

Response to comments on 30-day notice for OMB Control #2137-0596 (Pipeline Safety: Request for Revision of a Previously Approved Information Collection: National Pipeline Mapping System Program)

1. Positional accuracy

In the Federal Register notice published on 6/22/16, PHMSA modified its positional accuracy definition to read as follows: “Hazardous liquid pipeline operators must submit data with a positional accuracy of +/- 50 feet. Gas transmission operators must submit data at +/- 50 feet accuracy for all segments which are in a Class 2, Class 3, or Class 4 area; are within a HCA or have one or more buildings intended for human occupancy or an identified site, (See § 192.903), within its potential impact radius. All other gas pipeline segments must be mapped to a positional accuracy of +/- 100 feet.”

Comments from INGAA, TransCanada, and Gary Krichau asked PHMSA to align its definition with that of Moderate Consequence Areas from a rulemaking in progress by altering the passage “have **one** or more buildings intended for human occupancy or an identified site” to “have **five** or more buildings intended for human occupancy or an identified site.” Synchronizing these definitions will reduce the burden on operators by allowing them to maintain fewer classifications of data for PHMSA reporting requirements.

Mid-American asked that the word “centerline” be added to the definition. PHMSA accepts these comments and is updating the definition of the positional accuracy requirement to read as follows: “Hazardous liquid pipeline operators must submit centerline data with a positional accuracy of +/- 50 feet. Gas transmission operators must submit centerline data at +/- 50 feet accuracy for all segments which are in a Class 2, Class 3, or Class 4 area; are within a HCA or have one or more buildings intended for human occupancy or an identified site, (See § 192.903), within its potential impact radius. All other gas pipeline segments must be mapped to a positional accuracy of +/- 100 feet.”

API and AOPL requested that PHMSA keep the field which states the positional accuracy (e.g. the segment is accurate within 50 feet) on the password-protected viewer PIMMA only, and not display it on the Public Viewer, which is used by the general public. The Pipeline Safety Trust commented that the positional accuracy attribute should be part of the data on the Public Viewer, and urged PHMSA to accept updated positional accuracy from operators prior to the current deadline of 2024. As the current field which gives the segment's positional accuracy is only viewable on PIMMA, PHMSA believes that the same field with the new accuracy values should also be restricted to PIMMA. The 30-day notice did not indicate which security level would be used for this attribute. PHMSA's decision is that it will be available in PIMMA, but not the Public Viewer. PHMSA is prepared to accept the new positional accuracy from operators in an NPMS submission as it becomes available.

2. Segment could affect a High Consequence Area (HCA)

TransCanada opposed collection of this attribute due to concerns over PHMSA's ability to keep the data secure. PHMSA has safeguarded the sensitive ecological and drinking water High Consequence Area datasets since their release in 2001 with no data breaches, and will continue to safeguard this data and the "could affect" segments in the future.

API and AOPL requested that PHMSA provide a definition for "could affect." Appendix C of 49 CFR §195.452 already provides guidance on determining if a segment could affect a High Consequence Area. Additional guidance on when a segment "could affect" an HCA can also be found by the Final Orders issued by PHMSA in CPF #: 1-2002-5007 and CPF #: 5-2008-5006, pages 21-22 of PHMSA's Hazardous Liquid Integrity Management Enforcement Guidance, and pages 21-24 in PHMSA's Hazardous Liquid Integrity Management, Inspection Protocols. PHMSA believes these multiple sources provide adequate guidance as to when a segment "could affect" an HCA.

3. Pipe grade

AGA commented that this data element has no independent value when calculating risk. They asked whether it would apply to pre-1970 (grandfathered) pipe and requested that it be moved to Phase 3. API and AOPL requested that this data element be moved to Phase 2. Pipe grade is essential information in issues regarding pipe integrity, and is a necessary component in determining and verifying the allowable operating pressure of a pipeline. PHMSA will move this data element to Phase 2. In response to API's and AOPL's inquiry about pre-1970 pipe, PHMSA notes 49 CFR §§ 192.13, 192.359(b), 192.455, and 192.457 contain clauses that apply to the construction and maintenance of pipelines. However, the data points proposed in this information collection do not deal with the construction or maintenance of pipelines—only with the characteristics of the pipeline. Therefore, the requirements for this data element do apply to pre-1970 pipelines.

4. Wall thickness

AGA commented that this data element has no independent value when calculating risk and does not relate to the risk of corrosion. They asked whether it would apply to pre-1970 (grandfathered) pipe and requested that it be moved to Phase 3. API and AOPL also asked whether it would apply to pre-1970 (grandfathered) pipe and requested that it be moved to Phase 2. PHMSA analysts and inspectors identified nominal wall thickness as a fundamental piece of descriptive information for pipeline risk. This information is especially critical for determining the relative risk of corrosion. Loss of wall thickness can occur for different reasons including corrosion, arc burns, and gouges due to excavation damage or improper back-fill. Prior excavation damage and corrosion are time-dependent threats. This additional data element will provide PHMSA the means to assess the adequacy of wall thickness requirements and remaining strength projections over time. Wall thickness can also be used to determine if existing pipe design is adequate for the present class location. Additionally, a lower wall thickness value, in the

presence of inadequate cathodic protection, indicates a greater chance that an anomaly will grow to a level that requires intervention per 49 C.F.R. §192 or §195.

PHMSA will move this data element to Phase 2. In response to API's and AOPL's inquiry about pre-1970 pipe, PHMSA notes §§ 192.13, 192.359(b), 192.455, and 192.457 contain clauses that apply to the construction and maintenance of pipelines. However, the data points proposed in this information collection do not deal with the construction or maintenance of pipelines—only with the characteristics of the pipeline. Therefore, the requirements for this data element do apply to pre-1970 pipelines.

5. Pipe join method

AGA requested that operators have a "predominant" option or that "flanged" be removed as a choice to avoid heavy segmentation (since a very common scenario is to have a flanged valve attached to a pipe segment which has a welded join method). PHMSA will accept predominant values, where the value reported represents the characteristics of 90% or more of the pipe segment.

6. Seam type

PHMSA requires seam type to evaluate the risk of Low Frequency Electric Resistance Weld seam failures in all areas. MAOP is determined using 49 C.F.R. §192.105 and longitudinal joint factor (seam type) is needed to properly determine MAOP.

API and AOPL asked whether this element would be required for pre-1970 (grandfathered) pipe and requested that it be moved to Phase 2. They asked whether it would be required for segments where a yield test has been performed to verify MAOP/MOP. AGA also asked whether it would apply to pre-1970 (grandfathered) pipe and requested that it be moved to Phase 3. AGA stated that operators are not required to have this information. INGAA requested that this data element be collected only for Class 3, Class 4 and "could affect" HCA segments, which would match the requirements of the NPRM titled

“Pipeline Safety: Safety of Gas transmission and gathering pipelines” (2137-AE71). PHMSA will move this data element to Phase 2. Because this data is needed to evaluate the risk of Low Frequency Electric Resistance Weld seam failures in all areas, PHMSA will collect this element for all pipe segments, with an option to report the seam type is unknown. In response to API's and AOPL's inquiry about pre-1970 pipe, PHMSA notes 49 CFR §§ 192.13, 192.359(b), 192.455, and 192.457 contain clauses that apply to the construction and maintenance of pipelines. However, the data points proposed in this information collection do not deal with the construction or maintenance of pipelines—only with the characteristics of the pipeline. Therefore, the requirements for this data element do apply to pre-1970 pipelines.

7. Maximum Allowable Operating Pressure (MAOP) / Maximum Operating Pressure (MOP)

API and AOPL requested that a definition of MOP be included, that it not be required for segments with a SMYS at or under 20%, and that this element be moved to Phase 3. AGA opposed collection of this element, saying that MAOP is already a factor in SMYS calculation. The definition of MOP is as follows: The maximum pressure at which a pipeline or segment of a pipeline may be normally operated under Part 195. More information about MOP can be found in 49 CFR §195.406. After discussions with the Transportation Security Administration (TSA), PHMSA determined this attribute would receive Sensitive Security Information (SSI) status. PHMSA determined that further research is needed to develop the necessary safeguards and procedures for collecting this attribute. As a result, the attribute listed above has been removed from this information collection. PHMSA reserves the right to reconsider collecting this attribute in the future.

8. Percent Specified Minimum Yield Strength (SMYS)

API and AOPL asked whether Percent SMYS would apply to pre-1970 (grandfathered) pipe and requested that it be moved to Phase 2. They also asked whether it would be required for segments where a yield test has been performed to verify MAOP/MOP. After discussions with the TSA, PHMSA determined this attribute would receive SSI status. PHMSA determined that further research is needed to develop the necessary safeguards and procedures for collecting this attribute. As a result, the attribute listed above has been removed from this information collection. PHMSA reserves the right to reconsider collecting this attribute in the future.

9. Inline Inspection (Yes/No)

PHMSA mandates that new and replaced pipelines be capable of ILI in 49 CFR §192.150(a).

AGA commented that collecting this data as simply yes or no would not satisfy NTSB mandates P-15-18 (Require that all natural gas transmission pipelines be capable of being in-line inspected by either reconfiguring the pipeline to accommodate in line inspection tools or by the use of new technology that permits the inspection of previously uninspectable pipelines; priority should be given to the highest risk transmission pipelines that considers age, internal pressure, pipe diameter, and class location.) and P-15-20 (Identify all operational complications that limit the use of in-line inspection tools in piggable pipelines, develop methods to eliminate the operational complications, and require operators to use these methods to increase the use of in-line inspection tools). Collection of this data element will assist PHMSA in taking the first steps towards satisfying the above NTSB mandates by knowing where non-piggable lines exist. Additionally, PHMSA will use this data element for risk evaluation, inspection prioritization, Integrity Management Plan (IMP) evaluation and decision support for future regulations, including evaluating financial burden/impact. AGA asks that this data element be moved to Phase 3. INGAA asked that ILI be defined as follows: "An instrumented inline inspection segment means a length

of pipeline through which a free-swimming commercially available inline inspection tool can travel without the need for any permanent physical modifications to the pipeline and (1) is capable of assessing the identified threat(s), (2) can inspect the entire circumference of the pipe and (3) can record or transmit relevant, interpretable inspection data." PHMSA rejects INGAA's proposed new definition because robotic ILL crawlers are an acceptable method of inline inspection yet are not included in INGAA's definition. However, PHMSA accepts that the definition of ILL given in the 30-day notice could benefit from clarification, and changes the Inline Inspection data element to read as follows: "whether a line is capable of accepting an inline inspection tool (defined as an internal passage device that can assess the geometry and pipe wall conditions on a continuous basis for the pipeline segment transited) with currently available technology." This data element will be collected in Phase 1.

10. Year of last assessment

TransCanada requested that this element be collected in Phase 3. PHMSA's research, consisting of conversations, meetings, and interviews with individual pipeline operators and industry groups from 2012 to the present indicated that operators do not require seven years to compile this information. This data element will be collected in Phase 2.

11. Method of last assessment

API and AOPL asked if the year of last pressure test would be required for grandfathered lines. They stated that pressure test information should not be required for lines operated at or under 20% SMYS. PHMSA responds that operators with exempt lines (which does not include all lines operated at or under 20% SMYS) would use the "EX" code to represent an exempt pipeline segment. TransCanada requested that this element be collected in Phase 3. AGA commented that PHMSA has not explained how the assessment method would improve risk analysis and why it needs to be collected geospatially instead of as tabular data on the annual report. PHMSA responds that this information is critical for risk

assessment. The time elapsed from the last hydrostatic test or other assessment method increases risk of failure. This data needs to be collected geospatially so that PHMSA can understand where the high-risk segments are instead of simply receiving a mileage figure of an operator's assessments.

MidAmerican asked PHMSA to clarify if the assessment is defined as a full assessment or interim seven-year assessment. MidAmerican also requests PHMSA clarify if the direct assessment method includes low stress reassessments as outlined in 49 CFR §192.941. PHMSA's response is that the assessment is defined as the date of the last successful ILI run. TransCanada requested that this element be collected in Phase 3. PHMSA's research, consisting of conversations, meetings, and interviews with individual pipeline operators and industry groups from 2012 to the present indicated that operators do not require seven years to compile this information. This data element will be collected in Phase 2. In response to API's and AOPL's inquiry about pre-1970 pipe, PHMSA notes 49 CFR §§ 192.13, 192.359(b), 192.455, and 192.457 contain clauses that apply to the construction and maintenance of pipelines. However, the data points proposed in this information collection do not deal with the construction or maintenance of pipelines—only with the characteristics of the pipeline. Therefore, the requirements for this data element do apply to pre-1970 pipelines.

12. Onshore/offshore

API and AOPL requested that this data element be viewable only to users of the password-protected application PIMMA “to protect vital energy infrastructure,” and not to the general public via the Public Viewer. PHMSA sees no security risk in including the onshore/offshore attribute on the Public Viewer. This data element will remain part of the Public Viewer.

13. Abandoned pipelines

API and AOPL asked PHMSA whether submission of abandoned segments would only apply to lines abandoned from the effective date of the Information Collection forward. Yes, submission will be

required only for lines abandoned from the effective date of the Information Collection forward. PHMSA is changing the description of the abandoned lines element from “PHMSA proposed that all gas transmission and hazardous liquid pipelines abandoned after the effective date of this information collection be mandatory submissions to the NPMS” to “PHMSA proposed that all gas transmission and hazardous liquid pipelines abandoned only after the effective date of this information collection be mandatory submissions to the NPMS.”

14. Mainline block valves

AGA supports including only emergency valves, not all mainline block valves, and requests that this element be moved to Phase 3. In their 2015 comment, they requested changes to the technical specifications of this attribute, found in Appendix A.3 of the Draft NPMS Operator Standards Manual associated with this Information Collection. Specifically, they requested that PHMSA remove the “valve type” attribute (the choices are ball, gate, plug, check valve or other) and modify the “operation of valve” attribute to remove the “check valve” choice. Spectra Energy requests that PHMSA provide a definition of a mainline block valve. A mainline block valve is a valve positioned at a location along the pipeline system that can be closed down to isolate a line section. MidAmerican and TransCanada oppose collection of this data element, saying that emergency responders should not be operating these valves themselves. TransCanada believes that this data, if needed by PHMSA, should be collected through audits. After discussions with TSA, PHMSA determined this attribute would receive SSI status. PHMSA determined that further research is needed to develop the necessary safeguards and procedures for collecting this attribute. As a result, the attribute listed above has been removed from this information collection. PHMSA reserves the right to reconsider collecting this attribute in the future.

15. Gas storage fields

API and AOPL commented that this data element should not be collected by PHMSA as it is not part of the agency's regulatory assets. TransCanada also opposed collection of this attribute. After discussions with the TSA, PHMSA determined this attribute would receive SSI status. PHMSA determined that further research is needed to develop the necessary safeguards and procedures for collecting this attribute. As a result, the attribute listed above has been removed from this information collection. PHMSA reserves the right to reconsider collecting this attribute in the future.

16. Pump and compressor stations

TransCanada opposed collection of this data element over concerns about data security. After discussions with the TSA, PHMSA determined this attribute would receive SSI status. PHMSA determined that further research is needed to develop the necessary safeguards and procedures for collecting this attribute. As a result, the attribute listed above has been removed from this information collection. PHMSA reserves the right to reconsider collecting this attribute in the future.

17. Additional Liquefied Natural Gas (LNG) plant attributes

API and AOPL requested that this data element be viewable only to users of the password-protected application PIMMA, and not to the general public via the Public Viewer. MidAmerican commented that emergency responders should be working directly with operators during an emergency to obtain this data and should not be getting it through the NPMS. PHMSA will restrict the additional LNG plant attributes to PIMMA, and will advise emergency responders that their first line of communication about LNG plant information in an emergency should be to the pipeline operator, not PIMMA.

18. Breakout tanks

API and AOPL requested that this data element be viewable only to users of the password-protected application PIMMA, and not to the general public via the Public Viewer. TransCanada commented that

the burden to prepare this information is high and PHMSA has not demonstrated sufficient need for the data. PHMSA intends to retain this data element in the Information Collection. Such data is needed by PHMSA inspectors to locate individual tanks within a tank farm and to determine if these tanks contain breakout tanks as well as non-breakout tanks. Additionally, PHMSA believes the burden to prepare this information is not high; information that was previously collected in optional breakout tank submissions has been removed from this data element, as it is already collected in the operator's transmittal letter.

Operators will not be required to submit breakout tank data until the first submission year after the effective date. In 2015, operators reported 7,571 breakout tanks on their PHMSA annual reports. 3,442 breakout tanks, or approximately 45% of the total number of breakout tanks, have been submitted to the NPMS on an optional basis. The high percentage of operators submitting this currently optional data shows that this data is not overly burdensome for an operator to submit. Breakout tanks are currently viewable in the Public Viewer as well as on commercially available imagery. PHMSA will continue to display this element on the Public Viewer.

19. Data Security

API and AOPL commented that PHMSA needs to provide more details on how Sensitive Security Information (SSI) data elements will be protected. TransCanada, Texas Oil and Gas, and American Fuel Petrochemical also expressed doubt about PHMSA's ability to protect SSI data elements. After discussions with the TSA, PHMSA determined some attributes would receive SSI status. PHMSA determined that further research is needed to develop the necessary safeguards and procedures for collecting these attributes. As a result, the attributes listed below have been removed from this information collection. PHMSA reserves the right to reconsider collecting these attributes in the future.

- Percent SMYS
- MAOP/MOP

- Segment could affect a Drinking Water Unusually Sensitive Area
- Pump and compressor stations
- Mainline block valves
- Gas storage fields

20. Legality

AGA commented that operators are not required to have GIS and many of these attributes are not required in 49 C.F.R. Part 191 and Part 195. NPMS submission is required in 49 CFR §191.29 and §195.61. If an operator does not have a GIS, s/he may submit NPMS data as ASCII text file coordinate pairs, with an accompanying spreadsheet containing attribute information for each pair. The NPMS Operator Standards Manual, available at https://www.npms.phmsa.dot.gov/Documents/Operator_Standards.pdf provides further details on making this type of submission.

INGAA asked that the following language be added: “Except where stricter quality or accuracy requirements are defined in this document, operators should use their best readily available data and engineering judgment to determine attribute values.” PHMSA acknowledges INGAA's comments and will accept NPMS data based on sound engineering judgment. Attributes in this information collection must accurately reflect pipeline, LNG, and breakout tank characteristics based on exact data or sound engineering judgement, not based solely on the best readily available data.

NTSB Safety Recommendation P-15-4 includes improving the accuracy of attribute details relevant to safety, 49 CFR §§ 191.29 and 195.61 require that operator submittals to the NPMS reflect assets as of December 31 of the previous year, and comments to date support improving the accuracy and completeness of the NPMS. Also, Safety Recommendation P-15-22 (to develop and implement a plan to improve data integration for integrity management) is supported by this information collection. In

support of these recommendations, regulations, and pipeline safety needs, operators should use exact data or sound engineering judgement to submit accurate information to the NPMS.

21. Burden

AGA, Texas Oil and Gas, and Spectra commented that the burden has been underestimated. PHMSA acknowledges that the increased number of required attributes will result in an increased burden on operators to submit data to the NPMS. Beginning in 2012 when the information collection was in the planning stages, PHMSA researched industry practices across both large and small operators in an effort to estimate the incremental burden of complying with the proposed changes to this information collection. The majority of the requested attributes are currently in operators' GIS systems. The estimated burden reflects this and takes into consideration the amount of effort and time it will take for operators to submit data that is currently not in their GIS systems. PHMSA has adopted a phased approach which will allow operators to submit first those data elements currently in their GIS systems. Data elements which will require more effort will be submitted in later phases. The largest burden is associated with submitting data on positional accuracy. To account for this, PHMSA will allow operators until 2024 to submit this data. This will allow operators to survey their lines in coordination with the required integrity management assessments. Six attributes or data layers were removed from this information collection since the last 30-day notice. These measures were developed in an effort to reduce the burden on operators to comply with this data collection.

INGAA asked that the filing deadline for NPMS submissions for gas transmission operators be moved to March 30 annually, instead of the current March 15 deadline. PHMSA responds that a deadline change would require a rulemaking, as the March 15 deadline is specified in 49 CFR §191.29. However, any operator who needs up to an additional month to prepare his/her NPMS submission is welcome to contact PHMSA's GIS Manager to ask for an extension.

22. General

Spectra requested the ability to submit a full replacement NPMS submission each year and to eliminate the Revision Code field (REVIS_CD) for individual attributes. They asked that PHMSA train emergency responders in NPMS usage. Because PHMSA uses change tracking to create pipeline “history,” which allows PHMSA to differentiate operator performance from pipeline performance and view the history of a pipe segment as it changes operators, submitting the Revision Code field is required. Full replacements are still the most common NPMS submission type and are never discouraged, but NPMS staff have developed simplified alternatives for operators with very few or no changes to report. Operators who have difficulty in determining what has changed in their assets since their previous NPMS submission are asked to review the guidance in the [Operator Submission Guide](#). There is no Revision Code required for individual attributes. See the [NPMS Operator Standards Manual](#) for further details. PHMSA conducts numerous outreach efforts each year and created user demonstration videos to educate emergency responders about the NPMS.

After internal discussion, PHMSA will move the element “Facility Response Plan Sequence Number” to from Phase 1 to Phase 2. PHMSA’s research indicates that operators may need additional time to collect the data for this attribute. PHMSA will move the element “Decade of Installation” to Phase 2. These attributes have been simplified from earlier Federal Register notices and PHMSA’s research shows they are available in operators’ systems.

The Pipeline Safety Trust asked for more data elements to be added to the Public Viewer instead of being kept only on password-protected PIMMA. PHMSA has reviewed all data elements individually and has determined the appropriate security level for each attribute based on research and multiple discussions with TSA officials.

American Fuel Petrochemical and Texas Oil and Gas asked that PHMSA convene a working group including industry stakeholders before finalizing the Information Collection. PHMSA does not plan to convene a working group. The Information Collection has had three comment periods, two of which have been extended to allow all interested parties to submit their comments, as well as two public meetings (in 2014 and 2015) and a technical workshop (in 2015).

INGAA asked that minor inconsistencies in Appendix A of the NPMS Operator Standards Manual be corrected. Specifically, they asked that:

- An “unknown” option be added to the Percent SMYS attribute, to match the options available in Part K of the PHMSA Annual Report. Because this attribute is no longer part of this information collection, this comment is no longer applicable.
- The diameter (reported as nominal pipe size) includes a category of “NPS 4 or less” to match the PHMSA Annual Report categories instead of allowing the operator to enter NPS values, as proposed by PHMSA in the Operator Standards Manual. PHMSA's decision to collect NPS as a numeric value aligns with PHMSA's accident and incident reporting requirements and preserves the numeric field type for statistical analysis. To add a “NPS 4 or less” category would apply to less than 0.5% of the pipe submitted to the NPMS. PHMSA will retain this attribute collection as a numeric NPS value, in line with PHMSA's accident and incident reports.
- For “Decade of Installation”, remove the 1920-1929 and 1930-1939 categories and change the pre-1920 category to pre-1940 to align with PHMSA's Annual Report categories. PHMSA will make this change.
- “Wrought Iron” be added as an option for “Pipe Material”, to align with PHMSA's Annual Report categories. PHMSA will make this change.