



224910-60-W

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

[Docket No. PHMSA-2014-0092]

Pipeline Safety: Request for Revision of a Previously Approved Information Collection:

National Pipeline Mapping System Program (OMB Control No. 2137-0596)

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), DOT.

ACTION: Notice of Public Meeting and request for comments.

SUMMARY: PHMSA invites public comments on our intention to request the Office of Management and Budget's (OMB) approval to revise this information collection. On July 30, 2014, (79 FR 44246) PHMSA published a notice and request for comments in the **Federal Register** titled: "Pipeline Safety: Request for Revision of a Previously Approved Information Collection: National Pipeline Mapping System (NPMS) Program (OMB Control No. 2137-0596)" seeking comments on proposed changes to the NPMS data collection. During the comment period, PHMSA received several comments and suggestions on ways to improve this data collection. We are publishing this notice to address the many comments received and to request additional comments on PHMSA's proposed path forward. We are required to publish this notice in the **Federal Register** by the Paperwork Reduction Act of 1995, Pub. L. 104-13.

DATES: A public meeting to discuss the revisions to the NPMS will be held on the afternoon of September 10, 2015.

Written comments on this information collection should be submitted by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: The public meeting will be held at the Crystal City Marriott located at 1999 Jefferson Davis Highway in Arlington, Virginia. Details regarding the meeting can be found at <https://primis.phmsa.dot.gov/meetings/MtgHome.mtg?mtg=106>.

You may submit written comments identified by Docket No. PHMSA-2014-0092 through one of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the online instructions for submitting comments.
- *Fax:* 1-202-493-2251
- *Mail or Hand Delivery:* Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, West Building, Room W12-140, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except on Federal holidays.
- *Instructions:* Identify the docket number PHMSA-2014-0092 at the beginning of your comments. Note that all comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. You should know that anyone is able to search the electronic form of all comments received in any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). Therefore, you may want to review DOT's complete Privacy Act Statement in the **Federal Register** published on

April 11, 2000 (65 FR 19477), or visit <http://www.regulations.gov> before submitting any such comments.

- *Docket:* For access to the docket or to read background documents or comments, go to <http://www.regulations.gov> at any time or to Room W12-140 on the ground level of DOT's West Building, 1200 New Jersey Avenue, SE, Washington, DC, between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays. If you wish to receive confirmation of receipt of your written comments, please include a self-addressed, stamped postcard with the following statement: "Comments on PHMSA-2014-0092." The Docket Clerk will date stamp the postcard prior to returning it to you via the U.S. mail. Please note that due to delays in the delivery of U.S. mail to Federal offices in Washington, DC, we recommend that persons consider an alternative method (Internet, fax, or professional delivery service) of submitting comments to the docket and ensuring their timely receipt at DOT.

FOR FURTHER INFORMATION CONTACT: Amy Nelson, GIS Manager, Program Development Division, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC, 20590, by phone at 202-493-0591, or email at amy.nelson@dot.gov.

SUPPLEMENTARY INFORMATION:

I. Background

II. Dropped Attributes

- A. Installation method if pipe segment crosses water body which is 100 feet in width or greater**
- B. Year of last direct assessment**
- C. Type of leak detection**
- D. Special permit segment and permit number**
- E. Offshore gas gathering line (y/n)**

- F. Average daily throughput
- G. Refineries
- H. Gas processing and treatment plants
- III. Kept Attributes
 - A. Positional accuracy (changed from previous 60-day notice)
 - B. Pipe diameter
 - C. Wall thickness
 - D. Commodity detail
 - E. Pipe material
 - F. Pipe grade
 - G. Pipe Join Method
 - H. Highest percent operating SMYS
 - I. Maximum Allowable Operating Pressure/Maximum Operating Pressure
 - J. Seam Type
 - K. Year or decade of installation
 - L. Onshore/Offshore
 - M. Inline inspection
 - N. Class location
 - O. Gas HCA segment
 - P. Segment could affect an HCA
 - Q. Year of last ILI
 - R. Coated/uncoated and cathodic protection
 - S. Type of coating
 - T. FRP control number and sequence number, if applicable
 - U. Year and pressure of last and original pressure test
 - V. Abandoned pipelines
 - W. Pump and compressor stations
 - X. Mainline block valves
 - Y. Gas storage fields
 - Z. Breakout tanks
 - AA. LNG attributes
- IV. General Comments
 - A. Reporting
 - B. Burden
 - C. Legality
 - D. Data Security
 - E. INGAA counter-proposal
 - F. Definitions
- V. Timeline for collection of new data elements
- VI. Summary of impacted collection

I. Background

On July 30, 2014, (79 FR 44246) PHMSA published a notice and request for comments in the **Federal Register** titled: “Pipeline Safety: Request for Revision of a Previously Approved Information Collection: National Pipeline Mapping System (NPMS) Program (OMB Control No. 2137-0596)” seeking comments on proposed changes to the NPMS data collection. Within this notice, PHMSA laid out its intentions to revise the currently approved NPMS data collection to expand the data attributes collected and to improve the positional accuracy of NPMS submissions. On November 17, 2014, PHMSA held a public meeting to grant the public an opportunity to learn more about PHMSA’s proposal, to ask pertinent questions about the collection, and to offer suggestions regarding the path forward. Details about the meeting, including copies of the meeting’s presentation files, can be found at <http://primis.phmsa.dot.gov/meetings/MtgHome.mtg?mtg=101>. PHMSA encouraged participants of the meeting to submit comments on the proposed attributes to docket PHMSA-2014-0092. During the 60-day comment period, PHMSA received input from 28 different commenters comprised of pipeline operators, industry and interest groups, and the general public. Commenters include:

Ameren Illinois

Ameren Missouri

American Fuel & Petrochemical
Manufacturers

American Gas Association

Anonymous

APGA via John Erickson

CenterPoint Energy	Chuck Lesniak
COGENT	Consumers Energy Company
Dan Ferguson for Enbridge Pipelines	INGAA
Intermountain Gas Company	MidAmerican Energy Company
Northern Natural Gas	Pipeline Safety Trust
Questar Gas Company	Questar Pipeline Company
Rodney Begnaud	Southwest Gas Corporation
Spectra Energy Partners	Texas Pipeline Association
Vectren	

PHMSA is publishing this notice to address and respond to the comments received. Please note that technical details pertaining to the new data elements such as domains and reporting requirements for each attribute can be found in the NPMS Operator Standards Manual.

The data being requested is the first substantial update to NPMS submission requirements since the NPMS standards were developed in 1998. The NPMS is PHMSA's only dataset which tracks *where* pipe characteristics occur, instead of how much/ how many of those characteristics are in PHMSA's regulated pipelines. In PHMSA's last Congressional reauthorization, Section 60132(a) stated that PHMSA has the power to collect "any other geospatial or technical data, including design and material specifications, which the Secretary

determines are necessary to carry out the purposes of this section. The Secretary shall give reasonable notice to operators that the data are being requested.” The National Transportation Safety Board (NTSB) recommendation P-11-8 states that PHMSA should “require operators of natural gas transmission and distribution pipelines and hazardous liquid pipelines to provide system-specific information about their pipeline systems to the emergency response agencies of the communities and jurisdictions in which those pipelines are located. This information should include pipe diameter, operating pressure, product transported, and potential impact radius.” Other NTSB recommendations are cited below with the attributes they address.

Specifically, the new data elements will:

- Aid the industry and all levels of government, from Federal to municipal, in promoting public awareness of hazardous liquid and gas pipelines and in improving emergency responder outreach. Currently, 787 Federal officials, 1,208 state officials and 4,791 county officials have access to the online mapping application. Providing these officials with an improved NPMS containing system-specific information about local pipeline facilities can help ensure emergency response agencies and communities are better prepared and can better execute response operations during incidents.
- Permit more powerful and accurate tabular and geospatial analysis, which will strengthen PHMSA’s ability to evaluate existing and proposed regulations as well as operator programs and/or procedures.
- Strengthen the effectiveness of PHMSA’s risk rankings and evaluations, which are used as a factor in determining pipeline inspection priority and frequency.

- Allow for more effective assistance to emergency responders by providing them with a more reliable, complete dataset of pipelines and facilities.
- Provide better support to PHMSA's inspectors by providing more accurate pipeline locations and additional pipeline-related geospatial data that can be linked to tabular data in PHMSA's inspection database.
- Better support PHMSA's research and development programs by helping to predict the impact of new technology on regulated pipelines.

II. Dropped Attributes

PHMSA received wide-ranging comments that provided various points of view on the proposed attributes and the effect the collection of this data would have on the Pipeline Safety program, the pipeline industry, and the general public. After much research and consideration, PHMSA has decided not to move forward with the following attributes at this time. PHMSA reserves the right to reconsider including these attributes in the future.

A. Installation method if pipe segment crosses water body which is 100 feet in width or greater.

PHMSA originally proposed that operators submit data on the installation method of pipe segments that cross bodies of water greater than 100 feet in width. Operators would have selected from options such as open cut, trenchless technologies, pipe spans, etc. The Pipeline Safety Trust and COGENT supported including this information as originally proposed. Energy Transfer Partners submitted comments indicating a willingness to provide this information but noted that for many lines this information may not exist. The American Gas Association (AGA), the Texas Pipeline Association (TPA),

TransCanada, InterMountain Energy Company, and the American Petroleum Institute commenting jointly with Association of Oil Pipelines (API/AOPL) noted that the installation method does not provide a reliable estimate for the depth of cover. Spectra Energy Partners and Vectren submitted comments suggesting that this attribute would not be useful for risk assessments. Avista commented that they did not possess this information within their Geographic Information Systems (GIS) infrastructure. PHMSA has decided not to move forward with including this attribute in the NPMS at this time.

B. Year of last direct assessment.

PHMSA originally proposed to collect the year and type of last direct assessment, as it is used to verify the integrity of the pipeline and is used in pipeline risk calculations. Comments received from the Pipeline Safety Trust supported including this attribute while those from TransCanada, Vectren, Energy Transfer, TPA, and AGA were opposed. PHMSA has determined that the year and type of the last Inline Inspection Instrument (ILI) assessment and last pressure test were most valuable for integrity evaluation. Further, PHMSA determined that the data regarding which lines have been subject to direct assessment can be deduced. As a result, PHMSA has decided not to move forward with this attribute at this time.

C. Type of leak detection.

PHMSA proposed that operators submit information on the type of leak detection system used. Comments submitted by the Pipeline Safety Trust and COGENT supported including the attribute. The American Petroleum Institute, commenting jointly with

Association of Oil Pipelines (API/AOPL), did not oppose including this attribute. However, API/AOPL requested delayed compliance as part of a three-phase implementation and that PHMSA include the option to submit more than one type of leak detection technology. The remaining comments from TransCanada, Spectra Energy Partners, Vectren, Energy Transfer Partners, Energy Transfer, DTE Gas Company, TPA, and AGA were critical of including this attribute. These comments focused primarily on the lack of a perceived safety or risk benefit for knowing what leak detection technologies were in place. InterMountain Gas Company and Avista noted that they did not have this information on a geospatial level within their GIS infrastructure. PHMSA has decided not to move forward with including this attribute in the NPMS at this time.

D. Special permit segment and permit number

PHMSA proposed that operators denote whether a pipe segment is part of a PHMSA special permit and report the special permit number. PHMSA received comments from COGENT and Spectra Energy Transfer supporting including this attribute as well as critical comments from API/AOPL, TPA, Energy Transfer, and TransCanada. Those opposed argued that since PHMSA issues special permits, requiring operators to submit this information would be duplicative. At this time PHMSA believes it would be better to collect this information via inspections or the special permitting and reporting process itself rather than in this revision to the NPMS.

E. Offshore gas gathering line (y/n)

PHMSA proposed that operators of offshore gas gathering pipelines make NPMS data submissions. PHMSA received comments from COGENT and Energy Transfer Partners,

whom were not opposed to including this attribute to NPMS. COGENT requested all onshore gathering lines be required to submit data to NPMS. TPA submitted comments claiming that this attribute would create a new class of pipelines and is therefore not an appropriate action for an information collection revision. PHMSA has decided not to move forward with including this attribute in the NPMS at this time.

F. Average daily throughput

Throughput is used to denote a pipeline's capacity by stating the pipeline's ability to flow a measured amount of product per unit of time. PHMSA received a positive comment from COGENT supporting the inclusion of this attribute in the NPMS. PHMSA received comments from 13 major industry trade associations and operators strongly opposed to collecting this attribute. Those opposed primarily argued that this attribute exceeds PHMSA's regulatory authority, and that the data requested poses a security and commercial risk. AGA, TPA, Avista, Spectra Energy Partners, and InterMountain Gas Company further noted that this information is difficult to measure, collect, and report due to constant fluctuations in market forces and pipeline flow. American Fuel and Petrochemical Manufacturers, TPA, and InterMountain questioned the risk assessment and emergency response value of collecting this information. PHMSA has decided not to proceed with this attribute as proposed, due to potential jurisdictional conflict with the Department of Energy.

G. Refineries

PHMSA proposes liquid pipeline operators submit a geospatial point file containing the locations of refineries. PHMSA received a comment from COGENT in support of including this attribute and another comment from Energy Transfer indicating a

willingness to provide this information. Critical comments from AFPM, Spectra Energy Partners, API/AOPL, TPA, and AGA strongly opposed the inclusion of this attribute. These groups primarily claimed that these facilities are outside of PHMSA's regulatory jurisdiction and that pipeline operators do not control them. Due to potential jurisdictional issues, PHMSA is not moving forward with this attribute for this revision to the NPMS.

H. Gas processing and treatment plants

PHMSA proposes gas transmission operators submit a geospatial point file containing the locations of gas process/treatment plants. PHMSA received a comment from COGENT in support of including this attribute and another comment from Energy Transfer indicating a willingness to provide this information. Critical comments from AFPM, 10474147 Spectra Energy Partners, API/AOPL, TPA, and AGA strongly opposed the inclusion of this attribute. These groups claimed these facilities are outside of PHMSA's regulatory jurisdiction and that pipeline operators do not control them. Due to potential jurisdictional issues, PHMSA is not moving forward with this attribute for this revision to the NPMS.

III. Retained Attributes

After careful consideration of the comments received, along with the agency's Pipeline Safety goals, PHMSA has decided to move forward with the proposal to collect geospatial data on the following pipeline attributes:

A. Positional Accuracy

PHMSA originally proposed that for pipeline segments located within Class 3, Class 4, High Consequence Areas (HCA), or "could affect" High Consequence Areas (HCAs),

operators submit data to the NPMS with a positional accuracy of five feet. PHMSA further proposed that for all pipeline segments located within Class 1 or Class 2 locations, operators submit data to the NPMS with a positional accuracy of 50 feet.

PHMSA received 24 comments on positional accuracy. COGENT's comments supported the original proposal of five foot positional accuracy. The Pipeline Safety Trust echoed this support, and noted many states already require more stringent accuracy standards though did not cite a specific figure. PHMSA received a number of comments from industry associations and operators which recognized the need for improved positional accuracy, but were highly critical of the five foot positional accuracy standard. Commenters noted that the vast majority of mileage was not mapped to this level of precision, and that some portions of this mileage may be impossible to survey to the requested accuracy. API/AOPL's comment suggested a positional accuracy of fifty feet would be reasonable, while INGAA proposed requiring fifty foot accuracy in 70% of mileage and 100 foot elsewhere. INGAA's comments were supported by AGA, Questar, DTE Gas Company, Energy Transfer, Spectra Energy Partners, a representative of Enbridge, and Questar Pipeline. These operators proposed requiring fifty-foot accuracy in 70% of mileage and 100-foot elsewhere. TransCanada suggested a positional accuracy of 100-foot was sufficient. Texas Pipeline Association commented that the average positional accuracy reported by its members was 200-foot. MidAmerican, APGA, SW Gas, and Avista noted that the current requirement reflects the technical capability of their GIS data and the Gas Producers Association stated that several hundred feet was sufficient for emergency response and planning.

PHMSA proposes that hazardous liquid pipeline operators submit data with a positional accuracy of +/- 50 feet. Gas transmission operators are required to 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; an identified site (See 49 CFR 192.903); a right-of-way for a designated interstate; freeway, expressway, or other principal 4-lane arterial roadway as defined in the Federal Highway Administration's "Highway Functional Classification Concepts" within its potential impact radius. All other gas pipeline segments must be mapped to a positional accuracy of +/- 100 feet. PHMSA concedes that +/- five feet may be unobtainable for certain locations and is difficult to maintain when GIS data is reprojected as part of its processing, but reiterates its need for a high level of positional accuracy. Any accuracy standard coarser than 100 feet would not achieve the level of detail required to make basic estimates of where a pipeline is located with relation to communities, infrastructure, and landmarks. These risk-based requirements require greater levels of stringency for locations with the highest potential consequences of pipeline incidents, while reducing the data collection burden for remote pipelines. These revisions to the positional accuracy requirements help satisfy the recommendations issued in NTSB recommendations P-15-4, "Increase the positional accuracy of pipeline centerlines and pipeline attribute details relevant to safety in the National Pipeline Mapping System." Additionally, PHMSA needs to improve its ability to identify pipe segments which cross water. Many recent pipeline accidents, such as the Yellowstone River accident earlier this year, have occurred at or near water crossings. Pipeline right-of-ways frequently run

alongside water bodies and PHMSA requires better positional accuracy to determine whether a pipe is running alongside water or under the water body.

B. Pipe diameter

PHMSA originally proposed requiring operators to submit data on the nominal diameter of a pipe segment. Knowing the diameter of a pipeline can help emergency responders determine the impact area of a pipeline in the event of a release. This attribute also gives PHMSA the opportunity to gain a broader understanding of the diameters of pipe being operated in any given geographical region, and to further assess potential impacts to public safety and the environment.

PHMSA received eleven comments in support of including mandatory reporting of pipe diameter in the revised information collection. This included industry associations, public interest groups, and individual operators. Most concerns centered on clarification regarding whether PHMSA was requesting nominal or actual diameter. Those commentators included Questar, TransCanada, Spectra, SW Gas, PST, COGENT, INGAA, API, TPA, and AGA. Energy Transfer was critical of the safety benefit of incorporating this attribute, but was willing to provide the information.

PHMSA proposes to move forward with this attribute as originally proposed. This attribute measures the nominal pipe diameter in inches to three decimal places. The primary benefit for incorporating this attribute is that a larger pipe may pose a greater hazard during a rupture. Knowing the location of large lines in relation to populated

areas will help PHMSA effectively prioritize inspections and emergency response planning.

C. Wall thickness

PHMSA originally proposed to collect data on the nominal wall thickness of a pipe. PHMSA intends to collect this information as originally proposed. The Pipeline Safety Trust and COGENT supported collecting this information as proposed. API/AOPL submitted comments expressing a willingness to collect this information but requested clarifications of PHMSA's expectation and that this requirement be phased in over time. Energy Transfer requested clarification on whether this attribute would be reported on a predominate basis. AGA commented that an attribute indicating whether a pipeline was operating above 30% SMYS would capture most rupture risk. TPA and Vectren submitted comments arguing that this attribute is not a necessary risk measure if percentage of SMYS is measured. Spectra Energy Partners commented that many interstate gas lines have many changes in wall thickness; therefore, capturing this information on an actual basis would greatly increase segmentation of the data. PHMSA intends to collect this information as originally proposed. For clarification, PHMSA is requesting the nominal wall thickness. This information will not be collected on a predominant basis. PHMSA analysts and inspectors identified this as a fundamental piece of descriptive information for pipeline risk. This information is especially critical for determining the relative risk of corrosion.

D. Commodity detail

PHMSA proposed operators submit commodity details for pipelines if the transported commodity is crude oil, product or natural gas, and subcategories of each. The list of commodity choices is available in the NPMS Operator Standards Manual (Appendix A). Other choices may be added as the need arises.

The Pipeline Safety Trust, COGENT INGAA, AGA, Questar Pipeline Company, Spectra Energy Partners, Energy Transfer Partners, and Southwest Gas supported including this attribute. Energy Transfer requested clarification, and API/AOPL and TransCanada supported a more limited version of this attribute as the commodity in hazardous liquid lines can change day to day.

PHMSA will move forward with this collection with minor modifications from the original proposal. Please see the NPMS Operator Standards Manual for more detailed information on how this information is to be reported. This level of detail is required because of potential differences in leak characteristics, rupture-impacted hazardous areas and a pipeline's internal integrity. Emergency responders will also be able to better respond to pipeline incidents if they know the specific type of commodity being transported.

E. Pipe material

PHMSA originally proposed that operators submit data on pipe material. Operators will be required to submit data on whether a segment was constructed out of cast iron, plastic, steel, composite, or other material. PHMSA received no opposition from commentators.

PHMSA proposes to move forward with this collection as originally introduced.

Knowing the pipe material helps PHMSA determine the level of potential risk from excavation damage and external environmental loads. These can also be factors in emergency response planning.

F. Pipe grade

PHMSA originally proposed that operators submit information on the predominant pipe grade of a pipeline segment. The Pipeline Safety Trust supported including this attribute and API did not oppose its collection. AGA, TPA, and an operator believed this attribute was redundant because percentage of SMYS captured the risk from pipe grade.

TransCanada and Vectren had concerns about reporting this attribute on a “predominant” basis. Energy Transfer Partners were willing to provide the data but believed the data format noted is insufficient. This information is essential in issues regarding pipe integrity, and is a necessary component in determining the allowable operating pressure of a pipeline. The list of pipe grades is available in the NPMS Operator Standards (Appendix A).

G. Pipe join method

PHMSA proposed operators submit data on the pipe join method. Operators will indicate whether pipes within the segment were welded, coupled, screwed, flanged, used plastic pipe joints, or other.

COGENT and the Pipeline Safety Trust submitted comments supporting including this information. Spectra Energy Partners and Energy Transfer Partners submitted comments opposed to incorporating this attribute on a joint-by-joint basis, though Energy Transfer Partners was receptive to reporting this information on a predominant basis. TPA, TransCanada, and Vectren submitted comments critical of the value of this attribute for risk assessment. InterMountain, MidAmerican, and Avista noted that they did not have this information in their mapping systems, and AGA and API/AOPL noted that it would be burdensome for many operators to collect and record this information. Energy Transfer Partners commented that this information is on the annual reports. PHMSA analysts and inspectors would use this information to identify high-risk joining methods and will be used in PHMSA's risk rankings and evaluations. These models are used to determine pipeline inspection priority and frequency.

H. Highest percent operating SMYS

PHMSA proposes operators submit information pertaining to the percent at which the pipeline is operating to SMYS. Specifically, operators would submit hoop stress corresponding to the maximum operating pressure (MOP) or maximum allowable operating pressure (MAOP) as a percentage of SMYS. PHMSA uses the established

percent SMYS to determine low- and high-stress pipelines, class locations, test requirements, inspection intervals, and other requirements in the pipeline safety regulations.

AGA, API/AOPL, TPA, Vectren, and Southwest Gas raised concerns about securing this information. AGA, TPA, Intermountain, and DTE Gas Company further proposed that this attribute should be calculated based on Maximum Allowable Operating Pressure (MAOP) rather than highest observed operating pressure. AGA and a number of gas operators proposed to allow lines operating below 30 percent SMYS be categorized as “low stress” due to a purported low propensity to rupture. Spectra Energy Partners believed that MAOP was a better measure of pipeline risk and that PHMSA could calculate either from other attributes submitted via NPMS. API further suggested that this should be a “phase 2” action. PHMSA intends to move forward with this attribute as originally proposed. PHMSA uses the percentage of operating SMYS to determine low- and high-stress pipelines, class locations, test requirements, inspection intervals, and other requirements in the pipeline safety regulations. Percentage of SMYS is required for determining and confirming MAOP and Maximum Operating Pressure (MOP). This information also helps PHMSA to determine the regulations applicable to each pipe segment along with the probable toughness of the steel and a segment’s likelihood of rupturing.

In order to safeguard this information, this information will only be available to individuals with access to the password protected Pipeline Information Management Mapping Application (PIMMA) site. PHMSA needs to collect both percent SMYS and MAOP because, though technically similar, they encapsulate different aspects of the potential risk to the public.

I. Maximum Allowable Operating Pressure or Maximum Operating Pressure (MAOP/MOP)

PHMSA proposed that operators submit the maximum MAOP or MOP for a pipeline segment in pounds per square inch gauge.

PHMSA received comments in support of including this attribute from COGENT, the Pipeline Safety Trust, TPA, Energy Transfer Partners, and Spectra Energy Partners. API, AFPM, AGA, Vectren and Southwest Gas submitted comments expressing security concerns. TPA, AGA, and Vectren suggested that this attribute is duplicative of and inferior to percent SMYS as a risk measure. TransCanada suggested replacing this attribute and others with one that indicates whether or not a line is operating below 30 percent SMYS. PHMSA intends to collect this information as previously proposed. While superficially similar to percent SMYS, MAOP/MOP is not identical and captures different elements of pipeline risk. Specifically, PHMSA inspectors identified it as an important element for incident analysis. MAOP/MOP helps enforce pressure levels between segments which are rated for different pressures. PHMSA engineers further

noted that it is useful for determining the potential impact radius. This information will be limited to those with PIMMA access or PHMSA employees.

J. Seam type

PHMSA proposed operators submit data on the seam type of each pipe segment. Options include: SM= Seamless, LERW=Low frequency or direct current electric resistance welded, HERW=High frequency electric resistance welded, DSAW=Double submerged arc weld, SAW=Submerged arc weld, EFW=Electric fusion weld, LW=Furnace lap weld, FBW=Furnace butt weld, PLAS=Plastic or OTHER=Other.

The Pipeline Safety Trust, COGENT, Southwest Gas supported including this attribute as proposed. Vectren, Energy Transfer, and DTE Gas Company noted that information may not always be available and PHMSA has not allowed an “unknown” option. AGA and TPA were opposed to collecting this information at this time as it may be part of a pending rulemaking. Spectra Energy Partners further noted that long interstate lines may have many changes in seam type. TransCanada commended that this was not as effective of a risk measure as some other pipeline characteristics.

PHMSA intends to collect this information with the possibility of limiting it to Classes 3, 4, and HCAs. This information is used to determine which type of integrity management inspection assessment should apply, is important for risk analysis due to certain time-dependent risky seam types (LF-ERW), and is used to confirm MAOP.

K. Decade of installation

PHMSA originally proposed that operators submit data on the predominant year of original construction (or installation). The year of construction determines which regulations apply to a pipeline for enforcement purposes. The data requested pertained to the year of construction and not the year the pipe was manufactured. On the annual report, operators report the decade of installation. As a result of this revised collection, operators will be able to submit data on the predominant decade of construction or installation. Predominant is defined as 90 percent or higher of the pipe segment being submitted to the NPMS.

Comments from both public safety advocacy groups and pipeline operators were generally positive. AGA and TPA recommended defining this attribute as the year that the segment was placed in service. Vectren recommended defining this on a segment-by-segment basis rather than on a predominant basis. API suggested this be phase 2 in a 3 phase implementation and to allow operators to submit data by decade for lines installed before 1990. Southwest Gas had security concerns and TransCanada and Spectra Energy Partners submitted comments doubting the significance of year of construction on pipeline safety risk. TransCanada further noted that this information is already collected on annual reports.

Collecting this information geospatially rather than in tabular form in the annual reports allows PHMSA to run better risk-ranking algorithms through pattern analysis and relating pipe attributes to surrounding geographical areas. Identifying and protecting aging

infrastructure is a DOT priority and collecting this information allows PHMSA to better understand and plan for age-dependent threats.

L. Onshore/Offshore

Onshore/Offshore: PHMSA proposes operators designate whether a pipe segment is onshore or offshore.

PHMSA received four comments on this attribute which were generally supportive. COGENT supported including this information as proposed. API/AOPL, Spectra Energy Partners, and Energy Transfer Partners were willing to provide this information but requested guidance on defining “offshore pipelines” for the purpose of this information collection. API/AOPL further recommended that this information be password protected under PIMMA.

PHMSA will move forward with this attribute as originally proposed. To aid compliance and standardization, PHMSA will issue guidance in the NPMS Operator Standards Manual on how to determine whether a pipeline is offshore or onshore for the purpose of this information collection. Comparisons between the NPMS (PHMSA-generated) offshore mileage statistics and operator-generated annual report offshore mileage statistics do not match. This collection will allow PHMSA to standardize and compare the statistics for regulatory purposes.

M. Inline Inspection

PHMSA originally proposed that operators indicate whether their system is capable of accommodating an ILI tool.

The Pipeline Safety Trust and COGENT strongly supported including this attribute, as did a number of industry entities including TransCanada, Spectra Energy Partners, and Energy Transfer. INGAA and Questar proposed a simplified yes/no version of this attribute. API and TPA were receptive to including this information but questioned the safety benefit. AGA and DTE Gas Company submitted critical comments citing difficulty of compliance given the ongoing technological development in pipeline assessment tools. InterMountain Gas Company and Avista noted that they did not have this information in their GIS infrastructure. Vectren noted their view that the information was not needed for risk ranking and was already on the annual report.

PHMSA intends to collect this information as originally proposed. For the purpose of this information collection, this attribute denotes whether a line is capable of accepting an inline inspection tool with currently available technology. Inline Inspection methods information is useful for tracking progress related to NTSB recommendations P-15-18 and P-15-20 which recommend that all natural gas transmission pipelines be capable of being in-line inspected and that PHMSA “identify all operational complications that limit the use of in-line inspection tools in piggable pipelines” respectively.

N. Class Location

Operators of gas transmission pipeline segments will be required to submit information on class location (49 CFR 192.5) at the segment level.

PHMSA received eight comments on this attribute which were generally positive.

COGENT, Spectra Energy Partners, Southwest Gas, TPA, and AGA submitted comments supporting including this attribute. TransCanada opposed, stating that PHMSA can collect this information at audits and inspections. Avista indicated that they did not have this information within their GIS infrastructure. Spectra Energy Partners and Energy Transfer submitted comments requesting greater clarity and guidance on the definition of segments, as well as expectations for accuracy for the purpose of this collection.

PHMSA intends to collect this information as originally proposed. Operators may consult the NPMS Operator Standards Manual for help in defining segments. This information is a critical measure of population risk, and is necessary to ensure that integrity management rules are properly applied to high-risk areas. Survey requirements vary based on class location, and this data is valuable for prioritizing, planning, and conducting inspections.

O. Gas HCA Segment

PHMSA proposed gas transmission operators identify pipe segments which “could affect” HCAs as defined by 49 CFR 192.903.

AGA, INGAA, TPA, TransCanada, Energy Transfer, Questar Pipeline Company, and COGENT supported collecting data regarding Gas HCAs. AGA, Vectren, and Intermountain requested clarification on how “could affect” HCAs impact gas operators. PHMSA intends to move forward with the HCA attributes as originally proposed. This information will help emergency responders identify areas with greater potential for significant damage. Additionally, these attributes identify areas subject to integrity management procedures. PHMSA has explicit statutory authority to map high-consequence areas under 49 U.S.C. 60132(d). Gas operators are only expected to submit information on whether that segment lies within an HCA as defined in 49 CFR 192.903.

P. Segment could affect an HCA

PHMSA proposed hazardous liquid and gas transmission operators identify pipe segments which could affect HCAs as defined by 49 CFR 195.450. Pipe segments can be classified as affecting a populated area, an ecologically sensitive area, or a sole-source drinking water area.

TPA and COGENT supported including this information as proposed. API/AOPL, the American Fuel and Petrochemical Manufacturers, and TransCanada had security concerns with including this data element.

PHMSA intends to move forward with the “could affect HCA” attribute as originally proposed. This information will help emergency response planners identify areas with greater potential for significant damage. Additionally it identifies areas subject to integrity management procedures. PHMSA has explicit statutory authority to map high-consequence areas under 49 U.S.C. 60132(d), and NTSB recommendation P-15-5 states

that PHMSA should “revise the submission requirement to include HCA identification as an attribute data element to the National Pipeline Mapping System.” This information will be secured with the PIMMA system to mitigate potential security risks.

Q. Year of last ILI

PHMSA proposes operators submit data detailing the year of a pipeline's last corrosion, dent, crack or “other” ILI assessment. The Pipeline Safety Trust, COGENT, and API/AOPL supported including this attribute, though the latter suggested protecting this information with PIMMA and delaying compliance to Phase Two of their three-phase plan. INGAA, AGA, Spectra and Vectren questioned the safety value of including this attribute. Avista noted that they did not have this information in their GIS infrastructure. PHMSA intends to move forward with this attribute as originally proposed. This information is used to verify integrity of the pipeline. It is also a key metric in PHMSA's pipeline risk calculations, which are used to determine the priority and frequency of inspections. Inspectors noted that this is important for inspection planning, as a line which has been recently assessed has a statistically lower risk than one that has not recently been assessed. This information will be protected by being placed in PIMMA.

R. Coated/uncoated and cathodic protection

PHMSA proposed operators indicate whether a pipe is effectively coated, and if so the type of coating.

COGENT, Pipeline Safety Trust, TPA, TransCanada and Southwest Gas Company supported including this attribute. AGA, INGAA, API/AOPL, Questar Pipeline Company, and Spectra Energy Partners petitioned for a greatly simplified binary yes/no

version of this attribute, possibly reported on a predominant basis. Intermountain and Avista indicated that they did not collect this information in their GIS infrastructure. PHMSA intends to move forward with this attribute as proposed. The presence and type of coating on a pipeline has a significant impact on corrosion, which remains a major source of risk to both gas transmission and hazardous liquid pipelines.

S. Type of coating

See previous section. The choices for type of coating (from the NPMS Operator Standards Manual) are: coal tar enamel, fusion bonded epoxy, asphalt, cold applied tape, polyolefin, extruded polyethylene, field-applied epoxy, paint, composite, other, and no coating.

T. FRP control number and sequence number, if applicable.

PHMSA proposed operators submit the Facility Response Plan control number and sequence number for applicable liquid pipeline segments.

COGENT, API/AOPL, Spectra Energy Partners, and Energy Transfer Partners were not opposed to collecting this information; API requested this information be protected by PIMMA. TransCanada viewed it as a potential security risk, and supported only including the plan number. AGA and TPA opposed this data element, suggesting that it is not needed for risk prioritization and is therefore not required.

PHMSA intends to move forward with this attribute as originally proposed. Access to the relevant facility response plan number through NPMS would be beneficial to first responders in an emergency situation, especially in areas with multiple pipeline facilities. Furthermore, this would greatly reduce the workload of regional offices and even

operators tasked with ensuring compliance with response plan regulations. Since operators are required to have this information, PHMSA believes it should be minimally burdensome to submit it.

U. Year and pressure of last and original pressure test.

PHMSA proposed to collect data on a pipeline's original and most recent hydrostatic test years and pressures. Note that the original pressure test data will be collected in Phase 3 (see section V) and the last pressure test data will be collected in Phase 1. This is to allow operators sufficient time to research the year of the original pressure test. The NPMS Operator Standards Manual also contains a designation if the operator has researched, but not found, the year of the original pressure test.

The Pipeline Safety Trust, COGENT and Energy Transfer Partners supported including this attribute. API/AOPL, TPA, and AGA questioned the value of this attribute, especially the original pressure test, noting that it will greatly increase segmentation of the dataset. API further suggested dropping the original pressure test information. TransCanada, Spectra Energy Partners, and Vectren were all opposed to collecting this attribute. Avista noted that they did not have this information in their GIS infrastructure.

PHMSA intends to move forward with this attribute as originally proposed with slight modifications. PHMSA will allow the more flexible “pressure test” language in recognition of some alternative testing methodologies available to liquid operators. This information is critical for risk assessment. The time elapsed from the last hydrostatic test increases risk of failure.

V. Abandoned pipelines.

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. Abandoned lines are not currently required to be submitted to the NPMS.

Operators would only need to submit this data in the calendar year after the abandonment occurs. API/AOPL, Energy Transfer Partners, and Dan Ferguson on behalf of Enbridge supported the inclusion of this attribute for newly abandoned lines only. The Pipeline Safety Trust noted that the definition of “abandoned” should match the definition in the Pipeline Safety Regulations (49 CFR parts 192.3 and 195.2) to mean permanently abandoned and emptied lines. COGENT supported the inclusion of this attribute but recommended applying the requirement retroactively to all abandoned pipelines. TPA, DTE Gas, and TransCanada submitted comments questioning the need for this information for risk assessment or integrity management calculation. AGA had concerns that including this attribute would encourage excavators to use NPMS instead of one call in areas where abandoned lines are expected, noting that there is a potential threat to telecommunications infrastructure that uses abandoned gas lines as cable conduits.

PHMSA intends to move forward with this attribute as originally proposed. This information is important for PHMSA inspections, particularly to enforce proper abandonment procedures. PHMSA inspectors have identified incidents in the past involving lines which had been mischaracterized as abandoned (i.e. still containing product). Additionally, there is a high level of public interest in this information. Since

operators are already required to map their lines, identifying recently abandoned segments is not exceedingly burdensome.

W. Pump and compressor stations.

PHMSA proposes operators submit a geospatial point file containing the locations of pump (for liquid operators) and compressor (for gas transmission operators) stations.

COGENT, Spectra Energy Partners, and the Texas Pipeline Association did not oppose this information collection. API/AOPL, TransCanada, and the American Fuel and Petrochemical Manufacturers opposed this data collection due to security concerns.

PHMSA intends to move forward with this attribute as originally proposed. Pump and compressor stations are vulnerable areas, and emergency responders need to know their locations for adequate emergency planning. Proximity to a compressor station has also been known to influence the level of stress on nearby segments, making this information valuable for prioritizing inspection resources. Additionally, the stations are often referenced as inspection boundaries for PHMSA's inspectors. Regarding security concerns, this information will be password protected under PIMMA, and PHMSA notes that this information is already available in commercial datasets.

X. Mainline Block Valves.

PHMSA proposes operators submit a geospatial point file containing the locations of mainline block valves, the type of valves and the type of valve operators. PHMSA received comments from Spectra Energy Partners and Energy Transfer Partners, who were unopposed to the inclusion of this attribute in NPMS. TPA conceded that valve location could be useful for PHMSA risk evaluation, but that the valve type component of the attribute had no safety benefit. AGA, TPA, Energy Transfer Partners, DTE Gas

Company, Vectren, and TransCanada noted that this information is not valuable to emergency responders as they are not permitted to operate block valves. Comments from API/AOPL and Southwest Gas emphasized security concerns. PHMSA will collect mainline block valve locations and associated attributes as described in the NPMS Operator Standards Manual. Valve location can assist emergency responders when working with pipeline operators during an emergency, and it is useful to PHMSA inspectors and partners to identify vulnerable points along a pipeline.

Y. Gas storage fields.

PHMSA proposes operators submit a geospatial polygon file containing the locations of and type of gas storage fields used in interstate gas transmission systems. PHMSA received comments from COGENT and Energy Transfer Partners expressing support for including this attribute. API/AOPL, AGA, TPA, AFPM, DTE Gas Company, and Spectra Energy Partners submitted comments strongly opposed to this proposal. The commenters opposed to including this attribute believe it exceeds PHMSA's jurisdiction and poses a security risk. PHMSA notes that the agency has legal jurisdiction over the transportation of gas which includes "storage of gas in or affecting interstate or foreign commerce", by the definition of transportation of gas in 49 CFR 192.3. PHMSA further notes that this information would be available only to individuals cleared for access to the PIMMA password protected mapping site. This information would help state and local emergency response planners prepare for incidents involving these facilities. More details on how to submit this data are available in the NPMS Operator Standards Manual.

Z. Breakout tanks.

PHMSA proposed to require the submission of breakout tank data. This is currently an optional submission; this revision would make it mandatory. PHMSA received positive comments from COGENT, API/AOPL, Texas Pipeline Association, and Spectra Energy Partners. API requested security safeguards, and Spectra wanted clarification if it was a point file for each tank or the boundary of a tank farm.

PHMSA intends to proceed with this attribute as originally proposed. As detailed in the NPMS Operator Standards Manual, this information will be stored as a point file for each tank. This helps inspectors locate individual tanks as a tank farm may contain both breakout tanks and other tanks.

AA. LNG attributes.

PHMSA proposed to collect additional data attributes for liquefied natural gas (LNG) plants used in or affecting interstate commerce. These new attributes include type of plant, capacity, impoundments, exclusion zones and year constructed. COGENT and Spectra Energy Partners submitted comments supporting including this attribute. TPA supported making submitting LNG plant information mandatory but had security concerns with the new descriptive attributes included with this revision. The American Gas Association claimed that existing comprehensive risk analyses performed by the Department of Homeland Security means that PHMSA does not need to include this in its risk analysis on pipelines.

PHMSA intends to proceed with this information as originally proposed. Detailed LNG attributes will be protected by access to PIMMA and only available to PHMSA, state pipeline safety officials, and emergency responders. Geospatial information on the location and characteristics of LNG plants helps PHMSA and emergency responders better understand potential safety risks on a national and local level respectively.

IV. General Comments

A. Reporting.

INGAA, API/AOPL, AGA, and GPA submitted comments indicating that some of the proposed attributes appear to be duplicative of information that PHMSA already collects, especially from the annual reports.

B. Burden.

A number of operators commented highlighting the expected burden of the proposed revisions to the information collection. Comments submitted by INGAA, API TPA, Ameren, and MidAmerican claimed that PHMSA greatly underestimated the expected burden of this revision. AGA, Ameren Illinois, Laclede Gas Co. and TransCanada noted that a high regulatory burden could divert resources from other safety initiatives such as integrity management and infrastructure replacement activities. Intermountain, Avista, Ameren Missouri, Ameren Illinois, Southwest Gas, AGA, and INGAA noted that many of the proposed changes were beyond the capability of their existing GIS, and would require resources to upgrade systems and hire individuals to convert non-GIS or paper records to an appropriate format.

C. Legality

INGAA, AGA, API/AOPL, and CenterPoint Energy submitted comments suggesting that certain aspects of the proposal exceed what is considered acceptable for an information collection regulated under the Paperwork Reduction Act, and that it should have been considered as a rulemaking. API/AOPL further commented on their opinion that the NPMS is intended for public awareness, rather than for other roles such as risk management. PHMSA responds that this information collection complies with the paperwork reduction act, as it was done with the approval of OMB. Further, this information collection revision was carried out with additional procedures normally involved in a rulemaking such as the notice and comment procedures, public meetings, advisory committee discussions, and a proposed hearing. Regarding the purpose of the NPMS, the statute makes clear that NPMS has applicability beyond public awareness, especially for emergency response. The website itself states that NPMS is, “used by government officials, pipeline operators, and the general public for a variety of tasks including emergency response, smart growth planning, critical infrastructure protection, and environmental protection.” See <https://www.npms.phmsa.dot.gov/About.aspx>.

D. Data Security

PHMSA understands that the new data elements have varying degrees of sensitivity, and that some of the new elements are highly sensitive. PHMSA has discussed the appropriate security categorization for the new data elements with the Transportation Security Administration (TSA). The following new data elements are proposed to be classified as SSI (Sensitive Security Information). These elements would be kept in an SSI-compliant environment at PHMSA. They would be released to no other parties

except for government agencies who can verify they maintain an SSI-compliant environment.

SSI elements

- Highest percent operating SMYS
- MAOP/MOP
- Segment “could affect” an HCA
- Pump and compressor stations
- Mainline block valves

The following elements are proposed to be restricted to PIMMA, the mapping application on www.npms.phmsa.dot.gov which is password-protected and available only to government officials (who may see their area of jurisdiction) or pipeline operators (who may see only the pipelines they operate).

PIMMA elements

- Diameter
- Commodity detail
- Pipe grade
- Seam type
- Decade of installation
- Wall thickness
- Inline inspection
- Class location
- Gas HCA segment
- Year of last ILI inspection
- Coated/uncoated and cathodic protection
- Type of coating
- FRP control and sequence numbers
- Year of original and last pressure test
- Gas storage fields
- All new LNG plant attributes
- Capacity element for breakout tanks

The following elements are proposed to be displayed on the NPMS Public Viewer, which can be accessed by the general public.

Public Viewer elements

- Pipe grade
- Pipe join method
- Onshore/offshore
- Abandoned lines
- Breakout tanks (excluding capacity)

E. INGAA Counter Proposal.

The Interstate Natural Gas Association of America submitted comments which included an alternative plan for revisions to the NPMS. INGAA proposed to collect only pipe material, nominal diameter, HCA, pipe coating (yes/no), cathodic protection (yes/no), ILI capability (yes/no), and commodity type. INGAA further proposed an alternative positional accuracy requirement of 50 feet for 70 percent of mileage and 100 feet for the remaining 30 percent. PHMSA has addressed the positional accuracy standard in the previous section. PHMSA further finds that the set of attributes proposed by INGAA is inadequate to meet the agency's risk assessment and emergency planning goals.

F. Definitions.

API/AOPL, INGAA, DTE Gas Company, the Pipeline Safety Trust has serious concerns about the use of the word "predominant." Other commenters made attribute specific comments to a similar effect. These criticisms centered on how the usage of predominant attributes is poorly defined, difficult to verify compliance with, and risks improper categorization of pipeline risk. For these reasons PHMSA has largely eliminated the option to submit data on a predominant basis.

Spectra Energy Partners requested general guidance on the definition of a segment. Other commenters had attribute-specific comments to a similar effect. This information is defined in more detail in the NPMS Operator Standards Manual.

V. Timeline for collection of new data elements

PHMSA has heard operators' and industry's concerns regarding the amount of time needed to compile, research, and/or prepare the data required for this information collection. PHMSA will collect the new data elements in three phases. Phase 1 data will be collected the first submission year after the effective date, Phase 2 data will be collected the second submission year after the effective date, and Phase 3 data will be collected the third submission year after the effective date. The data elements in each phase are listed below.

Phase 1

- Pipe diameter
- Commodity detail
- Pipe material
- Pipe grade
- Wall thickness
- Pipe joining method
- MAOP/MOP
- Highest percent operating SMYS
- Seam type

- Onshore/offshore
- Inline inspection
- Class location
- Gas HCA segment
- FRP control number and sequence number, if applicable
- Abandoned pipelines
- Pump and compressor stations
- Breakout tanks
- LNG attributes

Phase 2

- Decade of installation
- Segment could affect an HCA
- Year of last ILI
- Coated/uncoated and cathodic protection
- Type of coating
- Year and pressure of last pressure test
- Mainline block valves
- Gas storage fields

Phase 3

- Positional accuracy conforms with new standards
- Year and pressure of original pressure test

VI. Summary of Impacted collection

The following information is provided for this information collection: (1) Title of the information collection, (2) OMB control number, (3) Current expiration date, (4) Type of request, (5) Abstract of the information collection activity, (6) Description of affected public, (7) Frequency of collection, and (8) Estimate of total annual reporting and recordkeeping burden.

PHMSA requests comments on the following information collection:

Title: National Pipeline Mapping System Program.

OMB Control Number: 2137-0596.

Form Numbers: N/A

Expiration Date: 6/30/2016.

Type of Review: Revision of a Previously Approved Information Collection

Abstract: Each operator of a pipeline facility (except distribution lines and gathering lines) must provide PHMSA geospatial data for their pipeline system and contact information. The provided information is incorporated into the National Pipeline Mapping System (NPMS) to support various regulatory programs, pipeline inspections, and authorized external customers. Following the initial submission of the requested data, the operator must make a new submission to the NPMS if any changes occur so PHMSA can maintain and improve the accuracy of the NPMS's information.

Respondents: Operators of natural gas, hazardous liquid, and liquefied natural gas pipelines.

Number of Respondents: 1,211.

Number of Responses: 1,211.

Frequency: Annual.

Estimate of Total Annual Burden: 335,124 hours.

PUBLIC COMMENTS INVITED: You are asked to comment on any aspect of this information collection, including (a) Whether the proposed collection of information is necessary for the Department's performance; (b) the accuracy of the estimated burden; (c) ways for the Department to enhance the quality, utility and clarity of the information collection; and (d) ways that the burden could be minimized without reducing the quality of the collected information.

The agency will summarize and/or include your comments in the request for OMB's clearance of this information collection.

AUTHORITY: The Paperwork Reduction Act of 1995; 44 U.S.C. chapter 35, as amended; and 49 CFR 1.48.

Issued in Washington, DC on August 21, 2015, under authority delegated in 49 CFR 1.97.

Jeffrey D. Wiese,
Associate Administrator for Pipeline Safety.

[FR Doc. 2015-21238 Filed: 8/26/2015 08:45 am; Publication Date: 8/27/2015]