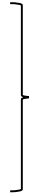


**BEFORE THE  
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION  
UNITED STATES DEPARTMENT OF TRANSPORTATION  
WASHINGTON, D.C.**

Pipeline Safety: Request for Revision  
of a Previously Approved Information  
Collection – National Pipeline Mapping  
System Program



Docket No. PHMSA-2014-0092

**COMMENTS OF THE AMERICAN GAS ASSOCIATION  
ON THE  
RENEWAL AND REVISION TO THE NATIONAL PIPELINE MAPPING SYSTEM  
SECOND PROPOSAL**

November 24, 2015

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The American Gas Association (AGA), founded in 1918, represents more than 200 municipal and investor owned local energy companies that deliver clean natural gas throughout the United States. There are more than 71 million residential, commercial and industrial natural gas customers in the U.S., of which almost 94 percent – more than 68 million customers – receive their gas from AGA members. Today, natural gas meets almost one-fourth of the United States' energy needs.

## **I. INTRODUCTION**

AGA appreciates the opportunity to comment on the revised proposed modification to the information collected under OMB Control Number 2137-0596 titled “National Pipeline Mapping System (NPMS) Program”.<sup>1</sup> These comments supplement previous comments submitted by AGA and are not a substitution of those previous comments or the material submitted with those comments. AGA’s initial comments submitted on December 1, 2014 highlighted the significant security, feasibility, and pipeline safety concerns with PHMSA’s initial proposal for modifications to the NPMS.<sup>2</sup> Many of those concerns remain with PHMSA’s second proposal.

AGA remains supportive of efforts to improve pipeline safety through the modernization of the NPMS. AGA is supportive of PHMSA narrowing the centerline positional accuracy of pipeline segments and adding appropriate pipeline attributes to the current NPMS. However, AGA cannot support PHMSA’s revised proposal, which is a complete overhaul of the NPMS, including a dramatic increase in the number of pipeline attributes requested. This overhaul will create a significant burden and cost, will not benefit the operator in its efforts to improve pipeline safety, and will force operators to move resources from critical pipeline safety work to efforts directly resultant from PHMSA’s NPMS request. AGA maintains that such an overhaul warrants significant further exchange between industry, emergency responders, and Federal and State Regulators. While this discussions began in PHMSA’s public workshops, the workshops only allow for a limited exchange of information. The stakeholders that will be required to submit information and those that will use the information, should all participate in the dialogue to ensure that the dramatic overhaul of the NPMS enhances pipeline safety, while avoiding duplicative reporting requirements that do not provide additional pipeline safety value and do not introduce unwarranted pipeline security risks that are not currently present.

Information collection requirements that do not benefit pipeline safety are an unreasonable burden on pipeline operators, a misuse of valuable government resources, and do not further the goals of the NPMS. AGA respectfully reminds PHMSA that AGA member utilities are spending significant

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<sup>1</sup> 80 Fed. Reg. 52084 (Aug. 27, 2015) (Request for Revision of a Previously Approved Information Collection: National Pipeline Mapping System Program (OMB Control No. 2137-0596)).

<sup>2</sup> 79 Fed. Reg. 44246 (July 30, 2014) (Request for Revision of a Previously Approved Information Collection: National Pipeline Mapping System Program (OMB Control No. 2137-0596)).

resources on the modernization of aging pipeline infrastructure, through activities that not only include the replacement and installation of pipeline assets, but also regulator stations, compressor stations, and automated valves. The resources of pipeline operators must be managed prudently by focusing on activities and actions that have a beneficial impact on pipeline safety performance. In addition, utility ratepayers will be funding the costs borne by AGA's member utilities to comply with the increased reporting requirement under the NPMS and adding cost to a customer's bill should benefit the customer through increased safety or reliability. PHMSA's proposed changes to the NPMS will increase customer bills and will not increase the safety or reliability of the pipeline that is used to transport gas to customer homes and businesses.

PHMSA's proposed revised NPMS collection identifies twenty-four unique pipeline attributes<sup>3</sup> that are to be provided by operators to PHMSA in a specific geospatial format that are in addition to the two existing pipeline unique attributes required for the NPMS, Commodity Detail and Pipeline Diameter<sup>4</sup>. In addition, PHMSA has broadened the scope of the information collection request (ICR) to include geospatial information from three new facility types, Pump and Compressor Stations, Gas Storage Facilities, and Breakout Tanks. The proposed revised collection would significantly expand the scope of data to be collected for the NPMS and would impose substantial burdens on regulated parties to conform the data to the format required by PHMSA – burdens that cannot be reconciled with PHMSA's suggestion that its proposed request is a simple revision of the NPMS. PHMSA's proposal more closely resembles a substantive rulemaking. It is a complete overhaul of both PHMSA's data gathering system and the method by which operators would be obligated to maintain and submit data, it would impose significant obligations and duties on the regulated community, and it would result in enormous expenditures incurred by the industry that would ultimately be borne by natural gas customers. Furthermore, the single online location of extensive sensitive pipeline operations data creates a security vulnerability that potentially threatens the safety of the communities PHMSA suggests it is protecting through the NPMS modernization effort.

There is universal support for the modernization of the NPMS. However, PHMSA's proposal in the August 27, 2015 Federal Register Notice continues to impose burdens on operators that do not advance pipeline safety. AGA is committed to working with PHMSA, and other key stakeholders, on modernizing the NPMS and fully supports PHMSA bringing these stakeholders together to develop a viable path forward.

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<sup>3</sup> National Pipeline Mapping System. Operator Standards Manual. Draft to accompany Information Collection 2137-0596.

<sup>4</sup> National Pipeline Mapping System. Standards for Pipeline, Liquefied Natural Gas and Breakout Tank Farm Operator Submissions. October 2015.

**II. GENERAL COMMENTS ON THE PROPOSED REVISED COLLECTION**

**A. PHMSA Failed to Assess the True, Excessive Cost & Burden to Submit Information**

In AGA’s initial set of comments, filed December 1, 2014, AGA provided two examples outlining the tremendous cost for operators to comply with PHMSA’s first proposal. In the Federal Register notice for the second proposal, PHMSA did not address this concern, but instead simply listed the ten commenters that identified PHMSA’s underestimate of the expected burden, the potential diversion of resources from more critical pipeline safety programs, and the significant information technology infrastructure modifications that would be needed by the industry. In no way did PHMSA address or respond to these major concerns.

While the estimated costs to comply have declined in comparison to the initial proposal due to the new positional accuracy requirements and the slight reduction in attributes, the burden remains excessively high. Table 1 provides just a few examples of the many estimates AGA received for the burden to comply with PHMSA’s revised proposed positional accuracy requirements. Cost estimates range from \$20 to \$4,000 per pipeline mile, suggesting that there is a great diversity in the current level of GIS accuracy and thus variance in the cost and burden operators would need to overcome in order to meet the new proposal.

**Table 1. Burden Associated with 50 Feet Positional Accuracy Requirement**

<b>Company</b>	<b>% Mileage in Class 1</b>	<b>% Mileage in Class 2,3,4</b>	<b>Cost / Pipeline Mile to Reach Proposed Requirements</b>
<b>A</b>	45%	55%	\$800
<b>B</b>	60%	40%	\$200
<b>C</b>	70%	30%	\$1,500
<b>D</b>	90%	10%	\$4,000
<b>E</b>	75%	25%	\$1,300
<b>F</b>	90%	10%	\$20

The positional accuracy requirements represent just one of the new mandates in PHMSA’s proposed revised NPMS collection. The estimated burden to comply with the remaining requirements is even more significant. Tables 2 and 3 outline the associated burden for AGA members to respond with each of the twenty-six proposed NPMS attributes. It should be noted that AGA members operate 74,652 miles of gas transmission pipeline, or approximately 25% of the regulated transmission miles based on PHMSA’s annual report statistics.

**Table 2. Burden Associated with Linear Pipeline Attributes**

	Pipeline Attribute	Cost for AGA Members to Comply (\$/Mile)	Burden for AGA Members to Comply (Minutes / Mile)
1	Pipe Diameter	\$5 - 75	2 - 10
2	Wall Thickness	\$5 - 200	2 - 30
3	Commodity Detail	\$5 - 75	2 - 20
4	Pipe Material	\$5 - 75	2 - 10
5	Pipe Grade	\$5 - 125	2 - 75
6	Pipe Join Method	\$2 - 1,000	1 - 600
7	Highest Percent Operating SMYS	\$2 - 215	2 - 30
8	Maximum Allowable Operating Pressure	\$5 - 215	2 - 75
9	Seam Type	\$5 - 350	10 - 200
10	Decade (or Year) of Installation	\$5 - 215	2 - 30
11	Onshore/Offshore	Negligible for AGA Members	
12	Inline Inspection	\$5 - 75	5 - 15
13	Class Location	\$2 - 375	5 - 225
14	Gas HCA Segment	\$2 - 215	2 - 30
15	Segment Could Affect an HCA	N/A for AGA Members	
16	Year of Last ILI	\$1 - 215	1 - 60
17	Coat / Uncoated and Cathodic Protection	\$2 - 150	1 - 175
18	Type of Coating	\$5 - 150	5 - 175
19	FRP Control Number and Sequence Number	Negligible for AGA Members	
20	Year and Pressure of Last and Original Pressure Test	\$15 - 215	1 - 150
21	Abandoned Pipelines	\$2 - 215	2 - 20
<b>Total</b>		<b>\$90/Mile – \$4,200 / Mile</b>	<b>45 Minutes /Mile – 2,000 Minutes/Mile</b>

**Table 3. Burden Associated with Point Specific Pipeline Attributes**

	Pipeline Attribute	Cost for Average AGA Member to Comply (Total Cost)	Burden for Average AGA Member to Comply (Total Hours)
22	Pump and Compressor Stations	\$1,000 - 10,000	15 - 200 Hours
23	Mainline Block Valves	\$2,000 - 500,000	15 - 800 Hours
24	Gas Storage Fields	\$500 - 25,000	5 - 10 Hours
25	Breakout Tanks	Up to \$100,000	~ 40 Hours
26	LNG Attributes	Up to \$40,000	~ 20 Hours
<b>Total</b>		<b>Up to \$675,000 for an AGA Member</b>	<b>Up to 1,000 Hours for an AGA Member</b>

Based on the responses received from AGA’s members, AGA estimates the hourly burden for each AGA member to comply both with the positional accuracy requirements and the additional attributes



to be between 1,000 and 3,000 hours and the total cost burden to be between \$500,000 and \$1 million.

PHMSA should also recognize that as it adds attributes to the NPMS requirement, the cost to comply increases. As shown in Tables 2 and 3, the cost and hourly burden on operators to submit PHMSA's proposed attributes varies greatly. AGA is supportive of PHMSA's efforts to advance its broad goals of pipeline safety as well as modifying the NPMS. To those ends, AGA encourages PHMSA to prioritize the attributes requested. This prioritization will allow a balance between pipeline safety benefits PHMSA may potentially receive through the changes to the NPMS and the costs and burden on operators to submit additional attributes and greater accuracy than what is currently required. As stated previously, the modernization of the NPMS will provide limited pipeline safety benefit to operators.

As detailed in PHMSA's public workshops on the NPMS and in comments submitted to the NPMS docket, without waving and subjecting to the concerns expressed in these and AGA's prior comments, AGA supports the inclusion of the following attributes in the new NPMS submittal:

1. Pipe Diameter
2. Commodity Detail
3. Pipe Material
4. Highest Percent Operating SMYS
5. Decade (or Year) of Installation
6. Class Location
7. Gas HCA Segment
8. Coated / Cathodic Protection (Yes/No)

By collecting the eight attributes listed above, AGA believes the justification for collecting the attributes listed below are adequately addressed and therefore the following five attributes do not need to be collected through the NPMS.

1. Maximum Allowable Operating Pressure
2. Pipe Grade
3. Wall Thickness
4. Pipe Coating
5. Coating Type

It should be noted that the following attributes do not affect the large majority of AGA operators. Therefore, AGA defers to other industry stakeholders on the relevance and burden of the following attributes:

1. Onshore/Offshore
2. HCA "Could Affect"
3. FRP Control Number and Sequence Number

Many operators compare the record search that will be necessary for the attributes listed in the NPMS proposal to the record search performed for Maximum Allowable Operating Pressure (MAOP) validation that began in 2011 when operators began submitting information contained in Section Part Q – *Gas Transmission Miles by §192.619 MAOP Determination Method*<sup>5</sup>. There is an understanding and appreciation within the industry that the MAOP validation record recovery process, while beneficial, was costly, time consuming, burdensome, and in most cases remains continuous. Aligning the various attribute records requested for the NPMS with the locational accuracy of each record creates much of the identified burden.

Combining the costs to add attributes to the costs associated with improving positional accuracy, the anticipated cost to comply with this Information Collection Request (ICR) is approximately \$150 million for AGA members alone. This cost is well over the \$100 million threshold for a significant rulemaking and it does not include the costs associated with interstate natural gas transmission and hazardous liquid operators in complying with PHMSA’s proposal.<sup>6</sup> Nor does this estimate include the extreme costs that will be incurred by PHMSA in order to process and publish this data in multiple applications, including a public viewer, an authorized user viewer, and a format for utilizing the SSI information.

PHMSA estimated a total annual burden of 335,124 hours for the 1,211 NPMS respondents for the proposed NPMS requirements.<sup>7</sup> This equates to an average of 276 hours per respondent. Tables 2 and 3 outline the significant variance between PHMSA’s estimate and the actual anticipated burden both to initially comply with PHMSA’s proposal, but also to comply annually with the ICR. AGA Members, or 203 respondents, estimate a total hourly burden greater than 450,000 hours to provide the initial submission. The 203 AGA respondents only represent 74,652 miles of the 302,821 total gas transmission miles regulated by PHMSA, or roughly 25 percent. AGA members estimate the increased annual burden to be approximately 2,230 hours, which is almost ten times the 276 hours that PHMSA estimated in the ICR.

AGA does not believe PHMSA has adequately evaluated the actual burden it will take operators to conduct detailed record searches and to format the data in PHMSA’s requested specifications. Every dollar spent to comply with PHMSA’s NPMS collection is a dollar not available for infrastructure

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<sup>5</sup> DOT PHMSA Annual Report for Natural and Other Gas Transmission and Gathering Pipeline Systems. OMB No. 2137-0522.

<sup>6</sup> Executive Order 12866 assigns the Office of Management and Budget (OMB) the responsibility of coordinating interagency Executive Branch review of significant regulations before publication. Significant regulatory actions include those rulemakings that “[h]ave an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities.” Exec. Order No. 12866 (1993).

<sup>7</sup> 80 Fed. Reg. 52093.

replacement, integrity management, or preventative and mitigative measures – those actions that do have tangible pipeline safety benefits.

## **B. PHMSA Has not Complied with the Paperwork Reduction Act**

Despite PHMSA’s assertion to the contrary, the Office of Management and Budget (OMB) has not approved the proposed revised information collection request under the Paperwork Reduction Act (PRA). The PRA was designed to “ensure the greatest possible public benefit from and maximize the utility of information created, collected, maintained, used, shared and disseminated by or for the Federal Government” and to “improve the quality and use of the Federal information to strengthen decision making, accountability, and openness in Government and society.”<sup>8</sup> The PRA requires agencies to justify the collection of information from the public<sup>9</sup> by establishing the need and intended use of the information, estimating the burden that the collection will impose on respondents, and showing that the collection is the least burdensome way to gather the information.<sup>10</sup> Federal agencies must receive OMB approval for each collection request before it is implemented.<sup>11</sup>

In response to public comments noting that PHMSA’s initial proposal failed to meet the requirements of the PRA, PHMSA responded that “this information collection complies with the paperwork reduction act, as it was done with the approval of OMB.”<sup>12</sup> PHMSA’s response fails to recognize that the PRA requires subsequent OMB approval of extensions of a currently approved collection of information,<sup>13</sup> as well as substantive or material modifications to approved collections of information.<sup>14</sup> PHMSA’s revised ICR, as proposed, does not meet the requirements of the PRA. OMB will not approve the revised information collection unless PHMSA can demonstrate that the proposed collection meets the PRA requirements:

- The proposed collection “[i]s the least burdensome necessary for the proper performance of the agency’s functions to comply with legal requirements and achieve program objectives;”
- The proposed collection “[i]s not duplicative of information otherwise accessible to the agency; and”
- The proposed collection “[h]as practical utility.”<sup>15</sup>

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<sup>8</sup> 44 U.S.C. §3501.

<sup>9</sup> The PRA defines “collection of information” to apply to the solicitation of information from ten or more persons. *See id.* at § 3502(3).

<sup>10</sup> *Id.* at § 3506.

<sup>11</sup> *Id.* at § 3507.

<sup>12</sup> 80 Fed. Reg. 52092.

<sup>13</sup> 44 U.S.C. § 3507(h)(1).

<sup>14</sup> *Id.* at § 3507(h)(3).

<sup>15</sup> 5 C.F.R. § 1320.5(d)(1).

In addition, approval of PHMSA's proposed revised collection is contingent on OMB's determination that the collection "is necessary for the proper performance of [PHMSA's] performance."<sup>16</sup> As AGA demonstrates below, PHMSA's proposed revised collection fails to meet any of these PRA requirements.

1. The Proposed Revised Collection Is Not Necessary for PHMSA's Performance

Much of PHMSA's stated purpose and reasoning behind the proposed revised collection is to educate and provide outreach to emergency responders for pipeline emergencies. PHMSA states that providing government officials with an improved NPMS can help ensure that emergency response agencies and communities are better prepared and can better execute response operations during incidents.<sup>17</sup> PHMSA provides no support identifying how an improved NPMS actually can achieve this purpose. To the contrary, emergency responders already are provided access to pipeline data upon request to the pipeline operator. Through extensive Public Awareness Programs, some of which are required by regulations, operators communicate information to their local emergency responders on the details of pipeline assets as well as how the parties will work together in emergency situations. Nowhere does PHMSA explain how the proposed NPMS ICR improves this exchange of information or is necessary.

2. The Proposed Revised Collection is Not the Least Burdensome and is Duplicative of Other Requirements

Several commenters, including AGA, noted that PHMSA's July 2014 proposal imposed significant compliance cost and burdens. PHMSA failed to substantively respond to these concerns in the August 2015 revised proposal.<sup>18</sup> As previously described, even with the slightly reduced number of attributes, the revised NPMS ICR imposes substantial compliance costs on companies. Regardless, PHMSA's burden analysis fails to meet the requirements of the PRA.

As an initial matter, PHMSA fails to acknowledge the significant increase from annual burden estimate contained in the currently approved ICR and the proposed revised ICR, 16,312 hours<sup>19</sup> to 335,124 hours.<sup>20</sup> Moreover, PHMSA has provided no support for how it calculated its burden estimate of 335,124 hours. The PRA requires that burden estimates be based on "the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency, including:

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<sup>16</sup> *Id.* at § 1320.5(e).

<sup>17</sup> 80 Fed. Reg. 52085.

<sup>18</sup> *See id.* at 52091.

<sup>19</sup> National Pipeline Mapping Program, Information Collection, [http://www.reginfo.gov/public/do/PRAViewIC?ref\\_nbr=201309-2137-001&icID=26822](http://www.reginfo.gov/public/do/PRAViewIC?ref_nbr=201309-2137-001&icID=26822).

<sup>20</sup> 80 Fed. Reg. 52093.

- (i) Reviewing instructions;
- (ii) Developing, acquiring, installing, and utilizing technology and systems for the purpose of collecting, validating, and verifying information;
- (iii) Developing, acquiring , installing and utilizing technology and systems for the purpose of processing and maintaining information;
- (iv) Developing, acquiring , installing and utilizing technology and systems for the purpose of disclosing and providing information;
- (v) Adjusting the existing ways to comply with any previously applicable instructions and requirements;
- (vi) Training personnel to be able to respond to a collection of information;
- (vii) Searching data sources;
- (viii) Completing and reviewing the collection of information; and
- (ix) Transmitting, or otherwise disclosing the information.”<sup>21</sup>

As discussed above, AGA believes that PHMSA’s estimate significantly underestimates the burden that the proposed revised ICR will pose on respondents. However, without any substantiation of how PHMSA reached this estimate, AGA is unable to “[e]valuate the accuracy of [PHMSA’s] estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used.”<sup>22</sup>

In addition to describing the steps the agency has taken to reduce the collection burden generally, the PRA requires that an agency certify to OMB that the proposed collection reduces the burden on small entities through techniques such as differing compliance or reporting requirements or clarification or exemptions from coverage.<sup>23</sup> In the currently approved information collection, PHMSA estimated that of the 894 respondents, 625 were small entities.<sup>24</sup> PHMSA has not identified whether the proposed revised collection will impact the same number of small entities, the burden on these small entities, nor the steps the Agency has taken to minimize this burden.

The proposed revised ICR requests information in a specific geospatial format that is duplicative of information accessible to PHMSA in various alternative formats. The proposed NPMS ICR requests numerous attributes and data points that can be found in the PHMSA Gas

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<sup>21</sup> 5 C.F.R. § 1320.3(b)(1).

<sup>22</sup> *Id.* at § 1320.8(d)(1)(ii).

<sup>23</sup> *See id.* at § 1320.9(c).

<sup>24</sup> National Pipeline Mapping Program, Information Collection, [http://www.reginfo.gov/public/do/PRAViewIC?ref\\_nbr=201309-2137-001&icID=26822](http://www.reginfo.gov/public/do/PRAViewIC?ref_nbr=201309-2137-001&icID=26822).

Transmission & Gathering Lines Annual Report.<sup>25</sup> Specifically, the proposed request seeks information pertaining to the pipeline material, Inline Inspection ability, percent Specified Minimum Yield Strength (% SMYS), and cathodic protection, all of which are available to PHMSA, albeit in an alternative format, through the Annual Report and during audits or inspections. Because PHMSA has not identified any revisions to the information collected for the Annual Report, the reporting of this information to the Agency through the proposed NPMS ICR is duplicative and therefore there are no reductions in reporting requirements derived from the implementation of a more robust NPMS.

In addition, the specific geospatial format requested by PHMSA is not the least burdensome and would impose significant burden on many operators that already have GIS, but not in the specific platform requested by PHMSA. At the November 18, 2015 public NPMS Operator Technical Workshop, NPMS staff encouraged the utilization of Linear Referencing Systems (LRS) for NPMS submissions. The NPMS itself is an LRS and thus the operators' data can be more easily managed and published by PHMSA if also submitted in a LRS format. However, many operators already maintain GIS in a non-LRS format. In order to reduce the level of data scrubbing and manipulation that the NPMS staff will be required to perform prior to publishing new NPMS information, NPMS staff have encouraged operators to modify their GIS to a LRS format. However, this request is not in the name of pipeline safety, but for the convenience of NPMS staff. This request places an even larger distraction and burden on operators, asking them to modify systems and utilize resources only in the name of convenience.

Finally, for each pipeline segment, the proposed collection requires operators to submit data for every requested attribute. This requirement ignores the reality that many of these attributes are duplicative in evaluating any potential safety concerns with the pipeline segment. For example, PHMSA would require that an operator submit data on the year and pressure of the last pressure test as well as the year and pressure of the original pressure test or past assessment dates. For pipeline segments that have a recent pressure test, the historic attribute data is duplicative and unnecessary for evaluating current pipeline safety concerns.

### 3. The Proposed Revised Collection Provides No Practical Utility

The PRA regulations define practical utility as "the actual, not merely the theoretical or potential, usefulness of information to or for an agency, taking into account its accuracy, validity, adequacy, and reliability, and the agency's ability to process the information it collects . . . in a useful and timely fashion."<sup>26</sup> PHMSA's proposed ICR fails to address how the agency intends to address the data inconsistencies that inherently will result from converting data from numerous

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<sup>25</sup> DOT PHMSA Annual Report for Natural and Other Gas Transmission and Gathering Pipeline Systems. OMB No. 2137-0522.

<sup>26</sup> 5 C.F.R. § 1320.3(l).

company's records (including digital and hard copy records) to ensure that the data is useful in meeting PHMSA's stated purpose for the data.

For many of the attributes that PHMSA requests, the applicable code provisions allow operators to use assumed or calculated values based on a conservative engineering judgment. Some operators may have actual values, whereas some operators may use a conservative assumed or calculated values. These inconsistencies will prohibit PHMSA from utilizing the information within the NPMS for risk based audits and inspections, one of the stated intents for the data. Similarly, as discussed further below, because operators utilize different base maps to create their GIS and the high degree of variability among base maps, the data submitted to the NPMS, although accurate relative to the operator's base map, may not be accurate relative to another operator's data. Any conclusion made from information provided to the NPMS will be flawed and often inaccurate. AGA urges PHMSA to have conversations with individual operators during audits and inspections about the risks to their pipelines, instead of trying to make conclusions about geospatial data that originates from various sources. PHMSA has not addressed how it will address these inconsistencies in the NPMS.

As previously mentioned, throughout the November 18, 2015 public NPMS Operator Technical Workshop, NPMS staff encouraged the utilization of Linear Referencing Systems (LRS) for NPMS submissions. This is due to the fact that the NPMS itself is an LRS and thus the operators' data can be more easily managed and published by PHMSA if also submitted in a LRS format. The very nature of GIS technologies have led to numerous GIS platforms being utilized throughout the pipeline industry. However, there is no regulatory obligation for operators to maintain a GIS generally, much less in a specific LRS format. Of those operators that developed GIS, many do not use LRS and intend to submit data on the newly requested attributes in the traditional non-LRS format. The submission of data in the traditional format will lead to significant segmentation of pipeline systems in the NPMS, which will take substantial time for NPMS staff to process. This time consuming data manipulation in and of itself reduces the public utility of the information being submitted. Both the delay in the publication of the information and the potential for inaccuracies due to data manipulation are in direct conflict with the goal of modernizing the NPMS.

In addition, PHMSA has not addressed how it will make use of the submitted data, including making the data available to state regulators and emergency responders, in a timely and useful manner. Currently, it takes PHMSA up to six months to make available NPMS updates with only two pipeline specific attributes in the current NPMS. PHMSA's proposal would result in a significant expansion in the scope of data it collects, yet PHMSA has not addressed how it intends to process this data so that it can be available in a timely manner.

### C. PHMSA should Align NPMS Requirements with Goals of Pending Pipeline Safety Regulations

AGA respectfully reminds PHMSA that there are numerous pipeline safety initiatives currently underway. From integrity assessments, to modernization of aging infrastructure, to installation of remote and automated valves, to increased patrolling and excavation damage prevention programs, operators are focusing their limited resources on the issues that impact pipeline, personnel and public safety. The financial resources associated with these initiatives are realized both within the operating companies as well as by the rate paying public. A continuation of true pipeline safety initiatives is paramount.

Additionally, approximately 60% of the nation's transmission pipeline mileage was constructed and installed prior to the 1970 effective date of the original federal pipeline safety regulations. It was those regulations that first imposed a national requirement for retention of certain pipeline records, and additional recordkeeping requirements were added later. For pipelines constructed prior to this time, many records were created before computers, are not in one location, and are not in the format requested by PHMSA. In addition, many records are not in a GIS nor have the locational accuracy requested in the proposal.

The draft Integrity Verification Process (IVP) for Gas Transmission Pipelines<sup>27</sup>, released in November 2013, is anticipated to be included in the larger Safety of Gas Transmission and Gathering Lines Rule<sup>28</sup>. The IVP contains actions that significantly parallel the efforts required by operators for submission to PHMSA's proposed NPMS. PHMSA and OMB have recognized the significance of the data collection associated with this Significant Rulemaking, as it has been under OMB review since April 27, 2015. This regulation is assumed to address the Congressional Mandate found within the Pipeline Safety, Regulatory Certainty and Job Creation Act of 2011 (2011 Act) Section 23d: Testing Regulations, which requires operators to, *"conduct tests to confirm the material strength of previously untested natural gas transmission lines located in high-consequence areas and operating at a pressure greater than 30 percent of specified minimum yield strength."* Only after these actions are taken and the required documentation has been obtained should this information be required to be submitted to the NPMS.

In order to streamline efforts, minimize burden to operators, and maximize net pipeline safety benefit, AGA believes the modernization of the NPMS and the expansion of integrity management principals need to be in sync. It is AGA's position that the following attributes should be submitted in conjunction with the necessary actions called for in the pending gas transmission regulations:

- Year and pressure of last pressure test
- Seam Type

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<sup>27</sup> DOT PHMSA. Pipeline Safety: Public Workshop on Integrity Verification Process. Docket ID: PHMSA-2013-0119.

<sup>28</sup> DOT PHMSA. Pipeline Safety: Safety of Gas Transmission Pipelines. Docket ID: PHMSA-2011-0023.



- Pipe Joining Method
- Pipe Grade

Also, as addressed in AGA's comments on the IVP, the benefits of sound material records for pipelines can only be realized through the minimization of coupon testing. AGA strongly believes that digging up pipelines that lack material records does not benefit pipeline safety, and in fact has a negative impact on the overall integrity of the pipeline.

#### **D. PHMSA's ICR Seeks Unprecedented Geospatial Data Collection**

As discussed by the Pipeline Safety Trust at the September 2015 NPMS Workshop, Washington and Texas have implemented state wide mapping systems. However, there is a major difference between the method and quantity of data being requested by PHMSA and these state mapping systems.

Texas requires operators to submit geospatial information on their transmission pipelines that require a state operating permit, the commodity details and the pipe diameter to their state pipeline mapping system. Washington State requests gas pipeline companies with interstate pipelines, or gas pipelines operating above 250 psig to submit information on their pipelines, but the attributes requested geospatially are the operator name, operator I.D., low stress designation, commodity, and interstate designation. Depending on the operator, the numerous other pipeline attributes requested by Washington are maintained in a tabular format and are not linked geospatially to the corresponding GIS feature. This is a significantly less onerous task than the format requested by PHMSA through the NPMS.

#### **E. PHMSA Should Clarify How to Manage Unavailable Attribute Information**

PHMSA's Annual Report for Natural Gas Transmission and Gathering Pipeline Systems, Part Q – *Gas Transmission Miles by 192.619 MAOP Determination Method*, asks operators to indicate the mileage of gas transmission pipelines without complete MAOP records. To date, many operators have indicated that there are missing records in their systems, which they continue to address through detailed record searches and actions to fill data gaps. In fact, throughout pipeline safety regulations, there are allowances for conservative assumptions. Table 4 displays the three NPMS proposed attributes that, by code can be defaulted to a conservative value if records do not exist or an engineering assessment can be made that allows for conservative assumptions. Furthermore, the proposed Integrity Verification Process highlights this understanding of missing records and even goes so far as to outline how operators should begin filling those record gaps through actions such as, validation digs, company interviews, and costly paper record searches. However, PHMSA has not indicated in the original or revised NPMS modernization proposals how this unavailable attribute information should be managed in NPMS data submissions.

**Table 4. NPMS Attributes that can be assumed in Pipeline Safety Regulations**

<b>NPMS Attribute</b>	<b>Design Formula Variable</b>	<b>Code Reference</b>
Pipe Grade	Yield Strength	§192.107
Wall Thickness	Nominal Wall Thickness	§192.109
Seam Type	Longitudinal Joint Factor	§192.113

There are three attributes in the NPMS Operator Standards Manual that correspond with the Federal Register Notice, which appear to allow “unknown” as an available response: Pipe Grade, Year of original pressure test, and Original pressure test pressure. However, it is unclear how an operator would indicate “unknown” for the latter two attributes, as one requires a single alpha character and the other requires a decimal input.

In addition to these three attributes, there is potential for other attributes to be unavailable to operators due to missing records. As highlighted during the numerous discussions between operators and PHMSA on MAOP records, these records were not always required to be retained and, in some instances, paper records have been either destroyed or lost over the lifetime of some pipelines due to company mergers and acquisitions, natural disasters, and fires.

AGA requests clarification on whether attribute information not based on complete records should be submitted into the NPMS. PHMSA should provide guidance on whether it would prefer operators to leave an attribute field empty or if a conservative engineering assumption should be entered. For some of the proposed publically available attributes, such as pipe grade and seam type, operators may currently be using conservative assumptions. While industry professionals understand the use of conservative assumptions, there is a risk that these assumptions will not be understood by other stakeholders, which could lead to the impression that the operator is providing erroneous information on a pipeline or that these pipelines will be misrepresented to the public. This opportunity for misunderstanding also directly violates the intent of an Information Collection Requirement, which is to “enhance the quality, utility and clarity of information to be collected.”

**F. PHMSA is Requesting Information that Should be Obtained from Other Federal Agencies**

PHMSA proposed to require gas transmission operators to submit data at ± 50 foot accuracy for “...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.”

It is apparent that PHMSA is attempting to address the National Transportation Safety Board’s (NTSB) Recommendation from the Sissonville, WV gas transmission pipeline rupture:

*P-14-01: Revise Title 49 Code of Federal Regulations Section 903, Subpart O, Gas Transmission Pipeline Integrity Management, to add principal arterial roadways including interstates, other freeways and expressways, and other principal arterial roadways as defined in the Federal Highway Administration’s Highway Functional Classification*

*Concepts, Criteria and Procedures to the list of “identified sites” that establish a high consequence area.*

It should not be up to a pipeline operator to identify 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.” PHMSA’s proposal to require operators to submit, at a greater accuracy, the location of their transmission lines will allow PHMSA to overlay the pipeline location information with information it obtains from the Federal Highway Administration.

If PHMSA needs additional information on the location of pipelines relative to roadways listed above, then:

- The source of the highway data should be consistent PHMSA should make this and available through a centralized database. The format of this database should be easily transferable to an operator’s GIS regardless of which vendor solution is utilized.
- It should be recognized that existing highway databases are either incomplete or do not provide sufficiently robust data to determine the proximity of a pipeline to a highway right-of-way.
- PHMSA needs to define and then provide clarity on the proximity of these highways to pipelines for their inclusion in the HCA definition.
- Operators would not have control over the accuracy of highway data, and therefore would not have control over the accuracy of their pipeline information submitted to the NPMS.

If this portion of the NPMS request is an attempt to expand PHMSA’s current HCA definition, this can only be accommodated through the rulemaking process<sup>29</sup> and not through an ICR. AGA is supportive of addressing the NTSB’s recommendation and is prepared to modify NPMS submissions to incorporate a change in definition to HCA once it has been vetted through the rulemaking process.<sup>30</sup>

There are several nuances to this HCA definition change that need to be vetted through the rulemaking process, including:

#### **G. The Term “Predominant” Is Appropriate Only in Limited Circumstances**

In PHMSA’s National Pipeline Mapping System Operator Standards Manual to accompany the proposed ICR, there are three pipeline attributes that are requested on a “predominant” basis: Pipe Grade, Year of Original Construction, and Class Location. The use of the term “predominant” for these pipeline attributes will actually cause confusion and further segmentation for pipeline operators.

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<sup>29</sup> See 5 U.S.C. §§ 500 et seq., Administrative Procedure Act.

<sup>30</sup> The Administrative Procedures Act defines a “rule” as “the whole or part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy...” 5 U.S.C. § 551(4).

There are, however, three attributes that would logically align with the allowance of predominant attributes: Inline Inspection, Type of Coating, and Pipe Join Method.

Pipeline operators distinguish the ability for a pipeline to be inline inspected on a predominant basis. Meaning there may be small appurtenances that need to be addressed prior to running an inline inspection tool, however largely the pipeline is able to be inline inspected. The clarity of allowing predominant for this pipeline attribute will ease the burden for the submission of this pipeline attribute.

The type of coating on a pipeline is understood to be predominant for risk analysis purposes. There may be very small sections of a pipeline that receive a wrapped style coating due to a discovered anomaly, but the remainder of the pipeline will have one consistent type of coating. The specific geospatial location of this small segment of wrapped coating does not represent any variance in risk associated with the overall pipeline.

Operators should also be allowed to submit the attribute Pipe Join Method on a predominant basis. This would eliminate any confusion about how to submit the attribute if there are single instances of appurtenances joined by a varying method.

#### **H. Data Conflation and Accuracy Challenges**

The ultimate goal of the NPMS is to provide accurate and meaningful geospatial pipeline data to appropriate stakeholder groups. Throughout these comments AGA addresses the challenges, burdens and perceived necessity of the proposed attributes. However, the conversation would not be complete without a discussion on the technical feasibility to utilize the geospatial data in larger context.

All operator GIS are created on a base map. The accuracy of individual points is dependent upon both the accuracy of the base map and the accuracy of each data point to the other data points in the system. Base maps, however, are highly variable and could differ from operator to operator. Therefore, when an operator submits data to the NPMS the data will not be relatively accurate to all other operator submittals, as they are each using potentially unique databases. Many operators utilize shapefiles for managing various attributes, such as HCAs and Class Locations. AGA requests that these various submission formats be permitted for the NPMS.

### **III. SECURITY WOULD BE UNDERMINED BY PHMSA'S PROPOSED ICR**

PHMSA is responsible for assuring the safety of the public and the protection of the environment through development and enforcement of integrity standards for pipeline owners and operators. PHMSA is proposing to require pipeline owners and operators to disclose locational data of national critical assets alongside of performance and capacity data to be aggregated and stored in the NPMS, a web-based

application to which access would be controlled by a third party vendor or the government. The asset owners and operators consider this detailed data to be security-sensitive and question whether there is good cause to aggregate these data nationally and store the data online in a single database.

AGA recognizes this second PHMSA proposal improves upon some of the security concerns previously raised about centerline positional accuracy and throughput data. AGA continues to maintain that the dramatic increase in the number of requested pipeline attributes — which are considered by pipeline operators to be sensitive information and which will be made available online in a single database — creates a significant security risk that otherwise does not presently exist. PHMSA is asked to acknowledge that the compilation of this data presents an attractive target for nefarious actors seeking to carry out cyber or physical attacks against pipeline infrastructure and that PHMSA be prepared to be held accountable in the highly likely event of database breach and data exfiltration. Is PHMSA prepared to testify before legislators on how its efforts to modernize the NPMS and improve public safety came at the expense of public security, especially in light of recent terrorist activities and data trends from the government intelligence community? AGA requests that PHMSA provide greater security measures and controls than those already employed by the owners, operators, and users of the NPMS.

The following sections detail AGA's security concerns regarding the proposed PHMSA information collection as applied to: the need for enhanced data protection; sensitive information handling; protection of online sensitive data repository; nefarious application of publically available sensitive information; third-party contractors; and physical infrastructure security.

**A. Enhanced Data Protection Program is Essential; DOT Must Take Full Responsibility & Liability Risks**

PHMSA proposes to collect and store online in a single database a number of pipeline attributes that are considered to be sensitive information. With the intended open availability of this sensitive information, PHMSA must be able to ensure the integrity of information handling by non-Federal entities and Federal entities beyond PHMSA staff. Information mishandling, whether intentional or in error, may result in unintended consequences with grave potential to threaten the safety and security of the communities the pipelines serve.

Many natural gas operators have established internal processes and policies around the authorized release of varying levels of pipeline attribute data to un-contracted third parties. Removing control from the operators must be balanced by DOT taking full responsibility, including liability, of the consequences associated with this information getting into the wrong hands. While collection of this data in one common location may be technically feasible, the increased convenience brings a corresponding increase in risk of exposure, inappropriate access, and use that requires careful evaluation.

AGA maintains that PHMSA should recognize that the information being requested lays the groundwork for a pipeline vulnerability assessment by nefarious actors. By analyzing the detailed pipeline information, a malicious party can plan and carry out the most serious physical and cyber attacks causing impactful incidents to public safety. How will PHMSA provide protection from this government-imposed increased risk to the operator and the communities the pipelines serve? What is PHMSA's contingency in the event the online database is breached and the detailed sensitive pipeline operations data are exfiltrated by unauthorized parties?

Based on remarks made by PHMSA representatives during the September 14, 2015 NPMS Public Meeting, it is AGA's understanding that the NPMS "has not been hacked." AGA would like to re-emphasize that an unawareness by PHMSA of a successful cyber breach does not constitute an absence of a breach. Adversaries have proven time and time again the ability to remain undetected in systems for months, or even years, before the compromise is recognized. This is most notably exemplified by the following recent high profile Federal data breaches<sup>3132</sup>:

Earlier this year, the U.S. Office of Personnel Management (OPM) discovered malicious cyber activity on their network. It was later determined that two massive breaches occurred that resulted in the theft of personnel and background investigation records of current, former, and prospective Federal employees and contractors from OPM's systems. In addition, information collected in applications and investigations for award of security clearances to private industry were stolen. These two breaches were reported to the public in June 2015. OPM and an interagency incident response team concluded with a high degree of confidence that sensitive information, including the Social Security Numbers (SSNs) of 21.5 million individuals, was stolen from OPM databases. In addition, in September 2015 it was reported that fingerprint records for 5.6 million people were stolen from OPM databases. Stolen records dated back as far as 2002. Both breaches went undetected for nearly a year before OPM became aware of them. OPM has partnered with the U.S. Department of Homeland Security's Computer Emergency Readiness Team (US-CERT), and the Federal Bureau of Investigation (FBI) to investigate and determine the full impact to Federal personnel. Federal law enforcement agencies continue to investigate the matter and assist with remediation efforts.

In September 2015, media reports revealed that attackers successfully compromised computer systems at the U.S. Department of Energy (DOE) more than 159 times between 2010 and 2014. During that time, the systems were attacked a total of 1,131 times. Reports show that

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<sup>31</sup> Office of Personnel Management (OPM) Frequently Asked Questions, <https://www.opm.gov/cybersecurity/faqs/>.

<sup>32</sup> *Timeline: What We Need to Know about the OPM Breach*, <http://www.nextgov.com/cybersecurity/2015/06/timeline-what-we-know-about-opm-breach/115603/>

the Department sustained a consistent barrage of attacks attempting to breach systems containing sensitive data about the nation's power grid, nuclear weapons stockpile, and energy labs. As the investigation is ongoing, DOE has not revealed what information was compromised by these breaches. It has also been reported that the Nuclear Security Administration, which falls within DOE, experienced 19 successful attacks during the same time period.<sup>33</sup>

Further, based on remarks made by PHMSA representatives during the September 14, 2015 NPMS Public Meeting, it is also AGA's understanding that PHMSA systems are independent of the impacted OPM systems. Though this may be true, AGA contends that the OPM breach is a symptom of a larger issue from which PHMSA is not immune. Isolation from a compromised system does not guarantee security. Again, the unawareness of a breach does not constitute the absence of a breach. A September 2015 report to Congress by the United States Government Accountability Office notes that "the number of information security incidents affecting systems supporting the federal government has continued to increase. Since fiscal year 2006, the number rose from 5,503 to 67,168 in fiscal year 2014: an increase of 1,121 percent."<sup>34</sup> This represents a significant security challenge that cannot be ignored. AGA encourages PHMSA to recognize that as the number of attacks against Federal government systems are increasing, the sensitive information being requested by PHMSA poses a desirable target for nefarious actors, and as such, PHMSA must provide assurances that this information will be safeguarded to the level of security well beyond a single password access.

PHMSA should provide a data protection plan detailing how parties involved in the pipeline integrity risk analysis will retrieve and receive the information. Components of the data protection plan should include levels of information detail that will be available to the various parties, how these groups will be held responsible for the protection of the information, and how information mishandling will be addressed, including legal actions that may be taken against an irresponsible party that wantonly or unintentionally mishandles the information. PHMSA must be able to address these issues with confidence, outlining proper mitigation measures that circumvent intentional and unintentional releases of the information to unauthorized third parties. A comprehensive data protection program and policy must be developed and implemented prior to the submission and compilation of sensitive data into a single resource that is made available beyond PHMSA staff.

Further, AGA would like to remind PHMSA of the November 2014 Office of Inspector General Audit Report, highlighting significant security weaknesses with the U.S. Department of Transportation's Information Technology Systems. Notably, the audit points out weaknesses around

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<sup>33</sup> *Records: Energy Department Struck by Cyber Attacks*, <http://www.usatoday.com/story/news/2015/09/09/cyber-attacks-doe-energy/71929786/>

<sup>34</sup> Government Accountability Office; *Agencies Need to Correct Weaknesses and Fully Implement Security Programs*, <http://www.gao.gov/assets/680/672801.pdf>

continuous monitoring, oversight and risk assessment for common security controls, procedures for testing new controls, overall lack of sufficient controls, and lack of sufficient management and oversight. A new audit of DOT's systems will be completed by the end of FY2015, and PHMSA should understand the level of progress that DOT has made in addressing these weaknesses. While DOT is demonstrating progress with improving its information security program, it remains evident that DOT still has a ways to go. PHMSA has suggested that the database will be located separately from the government network. Regardless of the database virtual location, PHMSA must ensure the integrity of the contractor and the data storage security. In light of this and before operators are expected to entrust detailed, sensitive pipeline information to an online database administered by PHMSA and/or its contractor, PHMSA must be able to provide assurances of the NPMS database's cyber defenses, regardless if the database operates on DOT or third party servers.

#### **B. PHMSA Must Ensure Security of Sensitive Information Handling**

An important consideration of a data protection program is the categorization of the data. Since most homeland security-related information is also business-sensitive, private companies worry that this information could be released either accidentally or under compulsion through open government laws. In an effort to strike the necessary balance between "sharing the information that needs to be shared" and "protecting the information that needs to be protected," the Federal government has instituted protection regimes for sensitive but unclassified homeland security-related information.

AGA understands that PHMSA proposes to classify the most sensitive attributes as Sensitive Security Information (SSI), with the intent of retaining these attributes in an SSI environment to ensure the attributes are only released to government agencies who can verify they maintain an SSI-compliant environment. However, SSI classification takes control out of the hands of the operators and relies solely on PHMSA to appropriately classify and handle the data once it is handed over. If the information is not appropriately classified, then there is a risk that this sensitive data will end up in the wrong hands. This threat can be exemplified by the May 2014 mishandling of sensitive information in a DOT data collection requirement that resulted in the public release of sensitive rail and hazardous material transport information:

On May 7, 2014, the Secretary of Transportation issued Emergency Order Docket No. DOTOST-2014-0067 (79 Fed Reg 36860, June 30, 2014) in which railroad operators were required to provide to the State Emergency Response Commissions the specific routes and frequencies of operations on those routes for trains transporting 1,000,000 or more gallons of Bakken crude oil and, potentially, other commodities transported in high hazard flammable trains. Despite DOT's labelling of the collected information as "confidential" and intended only for persons with "need-to-know", several states published the data provided by the railroad operators under the May 7 Order. While some states have declined public requests for publication, the ability of officials in those states to maintain this position is undercut by the publications elsewhere and by the lack



of Federal government action to accord appropriate information protection. Though the public release was of no fault of DOT, the release, nonetheless, creates a public safety vulnerability which did not exist prior to DOT's compilation and sharing of sensitive rail information to entities that could not be held accountable for information mishandling. Ironically, in an effort to improve public safety, DOT's neglect of ensuring proper information handling and security of sensitive information has made the communities along those railways easy targets of nefarious activity.<sup>35</sup>

A preferable classification that is more protective than SSI is Protected Critical Infrastructure Information (PCII), which is a program that protects infrastructure information voluntarily shared with the Department of Homeland Security (DHS) to be used for homeland security purposes. Through the Critical Infrastructure Information Act of 2002, PCII in the Government's hands is protected from disclosure. Under the auspices of the PCII, the operator voluntarily submits the information to DHS, and the submitter retains control of further dissemination (unlike the case of SSI where the submitter has no control). DHS must review the information to certify that it is not already publically available. Other government agencies, once accredited by DHS, may use the program for appropriate information voluntarily submitted. Information validated as PCII may not be disclosed through a FOIA request or through a request under a similar State, tribal, or territorial disclosure law; may not be disclosed in civil litigation; or may not be used for regulatory purposes. PCII is specially marked and must be safeguarded, both physically and electronically, under specific procedures to avoid any improper disclosures. PCII authorized users at all levels of government, to include contract support personnel, are subject to the criminal code and to the applicable laws within their jurisdictions. All of these protections ensure that submitted information is protected, whether containing critical homeland security-related or sensitive/proprietary private sector information. The 12-year old PCII process is an already workable method to balance critical data safeguards with giving access to stakeholders who require safety-sensitive information. Use of any less data protections than PCII invites the potential damage to national security.

The disclosure protections for SSI are significantly weaker than those for PCII. SSI consists primarily of a FOIA exemption and restrictions on the sharing and use of information. There is no reference to how SSI may be handled under a similar State, tribal, or territorial disclosure law, nor is there reference to disclosure in civil litigation. Further, penalties associated with SSI mishandling are limited to Federal employees.

Recognizing data submission to the NPMS will not be a voluntary program, and the PCII protections may not be applied, PHMSA is strongly encouraged to establish an information handling policy that incorporates PCII elements that holds information handlers fully accountable for any

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<sup>35</sup>Rail Sector Coordinating Council Adverse Security Significance – Publication of High Hazard Flammable Trains (HHFT) Operations Information. August 2014.

disclosure of SSI information at the State and local levels. Further, PHMSA is requested to provide an explanation for each element PHMSA concludes does not qualify for SSI protections.

### **C. Cybersecurity of Online Databases – PHMSA’s Proposal Would Increase Vulnerability**

PHMSA proposes to restrict the majority of requested attributes to the Pipeline Information Management Mapping Application (PIMMA), an online database for use by pipeline operators and federal, state, and local government officials. AGA would like to re-emphasize that Federal governments’ and government contractors’ computer networks are not immune to unauthorized, third-party access. Successful compromises have ranged from notable penetration by nation states of databases of the federal government’s personnel office, which contain files on all federal employees, including thousands who have applied for top-secret clearances (as discussed earlier); to access designs for many of our nation’s most sensitive advanced weapons systems; to stealing passwords and metadata.

Currently, the PIMMA database is accessed using single-factor authentication by way of a single user name and password. This type of authentication can easily be broken by guessing, brute force attacks, dictionary attacks, or other common cyber attack methods. Weaker password policies that do not specify length, character types, or enforce limits on age or password reuse can make it easier for attackers to steal log-in credentials. In addition, using a single user name and password can make it easier for users to share log-in credentials with each other. While this is against PHMSA’s usage policy, there do not appear to be any controls in place that restrict this practice. AGA understands that the PIMMA database limits users from signing into multiple devices at the same time using the same account; however, this will not prevent users from sharing log-in credentials. The best way to ensure that log-in credentials are used only by one user is, at the minimum, application of two-factor authentication, where the second factor is limited to something that only that user would have (e.g., security token, cell phone). Two-factor authentication also makes it measurably more difficult for attackers to break or steal log-in credentials.

Further, AGA understands that the current PIMMA password policy does not require passwords to be changed. Instead, users are notified after a certain period of inactivity that their log-in credentials will be revoked. Allowing users to utilize the same password for an indefinite period of time increases the amount of time that attackers have to steal it. As a general security practice, passwords should be changed 2-3 times a year to limit the amount of time that the password is exposed to theft.

As a matter of prudence, AGA does not support the online collection of data at the level being proposed by PHMSA. A single online database containing this level of operational and pipeline integrity information significantly increases our Nation’s pipeline physical security vulnerability,

especially in light of the evidence of cybersecurity related incidents and the grave potential the online database may be compromised by unauthorized users. If PHMSA persists in the online method of data compilation, storage, and access, then prudence demands PHMSA develop a comprehensive program, including policy, to ensure the cybersecurity integrity of the information. In addition to correcting the security concerns raised above, PHMSA's security program should consider more advanced security measures including data encryption, secure communication tunnels, and continuous monitoring capabilities.

**D. Excessive Publicly Available Information Jeopardizes Security**

AGA understands that PHMSA proposes to include pipe grade and pipe join method in the attributes that can be accessed through the NPMS Public Viewer, which can be accessed by the general public. AGA would like to understand what value is gained by the general public in knowing pipe grade and pipe join method. These attributes may be useful DOT integrity tracking efforts; however, there is no apparent use for the general public to have knowledge of such attributes. These attributes, alone, would not constitute a threat to pipeline security. However, the sum of these attributes with locational data for the pipes provides the playbook for a successful attack. AGA recommends that these attributes be restricted only to the access of pipeline operators; federal, state, and local government officials; and first responders.

**E. Security of Third-Party Contractors Should be a Key Requirement in Procurement Contracts**

AGA understands that PHMSA intends to utilize third party vendors to assist in the data processing and management for NPMS. Allowing third-party contractors to access this sensitive information presents a security concern that should be appropriately managed. The OPM security breaches revealed in June 2015 have been linked to Federal contractors. Adversaries commonly target third party contractors as one potential point of vulnerability that can be compromised in attempting to gain access to sensitive information. This highlights the need to ensure that contracts include the appropriate provisions for both cyber and physical security of information that is accessed or managed by the contractor, including penalties and operator collection of damages in the events of database breach. AGA would like to encourage PHMSA to ensure that security is a key consideration in the procurement process for third party contractors that will have access to this information.

**F. Physical Security would be Jeopardized by Placing Critical Asset Locations and Vulnerabilities on a Single Online Database**

With the location of all critical pipeline assets and specific information on these pipelines in a single online database, the targeting and mission planning for an individual or group (aggressor) wanting to do harm to pipeline infrastructure and impact the safety of the communities neighboring those pipelines have been performed for the aggressor. It is important for PHMSA to recognize that in its efforts to enhance public safety by improving the convenience and availability of pipeline attributes, PHMSA is creating vulnerabilities that do not presently exist and that the disclosure of the

attributes, whether intentional or not, increases the physical vulnerability of pipeline assets and the risk to public safety.

#### **IV. ANALYSIS OF ATTRIBUTES**

AGA offers PHMSA attribute-specific comments to ensure that if an attribute is retained, PHMSA can request the data in a reasonable manner that is consistent with operating practices and is not unduly burdensome. Without waving and subjecting to the concerns expressed in these and AGA's prior comments, AGA proposes that, in the interest of advancing pipeline safety generally, the following pipeline attributes as proposed in the notice be submitted by operators:

1. Pipe Diameter
2. Commodity Detail
3. Pipe Material
4. Highest Percent Operating SMYS
5. Decade (or Year) of Installation
6. Class Location
7. Gas HCA Segment
8. Coated / Cathodic Protection (Yes/No)

The additional attributes and the proposed increased positional accuracy requirements would result in an expansive increase in the scope of the NPMS and would impose significant burdens on operators without advancing an operator's efforts to improve pipeline safety. However, AGA and its members are willing to work with PHMSA on the modernization of the NPMS and these attributes, if collected as proposed by AGA, will allow PHMSA, state pipeline safety representatives, and emergency responders to meet many of the goals identified in the NPMS proposal. AGA's attribute-specific comments and proposed attributes are AGA's attempt to further the discussion with PHMSA.

##### **A. Positional Accuracy**

AGA appreciates PHMSA understanding the extreme feasibility challenges associated with the initial proposal to require Class 3, Class 4 and HCA pipelines to have a positional accuracy of 5 feet. The 50 foot requirement is an excellent improvement upon the current 500 foot requirement and existing technologies are available to companies to achieve this accuracy. AGA continues to encourage PHMSA to allow adequate time to reach these new positional accuracy requirements.

The timeline for submission of the new positional accuracy requirement should align with integrity assessment intervals, which is seven years for gas transmission pipelines. This will allow for efficiencies to be realized between ILI integrity assessments and field centerline surveys using Inertial Measurement Unit (IMU) tools. Any phased solution that does not allow for these two inline inspection tools to be run during the same work project is an inefficient use of operators' time and money. AGA reminds PHMSA that the costs for many operators to run inline inspection tools is not immeasurable and can be quite costly. Those project totals not only consist of the ILI tool vendor

costs, the associated engineering and data analysis, but also include site preparation, anomaly digs, and redundant gas supplies for single-feed critical pipelines.

AGA understands that ICRs are only approved for three years, and thus a seven year phased approach would eclipse the approval timeframe from OMB. However, AGA will continue to support the seven year phased approach for the narrowing of positional accuracy on any subsequent requests for renewal for the NPMS.

**B. Pipe Diameter**

AGA supports the submission of the attribute Pipe Diameter, as proposed, to the NPMS.

**C. Wall Thickness**

AGA does not support the collection of Wall Thickness. AGA believes the collection of %SMYS by PHMSA in the NPMS, as discussed below in section H. *Highest Percent Operating SMYS*, negates the need for the collection of this attribute in the NPMS for PHMSA to achieve its stated goals. Wall Thickness is a variable in MAOP calculations, and thus is a factor in the %SMYS of a pipeline segment. Wall Thickness has no independent impact on the risk to a pipeline segment.

As previously discussed in these comments, pipeline safety regulations allow for incomplete Nominal Wall Thickness records, per §192.109 – *Nominal wall thickness (t) for steel pipe*. This pipeline safety regulation outlines the steps by which an operator must take to make a conservative assumption for the wall thickness on a full pipeline. By allowing for operators to make conservative assumptions, PHMSA’s regulations recognize that this record is not available for all pipelines. AGA reminds PHMSA that any attribute required by the NPMS beyond the existing comprehensive regulatory requirements increases the burden for pipeline operators to comply. If PHMSA moves forward with this attribute, PHMSA must clarify how operators should submit attributes for which they have incomplete records and are using conservative estimates. Otherwise the information in the NPMS will decrease the clarity of the data versus increase, as required for Information Collection Requests.

**D. Commodity Detail**

AGA supports the submission of the attribute Commodity Detail, as proposed, to the NPMS.

**E. Pipe Material**

AGA supports the submission of the attribute Pipe Material, as proposed, to the NPMS.

**F. Pipe Grade**

AGA does not support the collection of Pipe Grade. AGA believes the collection of %SMYS by PHMSA in the NPMS, as discussed below in section H. *Highest Percent Operating SMYS*, negates the need for the collection of this attribute in the NPMS for PHMSA to achieve its stated goals. Pipe Grade is a variable in MAOP calculations, and thus is a factor in the %SMYS of a pipeline segment. Pipe Grade has no independent impact on the risk to a pipeline segment.

This attribute is especially challenging for submission to the NPMS for the 60% of transmission pipelines installed prior to 1970, when pipeline safety regulations were implemented or the adoption of API Specification 5L – *Specification for Line Pipe*. In fact, PHMSA has recognized this hurdle by allowing for conservative values to be utilized during design formula calculations per §192.107 – *Yield Strength (S) for steel pipe*. This code specified allowance results in a discrepancy between PHMSA’s recordkeeping requirements found in 49 C.F.R. § 192 and PHMSA’s proposed NPMS submission requirements. As proposed, the NPMS submission requirement is contrary to law and can only be achieved through a rulemaking process. Imposing this recordkeeping requirement through an information collection in no way “minimize[s] the burden of the collection of information those who are to respond.”<sup>36</sup>

For purposes of understanding the risk to a pipeline, the nuances for this attribute must also be recognized. The yield strength for the various API 5L grades are not a single yield strength, but instead are a range of yields strengths. In addition, each yield strength is not unique to a single API 5L grade. The overlapping of yield strengths allows pipe manufacturers to stamp the pipe to multiple API 5L Grades. For example a pipe with a yield strength of 75 ksi could have a triple stamping for X60, X65 and X70. The current proposal only allows for one pipe grade to be submitted. Operators will often default to the lowest, most conservative, grade marking. However, if PHMSA plans to utilize pipe grade to determine yield strength, the attribute itself will not be representative of the actual yield strength of the pipe material.

#### **G. Pipe Join Method**

AGA proposes that this attribute be submitted on a predominant basis. This would eliminate any confusion on how to submit welded pipelines with appurtenances that are joined by a varying method. To further eliminate any confusion, AGA encourages PHMSA to remove “F=flanged” as an option for this attribute. Most welded pipelines contain a few flanged connections (e.g. isolation flanges or at valves), but AGA is unaware of any pipelines completely joined solely by flanges in operation. If there happens to be one in existence the operator can select “O=other” and have a further conversation with PHMSA staff.

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<sup>36</sup> 44 U.S.C. §3506(c)(2)(A)(iv).

## H. Highest percent operating SMYS

AGA supports the collection of this information. This information can indicate if a pipeline will leak or if it will rupture in the unlikely event of a pipeline failure. As identified during AGA's initial comments and discussed during the September 10, 2015 Public Workshop on the NPMS, AGA requests PHMSA utilize common industry terminology when referencing this pipeline attribute. Operators define percent specified minimum yield strength (%SMYS) from the identified maximum allowable operating pressure (MAOP), not the highest operating pressure. AGA notes that the Full Description in the Operator Standards Manual reflects this definition. However, AGA suggest that PHMSA name this attribute "Percent SMYS" and not "Highest percent operating SMYS" as this is confusing and not consistent with normal industry terminology.

## I. Maximum Allowable Operating Pressure (MAOP)

Although operators have a deep understanding of the MAOP to their pipelines, the inclusion of this attribute coupled with the request for % SMYS is an example of where PHMSA is not reducing the Information Collection burden for operators, but instead is increasing it. As discussed previously in these comments, every additional pipeline attribute required for submission to the NPMS, is an additional burden for pipeline operators. AGA reminds PHMSA that the attributes requested should be minimized. Collection of %SMYS provides PHMSA with the pipeline risk information that it needs to achieve its goals.

PHMSA's explanation for inclusion of this attribute in the 2015 proposal is:

- (1) PHMSA inspectors identified [MAOP] as an important element for incident analysis.
- (2) MAOP / MOP helps enforce pressure levels between segments which are rated for different pressures.
- (3) PHMSA engineers further noted that it is useful for determining the potential impact radius.

AGA disagrees with PHMSA's reasoning on why the MAOP should be collected through the NPMS and outlines the reasons why PHMSA's explanations are not substantive.

- (1) If PHMSA believes the MAOP is useful information during incident analysis, the data should be collected through Incident Reports, such as the *Incident Report – Natural and Other Gas Transmission and Gathering Pipeline Systems Report* (OMB NO: 2137-0522). PHMSA has not identified why it considers MAOP important for incident analysis and as such, AGA cannot provide PHMSA with any meaningful comment. However, AGA reminds PHMSA that the use of NPMS information for a purpose outside of the specific purposes of the NPMS would be contrary to Congressional intent.
- (2) PHMSA's second reason for the inclusion of MAOP in the NPMS is simply a statement of the utility of MAOP for operating pipelines. In no way does this statement detail PHMSA's intended use of this pipeline attribute. Operators are required to comply with §192.195 – *Protection against accidental overpressuring*. If PHMSA would like to question an operator's

ability to comply with this section of pipeline safety regulations, they should do so during audits or inspections, not through analysis of data on the NPMS.

- (3) If an operator utilizes “Method 2” under the definition of High Consequence Area (HCA) in §192.903 – *What definitions apply to this subpart?*, then the operator must define the potential impact radius (PIR) of the pipeline. Again, if PHMSA believes that an operator is inaccurately calculating this information, this should be addressed in an audit, not superficially through analysis of NPMS data. PHMSA staff should not be attempting to perform operationally significant calculations on pipeline segments without consulting directly with the pipeline operator.

#### **J. Seam Type**

In the proposal PHMSA states that “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, and is used to confirm MAOP.” AGA agrees with PHMSA’s assessment of the usefulness of this data attribute; however, AGA disagrees with the notion that it is a necessary attribute for PHMSA to obtain through the NPMS data collection and disagrees with its inclusion in the NPMS. This information is available to inspectors during state and federal audits and the visual representation of seam type in the NPMS is not needed to meet PHMSA’s stated reasons for collecting this information. The ability and usefulness of collecting this information through other sources also violates the intent of Information Collection Requests, which are required to minimize the information collection burden for those responding.

In addition, Pipeline operators have been empowered through Transmission Integrity Management to assess and mitigate risk on pipelines. PHMSA’s reasoning for collecting this information suggests that PHMSA does not believe operators are adequately performing integrity management. If this conclusion is accurate, PHMSA needs to address this concern during a federal or state audit or through an official rulemaking that modifies Transmission Integrity Management.

As discussed in a previous section of these comments, Seam Type is an attribute where records are currently not required by pipeline safety regulations. §192.113 – *Longitudinal Joint Factor (E) for steel pipe*, allows operators to default to a conservative value when calculating the Design Formula for steel pipe. The inclusion of and requirement for this attribute is beyond the scope of what is required by current regulations and represents a change in the PHMSA’s regulations, more appropriately addressed through a rulemaking as opposed to an Information Collection Request. In addition, including this attribute in the NPMS reduces clarity in identifying the risks to pipeline segments, as conservative values may inappropriately express risks on a pipeline.



**K. Decade of Installation**

AGA encourages PHMSA to remain flexible on this pipeline attribute. There is a variance in how operators are collecting and storing this information. Where historical records are available and GIS are configured correspondingly, operators are able to submit the actual year of construction. While, in some cases, operators are only able to deduce the decade of construction from field experience or through incomplete records.

AGA disagrees with the use of predominant for this attribute, as operators will find it beneficial to update their GIS or their records whenever a segment of pipe is replaced. These updates will lead to actual data being submitted to the NPMS versus the predominant value for a whole pipeline. AGA would like to propose that PHMSA allow operators to submit year of construction where records exist or allow for a default value of the first year of the decade to be entered, understanding that operators will update this field when records are discovered. Table 5 provides AGA’s proposal for the attribute.

**Table 5. AGA Proposal for Year or Decade of Construction**

Field Name	Field Type	Field Length	Short Description		Full Description	Acceptable Values (UPPERCASE)
CONST_YR_DEC	I	4	Year or Decade of Construction	Year of original construction. Otherwise default to first year of decade.	1993 or 1990 (example)	Y

**L. Onshore/Offshore**

This attribute does not affect the majority of AGA operators. Therefore, AGA defers to other industry stakeholders on the relevance and burden of collecting this information through the NPMS. If PHMSA determines that this attribute is needed, must PHMSA issue clear and reasonable guidance on defining “offshore pipelines.”

**M. Inline Inspection**

The question posed by PHMSA for this attribute is, “Can commercially available devices (pigs) travel, inspect the entire circumference and wall thickness of the pipe, and record or transmit inspection data in sufficient detail or further evaluation of anomalies?” Operators are instructed to select yes or no.

AGA believes this question is too complicated and opinion based to be included in the NPMS. Many operators have the position that a pipeline is not “ILI Able” until an inspection pig has successfully passed through the pipeline. Furthermore, each operator may have a different determination method when answering the question PHMSA has posed, and therefore the attribute

does not belong in a database of records used for risk analysis. Whether or not a pipeline can accommodate inline inspection tools is also constantly changing as technology improves and advances. Given the rapid changes in technology for ILI tools, this pipeline attribute may become meaningless for PHMSA's relative risk assessment of pipelines. Additionally, the qualifier in the description of the attribute that the "pig" be able to inspect "the entire circumference" of the pipe eliminates the inclusion of robotic tools that are not free swimming pigs and are unable to capture data at specific appurtenances in the pipeline.

PHMSA cites two NTSB Recommendations from the 2015 safety study, *Integrity Management of Gas Transmission Pipelines in High Consequence Areas*, as the driver for the inclusion of this pipeline attribute.

*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.*

*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.*

The inclusion of the "ILI\_ABLE" attribute in no way helps PHMSA address NTSB Recommendations P-15-18 and P-15-20. The operational complications that limit the use of ILI tools and the configuration modifications necessary to receive ILI tools cannot be concluded through viewing pipeline segments on a map. AGA has offered and continues to welcome coordination with PHMSA on addressing these Recommendations. AGA would like to offer a venue to provide specific examples of the configuration and operational complications operators are challenged with when running ILI tools.

Due to the uncertainty and ambiguity in the assigning this attribute, along with the lack of justification for its inclusion, AGA does not support the addition of this attribute to the NPMS. If PHMSA proves that the burden to submit this attributed is outweighed by the benefits to pipeline safety, AGA encourages PHMSA to allow operators to submit this attribute on a predominant basis and should better define "able" versus "not-able" to align with the variability of technology changes and improvements.

#### **N. Class Location**

AGA supports the submission of the attribute Class Location, as proposed, to the NPMS.

#### **O. Gas HCA Segment**

AGA supports the submission of the attribute Gas HCA Segment, as proposed, to the NPMS.

**P. Segment Could Affect an HCA**

PHMSA’s proposal from August 27, 2015 states “PHMSA proposed hazardous liquid and gas transmission operators identify pipe segments which could affect HCAs as defined by 49 CFR 192.450.” The proposal also states “PHMSA intends to move forward with the ‘could affect HCA’ attribute as originally proposed.”

AGA maintains that this attribute is only applicable to hazardous liquid pipelines and should not be a requirement for gas transmission operators. There is no industry knowledge on a methodology to apply this concept to gas transmission pipelines.

**Q. Year of Last ILI**

While this attribute is only listed once in the Federal Register notice, it is actually four different attributes, as PHMSA has requested the year of the last corrosion, dent, crack and other ILI runs. As previously discussed in these comments, every additional attribute has potential for further segmentation of the pipelines and thus increased burden on the pipeline operators for submission. PHMSA states in the notice that this attribute is included because:

*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 statistically lower risk than one that has not recently been assessed.*

AGA emphatically disagrees with PHMSA’s assessment of the value of these four attributes for pipeline risk management. Inline Inspection tools are utilized to locate specific anomalies on pipeline segments that are determined to be potential threats and require mitigation. If an operator has not run a specific ILI tool, it does not equate to an increased risk on that pipeline segment. It may mean that the threat has been eliminated through previous runs or other mitigative measures.

AGA does not support the inclusion of these four pipeline attributes and categorically disagrees with PHMSA’s reasoning for their addition to the NPMS. AGA also maintains that there is no net pipeline safety benefit in the collection of this attribute through the NPMS versus discussions between the pipeline operator and individual federal and state inspectors on the operator’s analysis of the risks to its pipeline system and the operator’s assessment methods used to identify potential issues.

**R. Coat/Uncoated and Cathodic Protection**

AGA supports the inclusion of this information in the NPMS with modifications. AGA proposes that this information be collected through two simple Yes/No selections:

- Coated: Yes/No
- Cathodically Protected: Yes/No

These simple attributes would provide PHMSA with all necessary information to make a conclusion on the risk to the pipeline segment while minimizing the burden of submittal.

#### **S. Type of Coating**

AGA maintains that the “COAT\_TYPE” attribute is unnecessary. Collection of whether a pipeline is coated or not coated is the more relevant information for PHMSA to collect, and as stated above, AGA is supportive of PHMSA collecting that information. Collection of the type of coating simply adds another opportunity for dynamic segmentation, while adding no additional value.

This attribute is also outside of the ongoing MAOP record search that operators are performing on their transmission pipelines. A complete and separate record search may be necessary for operators to obtain and input this attribute in a geospatial format. AGA believes the inclusion of this attribute is unnecessary for pipeline safety and adds an undue burden on pipeline operators, which is in direct conflict with the PRA. If PHMSA determines that the pipeline safety benefits for including this attribute are greater than the burden to operators, then AGA proposes that the attribute be submitted on a predominant basis.

#### **T. FRP Control Number and Sequence Number, if Applicable**

AGA has no comments on this attribute as proposed.

#### **U. Year and Pressure of Last and Original Pressure Test**

PHMSA states that collection of the year and pressure of the last and original pressure test is “...critical for risk assessment. The time elapsed from the last hydrostatic test increases risk of failure.” AGA fully disagrees with this statement. Pressure testing is just one method that can be used to assess the integrity of a pipeline, which indicates that this is not critical information. AGA is aware of no industry evidence that indicates that the time elapsed from the last hydrostatic test increases risk of failure. If such evidence exists, PHMSA should make this evidence known.

In addition and more importantly, PHMSA’s current regulations do not require a pressure test for lines that were in existence prior to the creation of federal pipeline safety regulations. 49 CFR §192.619 allow an operator to use the highest actual operating pressure to which the segment was subjected during the 5 years preceding the creation of federal regulations in lieu of pressure testing. Therefore, operators of pre-1970 pipe were not required to conduct a pressure test on the line and, if a pressure test was conducted, may not have records of the pressure test.

The data encompassed by these four pipeline attributes are directly linked with pending pipeline safety regulations. These pending regulations may require hydrostatic pressure testing of lines that do not have a valid record of a pressure test. Given that operators of pre-1970 pipelines are not currently required to have a record of a pressure test, PHMSA does not provide justification for the collection of this information, and the pending regulation, AGA cannot support the collection of this information at this time. Once the pending regulation is final, it would be appropriate to reconsider this information collection burden.

#### **V. Abandoned Pipelines**

It is AGA's understanding that this information would be limited to pipelines abandoned after changes to the NPMS ICR go into effect. If this is correct, AGA supports the collection of this information.

#### **W. Pump and Compressor Stations**

AGA does not object to the collection of compressor station information as long as the proper security measures are put into place.

The collection of pump station information does not affect AGA operators. Therefore, AGA defers to other industry stakeholders on the relevance and burden of collecting this information through the NPMS.

#### **X. Mainline Block Valves**

AGA proposes that the requirement for this attribute be limited to Mainline Block Valves designated as emergency valves. Existing regulations already designate the appropriate spacing of block valves on transmission pipeline systems. AGA believes the identification beyond this distinction is unnecessary. AGA reminds PHMSA that the location of any valve is an extreme security concern and encourages this attribute to remain designated as Sensitive Security Information (SSI).

AGA does not see significant benefit in first responders having access Mainline Block Valve location information because non-company personnel are not qualified under the Operator Qualification requirements and regulations to operate such valves. Because first responders are not able to independently determine the consequences of closing a Mainline Block Valve, AGA does not support the inclusion of non-emergency valve locations in the NPMS.

AGA members identified Mainline Block Valves as an attribute that is extremely burdensome to submit as most operators do not have this attribute in GIS. Instead it is quite often housed in a separate database that allows for other functionalities, such as work order management. A large burden is associated with the very distinct valve types that PHMSA is requesting operators to assign.

Most operators do not distinguish valves between Ball Valve, Gate Valve or Plug Valve in a geospatial database. Additionally, some operators choose to install valves that are able to be operated remotely, but default automatically, and thus are unable to be distinguished as a Remote Control Valve (RCV) or an Automatic Shutoff Valve (ASV). AGA suggests the following modified Appendix A.3:

**Table 6. AGA Proposal for Appendix A.3**

<b>Appendix A.3: Mainline Emergency Valves Attribute Table</b>						
Type of layer: Point, representing the centroid of each mainline emergency valve.						
Field Name	Field Type	Field Length	Short Description	Full Description	Acceptable Values (UPPERCASE)	Required Field
OPID	I	5	Operator Number	Unique tracking number assigned by PHMSA to the company that physically operates the pipeline system. If you do not know your firm's OPID, check with your DOT/Regulatory Compliance department or the NPMS website.	Positive Integer	Y
VALVE_ID	C	30	Unique identifier for valve	Assigned by the operator. This is a unique identifier for the specific valve.	Character	Y
OPER_TYPE	C	5	Operation of Valve	Type of valve operation: MOV = Manually operated valve, RCV / ASV = Remotely controlled valve (RCV) or Automatic shutoff valve (ASV)	MOV, RCV, ASV	Y

**Y. Gas Storage Fields**

AGA would like to propose alternative “storage field types” that more accurately reflect the various storage field types that exist in the nation’s pipeline system.

**Table 7. AGA Proposal for Appendix A.4 Gas Storage Fields Attribute Table**

Field Name	Field Type	Field Length	Short Description	Full Description	Acceptable Values (UPPERCASE)	Required Field
STORAGE	C	1	Storage Field Types	Indicate type of field: T = aboveground tanks, C = underground cavern, R= Depleted Reservoir, A= Aquifer Storage	T, C, R, A	Y

**Z. Breakout Tanks**

AGA has no comments on this attribute as proposed.

#### **AA. LNG Attributes**

AGA has no comments on this attribute as proposed.

#### **BB. Quality Code**

With the new positional accuracy requirements, AGA suggests that this attribute is no longer necessary for the NPMS. AGA reminds PHMSA that every additional attribute eliminated will aid in lowering the burden for pipeline operators.

#### **CC. Revision Code**

AGA strongly suggests that this historic attribute be removed from the NPMS requirements. With the significant addition to pipeline attributes, this manually entered attribute will be extensively time consuming to maintain and update. PHMSA should anticipate substantial changes in each submission of the NPMS from every operator. The sheer magnitude in the quantity of pipeline segments that will have a designation other than “N=no change to the existing NPMS” will make this attribute arbitrary and meaningless. Operating companies welcome conversations with the PHMSA staff on specific changes between NPMS submissions.

### **V. PHMSA’S PROPOSED REVISED NPMS COLLECTION EXCEEDS THE SCOPE OF ITS AUTHORITY AND IS CONTRARY TO LAW**

PHMSA purports to propose an information collection pursuant to the National Pipeline Mapping System. However, PHMSA’s proposed collection would seek some pipeline attributes and information outside the scope of the NPMS and would impose obligations on operators that only can be achieved through rulemaking.

#### **A. PHMSA’s Limited Authority to Act Pursuant to Section 60132, National Pipeline Mapping System**

PHMSA’s proposed revised collection seeks to collect information from operators to support the Agency’s safety goals.<sup>37</sup> Collecting information for these purposes may be authorized by the Pipeline Safety Act generally; however, the collection of such expansive information is not authorized for purposes of the National Pipeline Mapping System.

PHMSA’s authority to collect information for the National Pipeline Mapping System is drawn from Section 60132 of the Pipeline Safety Act.<sup>38</sup> Through that section, Congress mandated the creation of the NPMS, defined its scope, and delegated limited authority to the Secretary of Transportation to collect information from operators for the mapping system. Those areas on which Congress delegated authority to seek information are limited to:

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<sup>37</sup> See 80 Fed. Reg. 32086 (“After careful consideration of the comments received, *along with the agency’s Pipeline Safety goals, . . .*”) (emphasis added).

<sup>38</sup> 49 U.S.C. § 60132, National pipeline mapping system.

- “Geospatial data,” and public contact and operator information<sup>39</sup>
- “Technical Assistance to Improve Local Response Capabilities”<sup>40</sup>
- “Map of High-consequence Areas”<sup>41</sup>
- “Any other geospatial or technical data, including design and material specifications, that the Secretary determines are necessary to carry out the purposes of [the National Pipeline Mapping System].”<sup>42</sup>

Importantly, although Section 60132 itself anticipates limited policy choices that permit the Secretary of Transportation to seek “Any other geospatial or technical data, including design and material specifications, that the *Secretary determines are necessary to carry out the purposes of this section. . . .*”,<sup>43</sup> this delegation of authority is limited to the purposes of the National Pipeline Mapping System. Congress did not delegate nor authorize the Department to collect information and act for “the purposes of this chapter.”<sup>44</sup> Instead, the Agency may only act with the force of law for the “purposes of this section” and with “reasonable notice.”<sup>45</sup> The Congressional delegation in Section 60132 is not a blanket authority to collect “geospatial or technical data, including design and material specifications” and clearly does not authorize many of the purposes PHMSA put forth as the sole purpose for specific attributes, including, among others listed in the notice:

- “PHMSA’s ability to evaluate existing and proposed regulations as well as operator programs and/or procedures,”<sup>46</sup>
- “Strengthen the effectiveness of PHMSA’s risk rankings and evaluations, which are used as a factor in determining pipeline inspection priority and frequency,”<sup>47</sup>
- “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,”<sup>48</sup>
- “Better support PHMSA’s research and development programs by helping to predict the impact of new technology on regulated pipelines.”<sup>49</sup>

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<sup>39</sup> 49 U.S.C. §§ 60132(a), (b).

<sup>40</sup> *Id.* at § 60132(c).

<sup>41</sup> *Id.* at § 60132(d).

<sup>42</sup> *Id.* at § 60132(a)(4).

<sup>43</sup> *Id.* (emphasis added).

<sup>44</sup> *See* 49 U.S.C. § 60102(a)(1)

<sup>45</sup> *Id.* “Reasonable notice” would necessarily entail a period of time collect and integrate the attributes into operator data collection procedures and software. Commentators to the prior notice noted that their current systems lacked many attributes and sought a phased in approach to the new information collections requirements.

<sup>46</sup> 80 Fed. Reg. 52085.

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> *Id.*



PHMSA's collection of information to support the agency's broad safety goals are beyond the scope of the information collection authorized by Section 60132. The proposed revised collection would require the disclosure of attributes that require substantive changes in the way an industry collects data, apports employee work hours and financial resources and is not a permissible information collection nor permissible interpretation of the statute. PHMSA may very well have the authority to undertake a rulemaking that would impose these recordkeeping and reporting obligations on operators pursuant to PHMSA's organic statutes. However, PHMSA neither has identified the organic statute as the source of its authority nor undertaken a rulemaking to impose these obligations on the regulated community.<sup>50</sup>

#### **B. PHMSA's ICR Is An Improper Attempt to Evade Rulemaking Requirements**

PHMSA has described its proposed action as an "information collection request" that has been "carried out with additional procedures normally involved in a rulemaking."<sup>51</sup> However, PHMSA's proposed revised collection imposes obligations on the regulated community that exceed the scope of an information collection, fail to provide safeguards integral to notice and comment rulemaking and that are contrary to law.

PHMSA's proposed collection of information imposes obligations on operators beyond the disclosure of information and recordkeeping requirements contemplated by the Paperwork Reduction Act. Under the PRA, recordkeeping requirements are limited to maintaining and retaining specified records.<sup>52</sup> Imposing an obligation to create and populate a geospatial information system database to the specifications of PHMSA's proposal does not fall within this definition. Despite the fact there is no regulatory obligation to maintain a GIS, much less the specific GIS platform, PHMSA's proposal suggests that operators submit data in a specific GIS platform. PHMSA's proposed revised collection would impose new legal obligations on affected parties that can only be promulgated through a rulemaking. Such a rulemaking is subject to the general requirements of the Administrative Procedure Act,<sup>53</sup> and in PHMSA's case, the Agency's specific regulations governing rulemaking.<sup>54</sup> Carrying out the proposed information collection request with additional procedures "normally involved in rulemaking" does not cure the deficiencies in PHMSA's proposal. PHMSA's proposal lacks the level of reasoned analysis and explanation supporting the agency's decisions necessary for a rulemaking under the Administrative Procedure Act.

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<sup>50</sup> If PHMSA had undertaken a rulemaking pursuant to the Pipeline Safety Act, PHMSA would be required to provide a "reasoned determination that the benefits of the intended standard justify the cost," 49 U.S.C. § 60102(b)(5), and comply with the procedural requirements outlined in

<sup>51</sup> 80 Fed. Reg. 52092.

<sup>52</sup> 44 U.S.C. § 3502(13) (definition of "recordkeeping requirement"); 5 C.F.R. § 1320.3(m) (same).

<sup>53</sup> 5 U.S.C. §§ 500, et seq.

<sup>54</sup> 49 C.F.R. §§ 190.301, et seq.

PHMSA's proposal imposes obligations on operators that in addition to and are inconsistent with the obligations imposed by PHMSA's current regulations. The proposal would obligate operators to create and maintain data in a GIS system, despite the fact that there is no obligation to do so. In addition, the manner in which PHMSA requests that the attributes be reported is in some circumstances contrary to what is permissible under PHMSA's regulations. For example, PHMSA's proposal requires operators to provide the actual pipe grade of pipeline segments, yet PHMSA's recordkeeping regulations allow for conservative values to be used. To the extent that PHMSA's proposal imposes such inconsistent obligations, the proposal is by definition contrary to law. PHMSA must revise its proposal by limiting it such that it falls within the scope of an information collection or undertaking a rulemaking consistent with PHMSA's procedural rulemaking requirements and the Administrative Procedure Act.

## **VI. CONCLUSION**

AGA supports the modernization of the NPMS through narrowing the required positional accuracy over a seven year phased implementation and supports adding attributes that aid PHMSA in achieving its stated goals, including: Pipe Diameter, Commodity Detail, Pipe Material, %SMYS, Decade or Year of Installation, Class Location, Gas HCA Segment, and whether the pipe is Coated and Cathodically Protected. AGA does not support collection information in a manner that has no public utility and does not support the submission of attributes that are unnecessary and burdensome for operators.

AGA respectfully reminds PHMSA that there are numerous pipeline safety initiatives currently underway. From integrity assessments, to modernization of aging infrastructure, to installation of remote and automated valves to increased patrolling and excavation damage prevention programs, operators are focusing their limited resources on the issues that impact pipeline, personnel and public safety. The financial resources associated with these initiatives are realized both within the operating companies as well as by the rate paying public. A continuation of true pipeline safety initiatives is paramount.

AGA thanks PHMSA for the opportunity to provide comments on a phased approach to modernizing the NPMS.

Respectfully submitted,

Date: November 24, 2015

By:

A handwritten signature in black ink, appearing to read 'CLS', written over a light blue horizontal line.

Christina Sames

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