j) *What is a continual process of evaluation and assessment to maintain a pipeline's integrity?*

(1) ...

(3) *Assessment intervals.* An operator must establish five-year intervals, not to exceed 68 months, for continually assessing the line pipe's integrity. An operator must base the assessment intervals on the risk the line pipe poses to the high consequence area to determine the priority for assessing the pipeline segments. An operator must establish the assessment intervals based on the factors specified in paragraph (e) of this section, the analysis of the results from the last integrity assessment, and the information analysis required by paragraph (g) of this section.

The Notice alleged that TBPL's IMP procedures, entitled *Section 11.0 Evaluation and Assessment (Section 11.0)*, were inadequate because they did not include a process or procedures to establish assessment intervals for continually assessing the line pipe's integrity under 49 C.F.R. § 195.452(j)(3).<sup>15</sup>

<sup>15</sup> Supplemental Response p. 131-132; TBPL IMP, Section 11.0 Evaluation and Assessment, pages 2-3.

Specifically, it alleged that *Section 11.0* merely restated one of PHMSA's IMP guidance documents, *Protocol #7.02 - Continual Process of Evaluation and Assessment: Re-assessment Intervals (Protocol #7.02)*. The following excerpt shows in bold text the paraphrased language from PHMSA *Protocol #7.02* and in underlined text the company's past actions:

TBPL IMP, Section 11.0 Evaluation and Assessment

TBPL has an approach to determine future integrity assessment plans.

**The reassessment process includes the following provisions:**

**1. Re-assessment intervals that are based on all risk factors associated with the pipeline and adequately consider the risk factors listed in Title 49 CFR Part §195.452 (e).**

**2. Re-assessment intervals that consider analysis of results from the last integrity assessment.**

**3. Re-assessment intervals that are determined using all information obtained on the condition of the pipeline as required by Title 49 CFR Part §195.452 (g).**

**4. Segments that are to be re-assessed on a schedule not to exceed five years unless a variance has been submitted and approved by PHMSA.**

Based on the assessments conducted to date and the risk factors as they exist at this time, TBPL has established a re-assessment schedule of 5 years. If during the annual review process it is determined that risk factors have changed or due to the results of assessments that have been subsequently conducted that necessitates a reassessment schedule of less than 5 years, TBPL will reestablish the reassessment interval.

The Notice also alleged that TBPL's IMP procedures, entitled *Section 6.0, Direct Assessment Plan (Section 6.0)*, included a process for determining reassessment intervals for ECDA on some of its pipelines, but did not account for or address the other assessment methods used on the pipeline. For instance, Respondent's IMP did not have a procedure to determine a reassessment interval for hydrostatic pressure test assessments the company had conducted.

Although the company submitted revised procedures on May 9, 2012, the revision of *Section 11.0* did not correct the inadequate procedure and still retained accounts of what the company had previously done.<sup>16</sup> For example, TBPL's revisions changed the established re-assessment interval to five years, not to exceed 68 months, and changed the word "that" to "those." The following excerpt shows deleted text with double strikethroughs, in underlined text the added language, and in bold underlined text language from 49 C.R.F § 195.452(g):

TBPL IMP, Section 11.0 Evaluation and Assessment

TBPL has an approach to determine future integrity assessment plans.

The re-assessment process includes d the following provisions:

<sup>16</sup> Supplemental Response, p 132; TBPL IMP, Section 11.0 Evaluation and Assessment, page 3.

1. Re-assessment intervals that are based on all risk factors associated with the pipeline and adequately consider the risk factors listed in Title 49 CFR Part §195.452 (e).

The highest risk factor is third party damage and vandalism. The pipelines are monitored almost continually but not less than weekly. Due to this monitoring program, no additional assessment is required prior to the 5 year period.

2. Re-assessment intervals that consider analysis of results from the last integrity assessment.

The last assessment found a number of issues with poor coating during construction. TBPL is performing a closer inspection of all construction activities, especially the coating process.

3. Re-assessment intervals that are determined using all information obtained on the condition of the pipeline as required by Title 49 CFR Part §195.452 (g).

The following areas were considered when establishing the re-assessment intervals.

**(1) Information critical to determining the potential for, and preventing, damage due to excavation, including current and planned damage prevention activities, and development or planned development along the pipeline segment;** All areas of the pipelines are inspected at least weekly for digging activities of which TBPL may not be aware. At this time no change in the re-assessment intervals is necessary.

**(2) Data gathered through the integrity assessment required under this section;** All data gathered during the assessment was factored into the decision for re-assessment. At this time, nothing indicates the need to make a change.

**(3) Data gathered in conjunction with other inspections, tests, surveillance and patrols required by this Part, including, corrosion control monitoring and cathodic protection surveys; and**

Data associated with cathodic protection, leak monitoring, pressures tests, and pipeline surveillance were considered when establishing the re-assessment interval. At this time, no changes are merited.

**(4) Information about how a failure would affect the high consequence area, such as location of the water intake.** Above ground bridge crossings are monitored at least weekly to ensure no tampering occurs. At this time, no change is necessary in the re-assessment intervals.

Segments that are to be re-assessed on a schedule not to exceed five years unless a variance has been submitted and approved by PHMSA.

Based on the assessments conducted to date and the risk factors as they exist at this time, TBPL has established a re-assessment schedule of 5 years, not to exceed 68 months. If during the annual review process it is determined ~~that~~ those risk factors have changed or due to the results of assessments that have been subsequently conducted that necessitates a reassessment schedule of less than 5 years, TBPL will re-establish the reassessment interval.



Having reviewed Respondent's revised IMP procedures and considered the adequacy criteria set forth in 49 C.F.R. § 190.237(a), I find the procedures are inadequate because they lack sufficient detail to establish assessment intervals for continually assessing the pipeline's integrity and they fail to address the other assessment methods used on the pipeline to meet the requirements of 49 C.F.R. § 195.452(j)(3).

**Item 7** in the Notice alleged that Respondent's written IMP procedures are inadequate to assure safe operation of its pipeline facilities because they fail to address 49 C.F.R. § 195.452(j)(5), which states:

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

(a) ...

(j) *What is a continual process of evaluation and assessment to maintain a pipeline's integrity?*

(1) ...

(5) *Assessment methods.* An operator must assess the integrity of the line pipe by any of the following methods. The methods an operator selects to assess low frequency electric resistance welded pipe or lap welded pipe susceptible to longitudinal seam failure must be capable of assessing seam integrity and of detecting corrosion and deformation anomalies.

The Notice alleged that TBPL's IMP procedures, entitled *Section 11.0, Evaluation and Assessment (Section 11)*, were inadequate because they did not include a procedure for selecting assessment methods to assess Respondent's pipeline under 49 C.F.R. § 195.452(j)(5). The Notice also alleged that Respondent's IMP lacked sufficient details to describe the process for selecting assessment methods to continually assess the integrity of the pipeline.

Specifically, the Notice alleged that *Section 11.0* merely restated one of PHMSA's IMP guidance documents, *Protocol #7.03 - Continual Process of Evaluation and Assessment: Assessment Methods (Protocol #7.03)*. For example, *Section 11.0* allegedly failed to set forth a procedure for continually assessing the integrity of the pipeline.<sup>17</sup> The following excerpt shows in bold text the paraphrased language from PHMSA *Protocol #7.03* and in underlined text the company's past actions:

TBPL IMP, Section 11.0 Evaluation and Assessment:

The selected assessment method allows TBPL to adequately assess the integrity of the pipeline. TBPL's **assessment method selection process should exhibit the following characteristics:**

**1. The assessment methods selected for each segment are appropriate for the specific integrity threats identified for the segment through the updated risk analysis, periodic evaluations, previous assessments, and industry experience.**

**2. The process for assessment method selection includes consideration of completed assessment results.**

<sup>17</sup> Supplemental Response, p. 135; TBPL IMP, Section 11.0 Evaluation and Assessment, page 6.

3. If ILI tools are used, they are capable of detecting corrosion and deformation anomalies including dents, gouges and grooves.

4. The assessment methods selected for all low-frequency ERW pipe or lapwelded pipe susceptible to longitudinal seam failure are capable of assessing seam integrity and of detecting corrosion and deformation anomalies.

5. If external corrosion direct assessment (ECDA) is the selected method, TBPL will have a complete ECDA Plan that addresses the requirements of NACE RP0502-2002. In addition, the operator is expected to address:

a. A formal, documented process to ensure that individuals who implement and evaluate ECDA assessments are qualified to perform that work. Characteristics of an effective process include:

i. A means to identify qualification requirements for the various ECDA steps,

ii. Documentation that demonstrates the individual's qualifications and proficiency, and

iii. Plan and schedule to provide additional training or skills acquisition to achieve and maintain qualification requirements, as applicable.

b. Requirements established by the operator for any vendors conducting ECDA assessment activities (e.g., indirect inspection) to assure that the vendors understand their responsibilities in performing integrity assessments that comply with this rule.

6. If technology other than pressure testing, external corrosion direct assessment, or in-line inspection is planned for use, the operator submits a notification to PHMSA at least 90-days before conducting the assessment.

Due to the age of the pipeline segments and the fact that the segments have not been designed and constructed to accommodate smart pigging, ILI cannot be utilized as an assessment method. The use of the product transported is critical to the customers of TBPL and these customers almost never shut down and certainly not all at one time, therefore the segments cannot be shut down to accommodate hydrostatic pressure testing. Due to the above, ECDA is the only assessment method available to TBPL. In 2005 TBPL decided to proceed with assessment of the segments using ECDA.

Another example, also found in the excerpt above, shows that TBPL's procedures included inaccurate or inconsistent information. Specifically, in its initial baseline assessment, TBPL used ECDA, hydrostatic pressure testing, and GWUT. However, TBPL's IMP procedure, *Section 6.0*, addressed only the use of ECDA and Guided Wave Ultrasonic Testing (GWUT), while the company's procedures in *Section 11.0* restricted the assessment method to ECDA.

A third inadequacy in the company's procedures is reflected in its description of the characteristics of its IMP. TBPL stated that it had one pipeline in an HCA that can accommodate

a smart pig tool, which had been assessed using ILI in 2012.<sup>18</sup> However, the excerpt from *Section 11.0* cited above states that Respondent's pipeline segments cannot accommodate a smart pig tool, as they were not designed to allow the use of ILI tools. Therefore, these two statements are inconsistent.

Fourth, although Respondent submitted revisions to *Section 11.0*, the procedures remain inadequate. TBPL's revisions merely consisted of statements regarding what actions had been taken in the past or what could be done and certain inaccurate statements, but still failed to establish a valid procedure.<sup>19</sup> Some further examples and explanations of the inadequacies are listed below:

1. TBPL had revised the procedures to state that the pipelines could be assessed by either pressure testing or ECDA, but TBPL did not correct the statement that the pipeline could accommodate a smart pig tool. At least one of TBPL's pipelines can accommodate a smart pig tool or ILI tool.

2. TBPL added language to indicate that ECDA had been used for its last assessment and that ECDA was the only method appropriate for Segments 6 and 7. TBPL's revisions still do not establish a procedure and is not accurate, as TBPL had used ECDA, hydrostatic pressure testing, and GWUT for its last assessment.

3. TBPL's revised procedure included a statement that "A formal ECDA plan is included in this IMP in Section 6." This statement is not a procedure and does not address all the assessment methods TBPL previously used.

Having reviewed Respondent's IMP procedures and considered the adequacy criteria set forth in 49 C.F.R. § 190.237(a), I find the procedures are inadequate because they fail to select the methods TBPL had used to assess its pipeline. I also find the procedures are inadequate because they contain inaccuracies, merely restate PHMSA guidance from *Protocol #7.03*, and lack sufficient details to meet the requirements of 49 C.F.R. § 195.452(j)(5).

Pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237, TBPL is ordered to amend its plans and procedures to provide a reasonable level of safety consistent with the details stated above. Respondent must:

1. Revise the company's IMP procedures to correct the deficiencies discussed above and to meet the requirements of 49 C.F.R. § 195.452. This includes, but is not limited to, revising the procedures to eliminate the paraphrasing or repetition of PHMSA's guidance and regulatory language.
2. Submit the amended procedures to the Director within 60 days following receipt of this

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<sup>18</sup> Supplemental Response, p. 134; TBPL IMP, Section 11.0 Evaluation and Assessment, page 5.

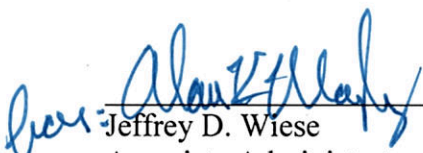
<sup>19</sup> *Id.*

Order.

The Director may grant an extension of time to comply with any of the required items upon a written request timely submitted by the Respondent and demonstrating good cause for an extension.

Failure to comply with this Order may result in administrative assessment of civil penalties not to exceed \$100,000 for each violation for each day the violation continues or in referral to the Attorney General for appropriate relief in a district court of the United States.

Under 49 C.F.R. Part 190, Respondent may submit a petition for reconsideration of this Order Directing Amendment. Should Respondent elect to do so, the petition must be sent to: Associate Administrator, Office of Pipeline Safety, PHMSA, 1200 New Jersey Avenue, SE, East Building, 2<sup>nd</sup> Floor, Washington, DC 20590, with a copy sent to the Office of Chief Counsel, PHMSA, at the same address. PHMSA will accept petitions received no later than 20 days after receipt by the Respondent of service of this Order Directing Amendment, provided they contain a brief statement of the issue(s) and meet all other requirements of 49 C.F.R. § 190.215. Unless the Associate Administrator, upon request, grants a stay, all terms and conditions of this Order Directing Amendment are effective upon service in accordance with 49 C.F.R. § 190.5.

  
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Jeffrey D. Wiese  
Associate Administrator  
for Pipeline Safety

JUL 23 2013

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Date Issued