



Pipeline and Hazardous Materials Safety Administration

DEC 1 1 2006

Mr. Jesse G. Metcalf Vice President, Operations and Technical Services Rocky Mountain Pipeline System LLC 555 17th Street Suite 3310 Denver, CO 80202

Re: CPF No. 5-2004-5001

Dear Mr. Metcalf:

Enclosed is the Final Order issued by the Acting Associate Administrator for Pipeline Safety in the above-referenced case. The Final Order withdraws several of the allegations of violation listed in the Notice of Probable Violation dated Feb. 18, 2004, makes findings of violation with respect to some of the other allegations, specifies actions to be taken to comply with the pipeline safety regulations, requires amendment of certain integrity management program procedures and assesses a civil penalty of \$7,000. The penalty payment terms are set forth in the Final Order.

When the civil penalty is paid and the terms of the compliance order and amendment of procedures are completed, as determined by the Director, Western Region, OPS, this enforcement action will be closed. Your receipt of the Final Order constitutes service of that document under 49 C.F.R. § 190.5.

Sincerely,

James Reynolds

Pipeline Compliance Registry Office of Pipeline Safety

Enclosure

cc:

Robert Mindess

Senior Counsel

Pacific Energy GP, Inc. 5900 Cherry Avenue

Long Beach, CA 90805-4408

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

DEPARTMENT OF TRANSPORTATION PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION¹ WASHINGTON, DC

In the Matter of	
Rocky Mountain Pipeline System,	CPF No. 5-2004-5001
Respondent.	

FINAL ORDER

From February 24-27, 2003, representatives of the Office of Pipeline Safety (OPS), pursuant to 49 U.S.C. § 60117, conducted an inspection of Rocky Mountain Pipeline System's (Respondent) integrity management program at Respondent's offices in Denver, Colorado.

As a result of the inspection, the Director, Western Region, OPS, issued to Respondent, by letter dated February 18, 2004, a Notice of Probable Violation, Proposed Civil Penalty, Proposed Compliance Order and Notice of Amendment (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding Respondent had violated various regulatory provisions of 49 C.F.R. §195.452, proposed assessing a civil penalty of \$34,000 for the alleged violations, and proposed that Respondent take certain measures to correct the alleged violations. The Notice also proposed, in accordance with 49 C.F.R. § 190.237, that Respondent amend its integrity management program procedures.

On March 9, 2004, Respondent requested a 60-day extension to respond to the Notice, which the Regional Director granted on March 15, 2004. Respondent submitted its response to the Notice on May 20, 2004 (Response). Respondent contested the allegations, submitted information to explain the allegations and requested a hearing. A hearing was held in the Western Region,

¹ This case is no longer before the Research and Special Programs Administration, the agency that initiated the case. Effective February 20, 2005, the Pipeline and Hazardous Materials Safety Administration (PHMSA) was created to further the highest degree of safety in pipeline transportation and hazardous materials transportation. See, section 108 of the Norman Y. Mineta Research and Special Programs Improvement Act (Public Law 108-426, 118 Stat. 2423-2429 (November 30, 2004)). See also, 70 Fed. Reg. 8299 (February 18, 2005) redelegating the pipeline safety functions to the Administrator, PHMSA.

OPS, on December 14, 2004. After the hearing, Respondent submitted a Closing Statement dated March 16, 2005.

FINDINGS OF VIOLATION

As discussed below, the Notice alleged violations of the integrity management program (IMP) requirements in 49 C.F.R. §195.452. In general, Respondent questioned whether the allegations had any basis in law, since many related to the level of detail in the IMP processes. Respondent argued its IMP provided what the regulations literally require but that the procedures may lack the detail necessary to satisfy some OPS inspectors. Respondent maintained OPS published a protocol after the inspection that provided more guidance to operators on the level of detail necessary in IMP procedures. The protocols Respondent refers to were first discussed at a public workshop on July 23-24, 2002. The initial version of the protocols was posted on OPS's integrity management website in conjunction with this workshop. A revised version was posted in January 2003. The inspection of Respondent's facilities took place in February 2003. Additionally, beginning in October 2001, OPS posted answers to FAQs to give hazardous liquid operators informal advice about how to carry out the IMP requirements. Thus, guidance was available to Respondent before the OPS inspection.

Item² 1 alleged three violations of §195.452(f)(1), which requires an operator's integrity management program (IMP) to have a process for identifying those pipeline segments in its system that could affect a high consequence area. The Notice alleged –

- Respondent could not assure all of its pipelines were accurately reflected in the National Pipeline Mapping System (NPMS) (1a);
- Respondent had not identified pipeline facilities, such as breakout tanks and pump stations, that could affect high consequence areas, as required by §195.452(f)(3) (1b); and
- Respondent's process for identifying pipeline segments could not ensure all segments that could affect a high consequence area were identified (1c).

With respect to 1a, Respondent maintained it had submitted its pipeline information to the NPMS on June 9, 2003. The due date was June 17, 2003. Respondent has demonstrated it provided the requisite information before the due date; therefore, I am withdrawing the allegation of violation.

In its initial response to 1b, Respondent said it interpreted §195.452(f)(3) to apply to pipeline assets only. At the hearing, Respondent confirmed its IMP program at the time of the inspection did not include non linear facilities, such as pump stations and breakout tanks. At the hearing and in its post-hearing response, Respondent said it is surveying the locations and creating a facility specific plan and methodology. Respondent said its next revision will include these facilities and an expanded description of the methodology.

² Item Numbers refer to the items listed in the Notice dated Feb. 18, 2004.

Section 195.452 (f)(1) requires an identification of all pipeline segments that could affect a high consequence area. Section 195.452(f)(3) requires an operator to integrate all available information concerning the entire pipeline. A pipeline is defined in §195.2 to mean all parts of a pipeline facility through which a hazardous liquid moves in transportation. Thus, I find Respondent violated §§195.452(f)(1) and 195.452(f)(3) because its IMP failed to identify and address all of its pipeline facilities.

In addressing 1c, Respondent maintained the allegations were unclear. Respondent believed all of its segments are readily identifiable and segments that could affect high consequence areas are identified on its maps. At the hearing, OPS explained Respondent's IMP did not have a process for performing pipeline segment identification to ensure all segments that could affect high consequence areas are included. Respondent maintained its maps provide adequate detail to identify all of the pipeline segments that could affect high consequence areas. Respondent also included a description of the methodology used to identify the segments.

Section 195.453(f)(1) requires an operator to have a process for identifying which of the pipeline segments in its system could affect a high consequence area. Sections 1.3 -1.3.6 of Respondent's IMP describe the Bass-Trigon RiskCat tool and the Integrity Assessment Program (IAP) risk assessment model used in the identification process, factors used to identify segments, future identification, data updates and incomplete data. Accordingly, I find Respondent did not violate §195.452(f)(1), because its IMP has a process for identifying those segments in its system that could affect high consequence area. But this process is deficient and needs to be amended to ensure safe operation of the pipeline system. Respondent's process needs to ensure the process the consultant used applies to Respondent's system. The approach needs to be better described and documented and include a method for reviewing the results provided by the consultant. Thus, this item will be included in the Amendment section of this document.

Item 2 alleged three violations of 49 C.F.R. §195.452(b)(3). The regulation requires a pipeline operator to have in its integrity management program a plan to carry out the baseline assessment of line pipe according to the baseline assessment plan requirements in §195.452(c). The Notice alleged —

- Respondent's baseline assessment plan did not specify or technically justify the choice of assessment methods (2a);
- Documentation stated Respondent did not have pre-1970 electric resistance welded (ERW) or lap welded pipe in its system, contrary to information presented to OPS inspectors that this type of pipe was in the system. Respondent's assessment tools had not considered the seam failure susceptibility of these types of pipe (2c); and
- Respondent did not have a process for revising the baseline assessment plan (2d).

For 2a, Respondent initially responded that section 4.10 of its IMP discussed available and allowable methods of assessments. Respondent maintained it did not interpret the rule to require an operator to specify or technically justify its choice of assessment methods.

At the hearing, OPS maintained Respondent's IMP did not show its decision making process on determining assessment methods. In its closing statement, Respondent said it addressed OPS's concerns by explaining sections 4.10 and 4.11 address the different assessment methods and what conditions must exist to choose a method.

Respondent's IMP (section 4.10) has procedures discussing assessment methods for the baseline assessment. Thus, I do not find a violation of §195.452(b)(3). Although Respondent has procedures, the procedures are very general statements about types of assessment methods. Thus, this item will be included in the Amendment section of this Order because the procedures are not adequate to ensure safe operation of Respondent's system. Respondent will be required to further amend its procedures to provide more detailed information about how personnel are to choose an integrity assessment method if certain conditions exist on a segment of line pipe.

With respect to 2c, Respondent acknowledged its IMP incorrectly indicated the system had no pre-1970 ERW or lap welded pipe. Respondent maintained it has since corrected the statement in its IMP (section 4.10) and has implemented procedures for assessing and repairing this pipe.

At the hearing OPS and Respondent discussed whether Respondent had analyzed the risk associated with this type of pipe. Respondent explained the database that performs its risk analysis did consider the pipe and the risk algorithm shows the program used this information.

Section 195.452(b)(3) requires an operator to have a baseline assessment plan that complies with the baseline plan requirements in §195.452(c). Section 195.452(c)(1)(i) requires an operator to use assessment methods capable of assessing seam integrity and of detecting corrosion and deformation anomalies if the system has low frequency electric resistance welded (ERW) pipe or lap welded pipe and the pipe is susceptible to longitudinal seam failure. Under §195.303(d) all pre-1970 ERW pipe and lap welded pipe is considered susceptible to longitudinal weld failure unless an engineering analysis shows otherwise.

Respondent has demonstrated the statement in its IMP at the time of the inspection was an error that has since been removed. Respondent's risk algorithm also includes an input field for pipe seam design. But, according to Respondent's March 2005 closing statement, there were 35 miles of lap welded pipe and 2.25 miles of low frequency ERW pipe in its system. Yet, the modified procedure Respondent submitted (Section 4.10) only discusses what might happen if pipelines acquired in the future contain low frequency ERW pipe. The procedure does not discuss how the current pipe in the system will be addressed or how a newly acquired pipe with lap welded pipe will be addressed.

Further, section 4.10 only states appropriate assessment techniques will be evaluated for effectiveness in managing the potential threat (i.e., susceptibility to longitudinal seam failure). Respondent must either have its IMP provide for assessment methods that address seam issues as specified in the regulation (i.e., the assessment method must be capable of assessing seam integrity and of detecting corrosion and deformation anomalies) or provide an engineering

analysis demonstrating the low frequency ERW pipe and lap welded pipe in Respondent's system is not susceptible to longitudinal seam failure. And if not determined susceptible to longitudinal seam failure, the procedures must describe the assessment method Respondent will use to assess this pipe.

At the time of the inspection Respondent's procedure was inaccurate. As discussed above, the revised procedure is still inaccurate and does not satisfy the regulation. Accordingly, I find Respondent violated §195.452(b)(3).

In response to 2d, Respondent initially said sections 2.2, 2.2.3, 5 and Appendix H of its IMP discuss how updates and modifications are to be made. Respondent believes OPS misinterpreted the reference to version 5.0 as being the 5th revision. Respondent explained the reference was an archive reference inadvertently left in the document. At the hearing Respondent again explained the reference to revision 5 was not a 5th revision. Respondent further explained sections 2.2, 2.2.3, chapter 5 and appendix H of its IMP describe in detail its process for updating and modifying its IMP and Respondent will expand the description in the next IMP revision.

This allegation concerned Respondent's IMP not having a process for revising the baseline assessment plan when changes to segment identification occur. This was not a misunderstanding over whether Respondent had documented its IMP revisions. As part of the requirement to have a baseline assessment plan that conforms with §195.452(c), Respondent is to document any changes or modification to the assessment plan. Changes include documenting when new high consequence areas are identified and included in the baseline assessment plan. (See §195.452(d)(3)(ii).) The IMP procedures Respondent submitted do not provide for this. Accordingly, I find Respondent violated §195.452(b)(3).

Item 3 alleged four violations of 49 C.F.R. §195.452(f)(8). The regulation requires an operator's IMP to have a process for review of integrity assessment results and information analysis by a person qualified to evaluate the results and information. The Notice alleged Respondent's IMP –

- did not have a process description for performing reviews of assessment results (3a);
- did not have a process description for ensuring personnel performing these reviews are qualified (3b);
- had grading features in the appendix that did not correlate with the rule's repair criteria (3c); and
- defines discovery of a condition as occurring up to 30 days after final inspection results are received (3d).

In addressing 3a, Respondent initially responded its IMP has procedures to review and integrate integrity assessment results and to confirm assessment results. Respondent referenced several sections in its IMP that Respondent maintained showed these processes.

At the hearing, Respondent described the process for reviewing integrity assessment results.

Respondent pointed to Section 4.2 of its IMP, which refers to integrating and reviewing data to develop a dig prioritization of the findings to confirm anomalies. Respondent agreed to rename the section to more specifically identify the review process. Section 7.0 discusses the quality control plan for managing integrity assessment data.

The process flow charts for analyzing data, communication plan and the procedures describing data integration and periodic maintenance are not relevant to this alleged violation. The requirement to have a process for review of integrity results is separate from the requirement to conduct a periodic information analysis. A process for a dig prioritization process is not the same as a process for reviewing integrity assessment results. The dig prioritization program may come after the review of the assessment results. Only section 7.1 of the IMP Quality Control plan on personnel qualifications includes a general statement that a Pacific Energy senior engineer will review the assessment results.

I do not see that any of the IMP sections Respondent referenced describe a process of how Respondent's personnel are to evaluate and validate the integrity assessment results. Accordingly, I find Respondent violated §195.452(f)(8).

In response to 3b, Respondent initially maintained it had not violated any regulation because OPS had not cited any regulation requiring such material to be in its IMP. According to Respondent, the regulation only requires the persons performing the assessment be qualified, and Respondent's personnel are qualified because of their extensive experience. At the hearing OPS clarified the allegation concerned whether Respondent's IMP has a process description for ensuring personnel reviewing integrity assessments are qualified. Respondent maintained its personnel who do these reviews are experienced and it also has a rigorous contractor qualification process. Respondent said it revised section 7.1 of its IMP to include information on who will perform the assessment review.

OPS did not allege Respondent's personnel were not qualified; rather, the allegation concerned the lack of a process to establish the qualifications of the person performing the review. As one of the required IMP elements, a program must have a process for review of integrity assessment results by a person qualified to evaluate the results. This is a two-part process: the review of the integrity assessment results and the qualification of personnel who will be performing that review.

I find Respondent violated §195.452(f)(8) because, at the time of the inspection, its IMP did not have a process for establishing the person's qualifications to perform the integrity results review. Moreover, the revised procedure Respondent submitted in March 2005 still does not establish a formal documented process for how Respondent establishes the reviewer is qualified.

With respect to 3c, Respondent maintained sections 4.4 through 4.8 set forth its repair criteria, which are consistent with the IMP repair requirements. Respondent further maintained OPS reviewed Respondent's Engineering Standard 9000 in a later inspection and found it complied

with the rule's requirements. At the hearing, Respondent maintained OPS misunderstood the purpose of the engineering standard.

After further review, OPS agrees Respondent's engineering standard 9000 is not inconsistent with the repair criteria. Respondent uses the standard in addition to the repair criteria. The standard helps categorize the anomalies into subcategories to prioritize the conditions for repair. Accordingly, I am withdrawing the allegation of violation.

For 3d, Respondent initially responded that its program and other documents reflect an appropriate response to discovery of a condition. At the hearing, OPS argued Respondent's procedure on discovery conflicted with the rule's requirements and implied a longer period for discovery. Respondent maintained it addressed these concerns by explaining its bid form requires contractors to release their final reports for Respondent to meet the 180-day deadline. In its closing statement, Respondent included amended section 4.3, which Respondent maintained clarifies information must be received no later than 180 days after the assessment.

Section 195.452(f)(8) concerns the requirement to have a process for review of integrity assessment results and information analysis by a qualified person. But the allegation concerns the requirements on discovery of a condition in §195.452(h)(2). Thus, I am withdrawing this allegation of violation because the regulation cited does not relate to the alleged problem. Furthermore, Respondent's revised procedure appears to satisfy OPS's concern about clarifying when discovery of a condition occurs to be consistent with the regulation.

Item 4 alleged Respondent had violated 49 C.F.R. §195.452(f)(4), which requires an operator's IMP to have criteria for remedial actions to address integrity issues raised by the assessment and information analysis. The Notice alleged Respondent's process description in its program did not have sufficient detail on criteria for determining remedial actions Respondent would take to address integrity issues.

In its initial Response, Respondent said its repair criteria are in section 4.0 of its IMP and the criteria are consistent with the criteria in the IMP regulation. At the hearing OPS explained that Respondent's repair criteria did not have sufficient detail for determining remedial actions. Respondent explained its IMP has the repair criteria in sections 4.4 through 4.8 and an engineering standard in Appendix C. Its O&M manual also has references to the process description for determining remedial actions. Respondent said it revised its IMP to reference the O&M Manual.

I am withdrawing this allegation of violation because Respondent's IMP had the procedures, albeit they needed to reference other documents. The revised procedures Respondent submitted provide more detail.

Item 5 alleged three violations of 49 C.F.R. §195.452(e)(1). This regulation requires an operator to develop an assessment schedule based on risk factors reflecting the risk conditions on the

pipeline segment. The regulations list certain risk factors an operator must consider. The Notice alleged Respondent –

- had not documented its risk analysis process description (5a);
- needed to establish a process for populating data fields in the risk model with values based on the best available information (5b); and
- did not have a process for analyzing the risk of pipeline facilities (5c).

In response to 5a, Respondent initially maintained OPS had not cited any regulation to support the allegation and in any event, section 3.2.2 of its IMP has all the variable definitions. At the hearing OPS explained Respondent had not documented the risk analysis process in sufficient detail, particularly how it was using the information from the Bass Trigon algorithm model. Respondent maintained it allayed this concern by explaining Appendix K to its IMP contains the Bass-Trigon methodology user implementation manual for the software program. Respondent said it reviews the results of the program and runs them through its management of change. Sections 3.2.2, 3.2.3, 3.2.4 and 6.1.3 explain how the information is used. In its closing statement, Respondent submitted a revised section 3.2.2, which Respondent said now includes definitions of the variables.

Section 195.452(e)(1) requires an operator to use risk factors in establishing the assessment schedule for the baseline and continuing integrity assessments. Thus, an operator must have a process describing the risk analysis it is using to support its assessment schedule. Respondent has a basic procedure describing its risk algorithm. Thus, I do not find Respondent violated §195.452(e)(1). But, the procedure still lacks sufficient detail to be adequate. Information, such as the basis for risk categories and variable weights, needs to be documented. Thus, this item will be included in the Amendment section of this Order.

To address 5b, Respondent initially responded that its risk model was populated with the best information available and its IMP addresses the need to include the most current data in the database on a continuing basis. At the hearing OPS maintained that Respondent had not documented the process for populating the risk model data fields. Respondent explained that Appendix K to its IMP has the user implementation manual and the specifics on how the information is used is in sections 3.2.2, 3.2.3, 3.2.4 and 6.1.3 of the IMP. Respondent further said it revised section 3.2.2 to include definitions of the variables and will expand on the description in its next revision.

The requirement in § 195.452(e)(1) to establish an assessment schedule based on risk factors implies the necessity for the operator to use the best available data. Without this data, there is no assurance the prioritization process reflects the actual risk conditions. Because Respondent has a process describing its risk algorithm that helped generate its assessment schedule, I do not find a violation of §195.452(e)(1). Nevertheless, this item will be included in the Amendment section of this Order because the process is lacking sufficient detail to be considered adequate. Respondent must ensure its IMP procedure provides for including historical data as well as

current data and input from subject matter experts, and keeping this information updated on a continuing basis. For example, as discussed at the informal hearing, Respondent had not included historical information from the previous operator into its risk model.

In response to 5c, Respondent said it understood OPS was concerned Respondent did not have a documented process for analyzing the risk posed by the non-linear portions of Respondent's pipeline facilities. Respondent maintained it was the first company required to perform a risk assessment of its facilities. Respondent explained it has ongoing surveys to address non linear facilities. When these surveys are completed, Respondent will perform HAZOP studies to assess the risk and create programs for the facilities. Respondent will include the expanded process description in its next IMP revision.

Contrary to Respondent's assertion about being the first cited for this failure, it has been standard practice during an IMP inspection for an OPS inspector to determine if an operator has identified and evaluated the risks of facilities that can affect high consequence areas. OPS has taken action against operators who do not have a process for doing so.

Nevertheless, I do not find this failure was a violation of §195.452(e)(1). Respondent's failure to include its pipeline facilities, such as pump stations and break out tanks, should have been cited as a violation of §195.452(b)(1) – not having a program that addresses risk on each segment of pipeline, or of §195.452(f)(3) and 195.452(g) – not fulfilling the data and information analysis and integration requirements. Since Respondent was not cited for violating these regulations, I cannot make a finding of violation. This item will be placed in the warning section of this document.

Item 6 alleged Respondent's integrity management program did not provide sufficient details on the methods Respondent would use in evaluating additional preventive and mitigative measures, in violation of 49 C.F.R. §195.452(i)(1).

In its Response, Respondent said it believed section 4.8 of its IMP adequately discusses preventive and mitigative measures. At the hearing, Respondent explained Appendix J contains more detail on the methods it uses. Section 4.8 further discusses the methods and their appropriate and effective use. Respondent said its next IMP revision will include more of its thought processes on how it decides among the different methods and include references to its operator qualification plan and operations manual.

Because Respondent has a procedure in its IMP for addressing additional preventive and mitigative measures, I do not find a violation of §195.452(i)(1). Respondent did not provide Appendix J. Thus, I cannot determine if the procedure provides sufficient detail to be adequate to protect the high consequence areas. Therefore, this item will remain in the Amendment section of this Order.

Item 7 alleged three violations of 49 C.F.R. §§195.452(e)(1) and (i)(1). The Notice alleged

Respondent's IMP -

- did not describe in detail the process for continual evaluation and assessment, and did not include a justification for establishing the 5-year and 3-year (bare pipe) reassessment intervals (7a):
- •did not describe a methodology for choosing reassessment methods (7b); and
- did not address OPS notification for reassessment interval extension (7c).

Section 195.452(e)(1) requires an operator to establish an integrity assessment schedule that prioritizes the pipeline segments for assessment, based on all risk factors applicable to each segment. Section 195.452(j)(1) requires continual assessment and evaluation of each covered pipeline segment.

In response to 7a, Respondent said its reassessment intervals are directly from the regulation. Respondent explained it selected the 5-year interval as an initial reassessment period in the absence of historical data and experience demonstrating a different interval is warranted. At the hearing Respondent explained sections 4.11 and 4.12 of its IMP address the reassessment intervals and how changes are handled in the assessment schedule.

Section 195.452 (j)(1) requires an operator to establish continual assessment at specified intervals. Per §195.452(j)(3) intervals are not to exceed five years, but are to be based on the risk the line pipe poses to the high consequence area.

Section 4.11 of Respondent's IMP sets a five-year reassessment period for all segments except those with bare pipe. It does not appear the schedule accounted for the risk each segment poses to the high consequence area. Respondent's procedures show no process for determining which segments are of higher risk or of any basis why all segments pose the same risk and are to be assessed at five-year intervals. Respondent's procedures must include justification for the determinations made to implement its program. Accordingly, I find Respondent violated §§195.452 (e)(1) and (j)(1).

For 7b, Respondent initially argued its IMP discussed available and allowable methods to conduct an integrity assessment. Respondent does not interpret the regulation to require an operator to specify or justify the choice of assessment method. In its post-hearing submittal, Respondent maintained sections 4.10-4.11 of its IMP address the different assessment methods available and what conditions must exist to choose one method over another. Respondent further explained it uses a combination of methods for different situations and plans to describe its methodology in more detail in its next IMP revision.

Sections 4.10-4.11 of Respondent's IMP include statements on current assessment technology and preferred assessment methods. Respondent does not have a process for personnel to determine which assessment method is preferable in defined circumstances. Further, the program does not describe a methodology for choosing integrity reassessment methods. Section 195.452(j)(5) allows an operator to use certain methods to assess the line pipe. To carry out the

required continual integrity reassessments per §195.452(j)(1), Respondent must have procedures describing how its employees are to choose an assessment method based on the line segment conditions and the information analysis Respondent is required to conduct.

Accordingly, I find Respondent did not violate §195.452(j)(1) because its IMP has procedures for reassessment and lists assessment methods. But, as described, the procedures are not adequate to ensure safe operation of the pipeline system. Thus, this item will be included in the Amendment section of this Order requiring amendment of certain IMP procedures.

In response to 7c, Respondent explained it does not intend to deviate from the reassessment interval it had established. Respondent maintained it did not include an extensive write up to avoid the implication an extension is an acceptable practice. Respondent thought it obvious one would have to communicate with OPS to request an extension. Respondent said it would revise section 4.12 addressing assessment schedule changes to include such language.

The regulations require reassessment at intervals based on the risk each line segment poses to the high consequence areas but no longer than five years. An interval can extend longer than five-years in limited situations requiring OPS notification and adequate justification supporting the extension. Interval extensions are optional. Thus, I do not find a violation of §195.452(j)(1) because Respondent's procedures on reassessment do not provide for an extension.

Although Respondent stated it has no intention of deviating from the 5-year interval, circumstances, such as unavailable technology, may prevent Respondent from completing the assessment within that period. And as the IMP matures, Respondent may determine it can justify a longer interval on certain segments. Its IMP procedures should explain the circumstances in which an interval extension is allowed, the type of supporting documentation needed and how to notify OPS. Procedures should not assume employees know the proper method of notification. Accordingly, this item will remain in the Amendment section of this Order.

Item 8 alleged Respondent violated 49 C.F.R. §195.452(f)(7) because its integrity management program did not define the process for applying performance metrics to evaluate program effectiveness. Section 195.452(f)(7) requires an operator's integrity management program to have methods to measure the program's effectiveness.

Respondent initially maintained the regulation merely requires the IMP set forth methods to measure the program's effectiveness, and its section 5.2.3 meets this requirement. At the hearing Respondent said it understood OPS's concern was whether the IMP provides adequate detail on how performance metrics will be evaluated. Respondent explained section 5.2.3 contains a process for reevaluating the program's effectiveness and it has added the performance metrics in ASME B31.G. Respondent said it would include an expanded description of the process in its next revision.

Section 5.2.3 of Respondent's IMP is written in the future tense. The section says Respondent

will create a plan that includes performance measures. This section also gives suggested performance measures from ASME B31.8, rather than actually incorporating the measures into the program. Respondent's IMP needs an established process not one Respondent plans to establish at some future date. Accordingly, I find Respondent violated 49 C.F.R. §195.452(f)(7).

Item 9 alleged two violations of 49 C.F.R. §195.452(l)(1)(ii), which requires an operator to maintain certain records to establish compliance with the IMP requirements. The Notice alleged Respondent –

- had not recorded revisions to its integrity management program (9a); and
- had not analyzed pipeline integrity information inherited from BP, the previous owner of certain pipeline segments (9b).

In response to 9a, Respondent reiterated the IMP's reference to version 5 was not a fifth revision but a reference to a plan draft and plan footer used for internal circulation. OPS agrees Respondent tracked the program changes. Accordingly, I am withdrawing this allegation of violation.

For 9b, Respondent argued OPS had not cited a regulation requiring the specified action. Respondent maintained the regulation does not require any specified level of review. Respondent explained it was not trying to present BP's past assessments as part of Respondent's qualified baseline assessment. Rather, Respondent used the fact of previous assessments in its risk ranking algorithm. At the hearing OPS explained Respondent was not analyzing the historical information from the previous owner. Respondent said the algorithm used to determine ranking of the pipeline segments took into account this information but Respondent chose not to use the information in its baseline assessment. Respondent believed it better to start with a fresh baseline assessment.

The regulation OPS cited addresses the requirement to maintain for review documents to support actions Respondent takes to implement and evaluate each element required in an IMP. Respondent had information from the previous operator concerning internal inspection runs but could not demonstrate it was integrating this information into its IMP and analyzing the information. Thus, I do not find Respondent violated §195.452(l)(1)(ii), because it had the records for review.

Rather, Respondent's failure was not the lack of records to support its action but that Respondent failed to integrate this information into its IMP. Section 195.452(e)(1) requires operators, in establishing a baseline integrity assessment schedule, to base the schedule on certain factors, including the results of previous integrity assessments. Section 195.452(f)(3) requires operators to include in their IMP an analysis that integrates all available information about the integrity of the entire pipeline. Section 195.452(g) requires operators, in periodically evaluating the integrity of the pipeline segments, to analyze all available information about the integrity of the entire

pipeline system. This information includes data acquired in conjunction with other inspections and tests required under Part 195. This historical information is important to assessing the current condition of pipeline segments and evaluating the risks posed to high consequence areas. The Notice did not allege these violations although they more accurately reflect what Respondent failed to do. This item will be included in the Warning section of this document.

These findings of violation will be considered prior offenses in any subsequent enforcement action taken against Respondent.

WITHDRAWAL OF ALLEGATIONS

As explained in the section above, the following allegations of violation have been withdrawn.

The following were withdrawn because Respondent demonstrated compliance with the cited regulation.

- 1a Respondent's pipelines were accurately reflected in the National Pipeline Mapping System.
- 3c Respondent's engineering standard is consistent with the rule's repair criteria.
- 4 Respondent's IMP has procedures for determining remedial actions.
- 9a IMP interim revisions are recorded.

The allegations in Notice items 3d, 5c and 9b were withdrawn because the incorrect citation was used. Items 5c and 9b are included as warning items, discussed below.

PENALTY ASSESSMENT

Under 49 U.S.C. § 60122, Respondent is subject to a civil penalty not to exceed \$100,000 per violation for each day of the violation up to a maximum of \$1,000,000 for any related series of violations. The Notice proposed a total civil penalty of \$34,000 for the three violations of \$195.452(f)(1) (Items 1a, 1b, 1c), three violations of \$195.452(b)(3) (Items 2a, 2b, 2c), four violations of \$195.452(f)(8) (Items 3a, 3b, 3c, 3d), one violation of \$195.452(f)(4) (Item 4), three violations of \$195.452(e)(1) (Items 5a, 5b, 5c), one violation of \$195.452(i)(1) (Item 6), two violations of \$\$195.452(e)(1) and 195.452(j)(1) (Items 7a and 7b) and one violation of \$195.452(l)(1) (Item 9b).

49 U.S.C. § 60122 and 49 C.F.R. § 190.225 require that, in determining the amount of the civil penalty, I consider the following criteria: nature, circumstances, and gravity of the violation, degree of Respondent's culpability, history of Respondent's prior offenses, Respondent's ability to pay the penalty, good faith by Respondent in attempting to achieve compliance, the effect on Respondent's ability to continue in business, and such other matters as justice may require.

The allegations of violation for items 1a, 3c, 3d and 4 have been withdrawn and no penalties will be assessed. Although I did not make findings of violation with respect to items 1c, 2a, 5a, 5b, 6

and 7b, I found the IMP procedures associated with the cited regulations were inadequate. Thus, no civil penalty will be assessed but these items will be included below in the Amendment section. Items 5c and 9b will be treated as warning items, and no civil penalty will be assessed for these items.

With respect to the remaining violations, in assessing a civil penalty I have considered that for purposes of the Part 195 IMP regulations, Respondent originally was a small operator with 35 miles of pipeline, until it purchased another operator's system. OPS did not conduct a quick hit inspection with Respondent, as it did with some large operators, which would have alerted Respondent to the level of detail OPS was expecting of operators with their integrity management programs. OPS had public workshops for operators. On its web site OPS posted inspection protocols beginning in July 2002, and numerous FAQs beginning in October 2001 to help operators implement the IMP regulations. Respondent was either unaware this information was available or failed to use it as a resource.

Nevertheless, I recognize that in developing its IMP Respondent did not have the knowledge and experience of a larger operator.

The Notice proposed a civil penalty of \$1,000 for violation of 49 C.F.R. §195.452(f)(1) (Item 1b). Other than Respondent misunderstanding the scope of which facilities needed to be identified, Respondent did not present any mitigating information. The identification of pipeline segments, including all parts of pipeline facility, is a basic and crucial part of the regulation and of an integrity management program. I see no basis for reducing this penalty and assess \$1,000 for this violation.

For the violation of §195.452(b)(3) (Item 2c), the Notice proposed a civil penalty of \$5,000. Respondent has deleted from its IMP the statement about there not being any pre-1970 ERW pipe or lap welded pipe in the system. The statement was a mistake and has been deleted. But, although the amended procedure now discusses future acquired pipelines having such pipe, there is still no discussion of how the existing pipe will be addressed. Because these types of pipe are susceptible to longitudinal seam failure, the regulation specifies certain capabilities the integrity assessment method must have. It is critical Respondent provide for this in its IMP. Respondent's risk analysis, nonetheless, considered the fact this type of pipe was in the system, and Respondent has been monitoring the pipe as part of its overall operations and maintenance program. Thus, I will reduce the penalty to \$3,000.

The Notice proposed a civil penalty of \$2,500 for violation of \$195.452(f)(8)(Item 3a). It is important Respondent's IMP have a process for how personnel are to review integrity assessment results to ensure consistency in the review process and that proper methods are used to validate the results. Respondent made a good faith effort to comply and believed its work orders and procedures concerning dig prioritization, quality control and communications satisfied the regulation. I am reducing the civil penalty to \$1,500.

For the second violation of §195.452(f)(8)(Item 3b), the Notice proposed a civil penalty of \$1,000. Again, it is essential Respondent's IMP describe what the qualification process is to ensure its personnel will always have the requisite training and qualifications to perform the review. As mitigating information Respondent believed it complied with the regulation by having qualified personnel with years of experience perform the reviews. Respondent misunderstood the necessity to also have a qualification process description. Due to Respondent's good faith effort to comply with the requirement, I will reduce the penalty to \$500.

The Notice proposed a civil penalty of \$2,000 for violation of §§195.452(e)(1) and 195.452(j)(1) (Item 7a). The purpose of these requirements is for the operator to establish the reassessment intervals based on the specific risk factors reflecting the risk conditions on each pipeline segment and to prioritize the segments according to these risks. As mitigating information, Respondent demonstrated good faith in trying to establish a reassessment interval and believed its across-the board three-year interval for bare pipe and five-year interval for all other pipe met the IMP requirement because the intervals stayed within the maximum allowable period. Respondent planned to update the intervals as it gained more information about the segments. I assess the civil penalty for this violation at \$1,000.

Respondent has not maintained a civil penalty will affect its ability to continue in business or that it is unable to pay. Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a total civil penalty of \$7,000.

Payment of the civil penalty must be made within 20 days of service. Federal regulations (49 C.F.R. § 89.21(b)(3)) require this payment be made by wire transfer, through the Federal Reserve Communications System (Fedwire), to the account of the U.S. Treasury. Detailed instructions are contained in the enclosure. Questions concerning wire transfers should be directed to: Financial Operations Division (AMZ-120), Federal Aviation Administration, Mike Monroney Aeronautical Center, P.O. Box 25082, Oklahoma City, OK 73125, (405) 954-4719.

Failure to pay the \$7,000 civil penalty will result in accrual of interest at the current annual rate in accordance with 31 U.S.C. § 3717, 31 C.F.R. § 901.9 and 49 C.F.R. § 89.23. Pursuant to those same authorities, a late penalty charge of six percent (6%) per annum will be charged if payment is not made within 110 days of service. Furthermore, failure to pay the civil penalty may result in referral of the matter to the Attorney General for appropriate action in a United States District Court.

COMPLIANCE ORDER

The Notice proposed a compliance order with respect to violations of §§195.452(f)(1), 195.452(b)(3), 195.452(f)(8), 195.452(f)(4), 195.452(e)(1), 195.452(i)(1), 195.452(j)(1), 195.452(f)(7) and 195.452(l)(1) (Notice items 1a, 1b, 1c, 2a, 2c, 2d, 3a, 3b, 3c, 4, 5a, 5c, 6, 7a, 7b, 7c, 8, 9a and 9b). The allegations of violation concerning 1a, 3c, 4 and 9a have been withdrawn and will not be included in this compliance order. Although I did not make findings

of violation with respect to items 1c, 2a, 5a, 6, 7b and 7c, I found the procedures implementing the requirements were inadequate and must be amended, as set forth below. Items 5c and 9b will be included as warning items.

As for violations of $\S\S195.452(f)(1)$, 195.452(b)(3), 195.452(f)(8), 195.452(e)(1), 195.452(j)(1) and 195.452(f)(7) (items 1b, 2c, 2d, 3a, 3b, 7a, 8), Respondent has not demonstrated compliance with the applicable regulations.

Under 49 U.S.C. § 60118(a), each person who owns or operates a pipeline facility is required to comply with the applicable safety standards established under chapter 601. Pursuant to the authority of 49 U.S.C. § 60118(b) and 49 C.F.R. § 190.217, Respondent is hereby ordered to take the following actions to ensure compliance with the pipeline safety regulations applicable to its operations.

- 1. To address violation of §195.452(f)(1)(Item 1b), Respondent must identify all facilities in its pipeline system that could affect a high consequence area and include these facilities in its IMP program and implementing procedures.
- 2. To address violation of §195.452(b)(3) (Item 2c), Respondent must establish procedures that address the pre-1970 ERW and lap welded pipe in its system (current and future pipe). Perform and document an engineering seam susceptibility failure analysis to determine if any segments with this type of pipe are susceptible to longitudinal seam failure. Included detailed procedures addressing assessment methods to assess these types of pipe and ensure the assessment methods have the capabilities to specifically address seam issues, and detect corrosion and deformation anomalies. Document (and perform if not already performed and documented) that the baseline assessment of these segments have been done by hydrostatic test or by assessment methods that have the capabilities to assess seam integrity and detect corrosion and deformation anomalies.
- 3. To address violation of §195.452(b)(3) (Item 2d), Respondent's IMP must describe and document the process for revising the baseline assessment plan.
- 4. To address violation of §195.452(b)(3)) (Item 3a), Respondent must have in its IMP a procedure describing the process for reviewing assessment results. These procedures must document roles and responsibilities, by organizational group or title, for implementing required actions, the information personnel must use in reviewing integrity assessment results and sources of the information, records required to be generated in the process of implementing assessment result reviews and integrity evaluations, and quality requirements for the review to assure accuracy and completeness.
- 5. To address violation of §195.452(b)(3) (Item 3b), Respondent's IMP must have a detailed description of how personnel who review integrity assessment results will be qualified, and what the requisite qualifications are to perform the review.

- 6. To address violation of §§195.452(e)(1) and (j)(1)(Item 7a), Respondent must include in its IMP procedures, the basis for determining its reassessment intervals. These intervals are to be based on risk factors reflecting the risk conditions on the pipeline segment. The IMP must also include the justification supporting the reassessment intervals.
- 7. To address violation of §195.452(f)(7) (Item 8), Respondent must include performance metrics in its IMP procedures to measure whether Respondent's program is effective in assessing and evaluating the integrity of each pipeline segment in Respondent's system and in protecting the high consequence areas. Respondent should refer to Appendix C of Part 195 in developing these measures.
- 8. Submit documentation demonstrating compliance with each of the above listed items to the Regional Director, Western Region, in Lakewood CO, within 30 days following receipt of this Final Order.
- 9. The Regional Director may extend the period for complying with any of the required items if Respondent requests an extension and adequately justifies the reasons for the extension.

AMENDMENT OF PROCEDURES

The Notice alleged the following inadequacies in Respondent's integrity management program and proposed to require amendment of some of Respondent's procedures to comply with the requirements of §192.452.

- Respondent's IMP procedures do not specify the process for communicating information from field activities, which could result in identifying new or extended segments that could affect high consequence areas (Item (1d);
- Respondent's procedures do not include a sensitivity analysis based on a range of break sizes and response times. Rather, Respondent's procedures for determining the indirect effects of a release for identifying could affect segments were based on a worst-case discharge (Item 1e).

In response to the first alleged inadequacy, Respondent maintained it has several programs in place to provide direct feedback to and from the field. Its IMP uses information obtained from the field and other sources but is not meant to be redundant by including all procedures and policies set forth in other manuals. At the hearing Respondent further explained information gathered by its line riders, aerial patrols, maintenance and operations reports are reviewed by its district engineer. This information goes to the integrity management team and the individual in charge of distribution and implementation of the team's activities. Respondent said this process is documented in its operations and maintenance manual and operator qualification plan and Respondent will reference these plans in its next IMP revision.

Because Respondent's submittals did not document IMP revisions to address this inadequacy, this item will remain in this Amendment.

In response to the second alleged inadequacy, Respondent initially said it used a worst-case discharge when performing the sensitivity analysis similar to what it does for Part 194 for emergency response planning. Respondent argued the IMP rule does not require multiple spill volume cases, break sizes and range of response times be examined. At the hearing, Respondent said it understood OPS's concern to be Respondent's lack of a procedure to examine the effect of spill volume and spill spread to evaluate potential spill impacts on high consequence areas. Respondent explained its emergency response plan looks at such data in detail and analyzes the worst-case scenario as well as lesser impacts and it will reference this plan in its next IMP revision.

While a worst-case discharge may be the worst case, in some instances a leak can go undetected for months or years with a cumulative loss greater than a worst-case discharge. Thus, procedures should include several scenarios to determine how the pipeline segment could affect the high consequence area.

As explained above, with respect to items 1c, 2a, 5a, 5b, 6, 7b and 7c, although I did not find Respondent's procedures violated certain IMP requirements, I found the procedures were not adequate to ensure the safe operation of Respondent's system. These items will be included in this Amendment.

Accordingly, I find that Respondent's procedures are inadequate to ensure safe operation of its pipeline system. Pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237, Respondent is ordered to make the following revisions to its integrity management program procedures. Respondent must -

- 1. To address the procedural inadequacy described in item1c, revise the segment identification procedures to better describe the methodology used in identifying pipeline segments in Respondent's system. The process must detail each step Respondent takes in determining if a segment could affect or could not affect a high consequence area. This process must also include the review of results provided by Respondent's consultant to ensure the accuracy of the segment identification process.
- 2. To address the procedural inadequacy described in item 1d, specify how personnel are to use feedback from field activities that could result in the identification of new or extended segments that could affect high consequence areas. Include which company personnel are to provide this information, how it is to be recorded and how this information is to be communicated among personnel.
- 3. To address the procedural inadequacy described in item 1e, include a sensitivity analysis (as opposed to a spill scenario) based on a range of break sizes and response times to ensure the process reflects a conservative evaluation of potential spill impacts on high consequence areas.
- 4. To address the procedural inadequacy described in item 2a, specify in better detail the assessment methods that can be used for each segment of pipeline to be assessed. The procedures are to include the criteria for choosing a certain method of assessment to address the

specific risks on each pipeline segment.

- 5. To address the procedural inadequacy described in item 5a, provide more detail on the risk analysis model to include the specific variables Respondent uses for its system, bases for these risk factors, variable weights, and the process for populating, maintaining and updating the risk analysis input database.
- 6. To address the procedural inadequacy described in item 5b, specify in detail the process for populating and updating the risk model data fields with the best available information from records and input from subject matter experts. This process must include use of historical information from the previous operator of any pipelines Respondent acquired or acquires.
- 7. To address the procedural inadequacy described in item 6, describe in detail the process for identifying and implementing additional preventive and mitigative measures to protect the high consequence areas. This process must include steps for choosing measures, assessing risks including the factors to use in analyzing risk, and determining whether and how to implement the additional measures. The process must include how leak detection improvements will be evaluated and how the need for emergency flow restricting devices will be determined.
- 8. To address the procedural inadequacy described in item 7b, describe the detailed process for choosing an integrity reassessment method. This process must include how an assessment method will be determined based on the specific conditions Respondent has identified for the pipeline segment, and the information analysis applied to the segment.
- 9. To address the procedural inadequacy described in item 7c, describe the process for notifying OPS if an extension of an integrity reassessment interval is necessary based on the circumstances allowed under 49 C.F.R. §195.452(j)(4), and the necessary supporting documentation to accompany any such notification.
- 10. Submit the amended procedures to the Regional Director, Western Region, OPS within 30 days following receipt of the Final Order.
- 11. The Regional Director may extend the period for complying with any of the required items if the Respondent requests an extension and adequately justifies the reasons for the extension.

WARNING ITEMS

The Notice issued a warning with respect to items 1f and 2b.

Item 1f warned Respondent to evaluate the constituents of its pipeline products and evaluate the potential impacts by air dispersion on high consequence areas.

Respondent maintained air dispersion modeling is not required. Respondent said it has product quality requirements shippers must meet, and these requirements limit H2S. Respondent submitted some chemical analyses of the crude oil it transports. Respondent said, based on its testing program, it has determined there is no threat of impact to a high consequence area from

product constituents. Thus, air dispersion modeling is not needed and it has revised its IMP procedures to reflect that determination.

An operator has to understand how a failure could affect the high consequence areas. This includes an air dispersion analysis to determine how fumes from a crude oil release could affect the areas. Respondent monitors after spills for benzene, lower explosion limit concentrations of fumes and H2S, but does not consider these effects in analyzing the potential effects of spills on high consequence areas. Respondent should do so.

Item 2b warned Respondent that after it had revised its baseline assessment plan, it failed to revise its assessment schedule so that at least 50% of segments were assessed by September 30, 2004. Respondent said OPS's calculation was wrong and Respondent had assessed more than 50% of the affected segments. Respondent has assessed the required percentage of segments and need take no further action to address this item.

As discussed above, with respect to items 5c - lack of a process for analyzing the risk of pipeline facilities and 9b -not analyzing integrity information inherited from the previous pipeline owner, I did not find violations of the cited regulation because of the incorrect citations. This does not mean that Respondent did not commit a violation for these failures in its IMP processes.

For those warning items described above Respondent has not yet addressed (items 1f, 5c and 9b), Respondent should take the necessary corrective action to come into compliance. Respondent is again warned that if OPS finds a violation for any of these items in a subsequent inspection, enforcement action will be taken.

Under 49 C.F.R. § 190.215, Respondent has a right to petition for reconsideration of this Final Order. The petition must be received within 20 days of Respondent's receipt of this Final Order and must contain a brief statement of the issue(s). The filing of the petition automatically stays the payment of any civil penalty assessed. All other terms of the order, including any required corrective action and amendment of procedures, remain in full effect unless the Associate Administrator, upon request, grants a stay. The terms and conditions of this Final Order are effective upon receipt.

Theodore\L. Willke

ng Associate Administrator

for Pipeline Safety

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Date Issued