

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

The American Gas Association (AGA), founded in 1918, represents more than 200 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 revision and renewal of the information collected under OMB Control Number 2137-0596 titled “National Pipeline Mapping System (NPMS) Program”. AGA is supportive of efforts to improve pipeline safety through the modernization of the NPMS. AGA acknowledges that narrowing the centerline positional accuracy of pipeline segments and adding appropriate pipeline attributes to the current NPMS are important components of the modernization effort. However, PHMSA’s current proposed revisions are a complete overhaul of the NPMS, including a dramatic increase in the number of pipeline attributes requested and a significant narrowing of positional accuracy. Such an overhaul warrants significant further exchange between industry, emergency responders, and Federal and State Regulators. These stakeholders should participate in a dialogue to ensure that the modernization of the NPMS enhances pipeline safety while avoiding duplicative reporting

requirements that do not provide additional pipeline safety value. Information collection requirements that do not benefit pipeline safety are an unreasonable burden on pipeline operators and a misuse of valuable government resources. AGA also respectfully reminds PHMSA that AGA member utilities are spending significant resources on the modernization of aging pipeline infrastructure, which includes the replacement and installation of not only pipeline assets, but also regulator stations, compressor stations and automated valves. The resources of pipeline operators must be managed prudently and should focus on activities and actions that have a genuine impact on pipeline safety performance. Utility ratepayers will be funding the costs borne by AGA's member utilities to comply with the increased reporting requirement under the NPMS.

In the Federal Register Notice, PHMSA proposes that operators submit data to the NPMS with a positional accuracy of five feet for Class 3, Class 4 and High Consequence Areas (HCAs) and outlines thirty-one different pipeline attributes that are requested in a geospatial format specified by PHMSA. The significant addition of data to be collected and the format specification for these attributes goes beyond a simple revision of the NPMS as described by PHMSA in the Federal Register Notice. This request more closely resembles significant rulemaking as it is a complete overhaul of both PHMSA's data gathering system and the method by which operators submit data, resulting in enormous expenditures incurred by the industry that are ultimately borne by consumers.

Through this information collection, PHMSA is essentially driving the gas and liquid transmission pipeline industries to a standardized geographic information system (GIS) with uniform data specifications. This requires the entire industry to convert to a system that has not been vetted through key stakeholders and would be the first mandate of its kind. AGA again reminds PHMSA that this would divert valuable funding and resources away from infrastructure investment and other pending pipeline safety initiatives that are being vetted through traditional regulatory channels.

On August 9, 2013 during a joint session of the Gas Pipeline and Liquid Pipeline Advisory Committees the committee members were briefed on the need to improve the NPMS. The committee members voiced that the level of accuracy desired by PHMSA, which PHMSA stated was "much finer than 500 feet, and it might even be in the single digits," was not realistic due to the extreme cost and manpower required to reach this accuracy. Based on PHMSA's current proposal, it is clear that PHMSA did not heed the advice of its Advisory Committee. At the October 21, 2014 joint session of the Gas Pipeline and Liquid Pipeline

Advisory Committees, the committee members again voiced their concerns with the level of accuracy and significant number of attributes PHMSA was proposing to collect.

There is universal support for the modernization of the NPMS. However, PHMSA's proposal in the July 30, 2014 Federal Register Notice is costly, burdensome and technically impractical. Therefore, AGA proposes a phased approach that would create a more effective and sustainable NPMS modernization effort and create a manageable path forward for PHMSA, the public, emergency responders and industry. Although this proposal would take additional time, the approach will allow stakeholders to develop a realistic plan to collect the pipeline information via the most effective methods and assure the information is protected from unauthorized users. 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.

II. DETAILED COMMENTS

A. Information Collection Request vs. Formal Rulemaking

While AGA agrees that the NPMS should be modernized in a timely fashion, the current proposal by PHMSA does not comply with the requirements found within the Paperwork Reduction Act (PRA) and Office of Management and Budget (OMB) regulations. The current proposal is an expansion and duplication of the data that PHMSA is already collecting both through Transmission Annual Reports and by PHMSA and state pipeline safety regulator during audits and inspections. The current collection of much of this information while proposing to collect the same data through a duplicate mechanism is in direct conflict to the central goal of OMB, which is to "strike a balance between collecting information necessary to fulfill their statutory missions and guarding against unnecessary or duplicative information that imposes unjustified costs on the American public."¹

In an effort to modernize the NPMS and provide the information necessary for PHMSA to perform the functions of the agency, minimize the Federal information collection burden and maximize the practical utility of and public benefit from the information collected, AGA proposes a phased approach detailed in Section F of these comments.

¹ "Information Collection under the Paperwork Reduction Act" Memorandum for the Heads of Executive Departments and Agencies, and Independent Regulatory Agencies.

B. Working Group

AGA appreciates the Public Meeting held by PHMSA on November 17, 2014. It was an excellent venue for all stakeholders to begin discussions around the attributes that are beneficial to users of the NPMS and will improve overall pipeline safety, while maintaining an understanding of currently available technologies and capabilities. However, the one day public meeting did not allow for complete resolution and there are many issues that still need to be resolved.

Therefore, AGA continues to encourage PHMSA to utilize the successful working group model employed in the initial creation of the NPMS in 1998. By forming a working group of government (state & federal regulators), industry (interstate, intrastate, liquid operators), emergency responders, and the public, enhancements to the NPMS can be made in a strategic and beneficial way. Using this approach, PHMSA will gain a full understanding of the current capabilities of operators, the costs for operators to meet the proposal, the resource burden necessary to comply with the expanded information collection, and the security implications associated with the sensitivity of this data. To address the significant security concerns, AGA encourages PHMSA to include the Transportation Security Administration in the work group to provide necessary security perspectives. Forming a NPMS Working Group, GIS platform capabilities, technical feasibilities, and security concerns can be vetted and an enhanced NPMS will result.

C. Security

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 precise locations of national critical assets, 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 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.

PHMSA is asked to acknowledge that the compilation of this data presents an attractive cyber target to nefarious actors. AGA requests that PHMSA provide greater security measures and controls than those already employed by the owners, operators, and users of the NPMS. AGA

encourages PHMSA to question whether adequate consultation has been made with the U.S. government intelligence community regarding the prudence of the PHMSA's current proposal.

There are commonly four basic elements of security - Personnel, Information, Cyber and Physical. Each is an integral part of the other. The proposed PHMSA information collection will impact three of these security elements (information, cyber and physical). Given this, AGA's concerns from a security perspective regarding the Information Collection Request are three-fold: 1) the security of sensitive information handling, 2) the cybersecurity of the online database to which all the information is to be submitted and stored, and 3) the physical security of identified critical assets and pipeline segments. These concerns are addressed individually as follows.

1. Security of Sensitive Information Handling

The level of pipeline detail being requested, which is to be stored within a single database creates a significant vulnerability that presently does not exist. The narrow positional accuracy and additional pipeline attributes for all gas and liquid transmission pipelines is currently located in multiple formats, in multiple sources, and within the control of industry operators. Current variability and distribution of information minimizes system-wide vulnerability from a targeted, strategic physical infrastructure and/or cybersecurity attack and compromise. This, in turn, supports pipeline system security, safety, and resiliency – leading objectives of the Administration, the Department of Homeland Security, the Department of Transportation, and the Department of Energy.

With the 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. The threat existence is best exemplified by a recent incident regarding the mishandling of sensitive information as an outcome of a DOT data collection requirement. The description of this incident follows:

On May 7, 2014, the Secretary of Transportation issued Emergency Order Docket No. DOT-OST-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.

Natural gas operators carefully scrutinize third-party requests for detailed geospatial data. Many operators have established internal processes and policies around the authorized release of varying levels of pipeline attribute data to un-contracted third parties. In each situation, the operator coordinates the method(s) of distribution and calibrates the amount of detail needed to the specific request. Removing the control of this level of detail 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 access to this data in one common location may be technically feasible, the increased convenience brings a corresponding increase in risk of exposure and inappropriate access and use that require careful evaluation.

Based on remarks made by State government representatives at the November 17, 2014 NPMS Public Meeting, one of the driving forces of the data aggregation is to allow State inspectors to more effectively prepare and conduct pipeline integrity risk assessments. PHMSA should recognize that this information also lays the groundwork for a pipeline vulnerability assessment. 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? 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 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 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.

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. There are two categories among the existing government programs that may apply in the case of unclassified, operationally sensitive pipeline data - Sensitive Security Information (SSI) and Protected Critical Infrastructure Information (PCII).

- SSI - Sensitive Security Information (SSI) is information obtained or developed which, if released publicly, would be detrimental to transportation security if publicly known. SSI is subject to the handling procedures required by the SSI Federal Regulation [1] (49 CFR Part 1520). The SSI regulation requires that only “covered persons with a need to know” may have access to SSI. Generally, covered persons have a need to know SSI when access to the information is necessary for the performance of official duties. Information designated as SSI may not be disclosed through a Freedom of Information Act (FOIA) request. SSI may be used for regulatory purposes. Unauthorized disclosure of SSI may result in civil penalties and other enforcement or corrective actions. Consequences associated with unauthorized disclosure is limited to Federal employees (49 CFR §1520.17).
- PCII - Protected Critical Infrastructure Information (PCII) 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. DHS must review the information to certify that it is not already available publicly. 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. PCII is commonly used by law enforcement and emergency management agencies at various levels of U.S. government to make risk-informed decisions.

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. As such, AGA is recommending PHMSA provide operators the option of PCII protections for voluntarily submitted data. PHMSA is requested to identify those elements (of the 31 in the Information Request) for which PHMSA will allow PCII protections. Further, PHMSA is requested to provide an explanation for each element PHMSA concludes does not qualify for PCII protections. 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 demonstrated in recent disclosures from the Federal Energy Regulatory Commission, where information that should have been classified was inappropriately provided to the mass media. If PHMSA chooses to use SSI designation, then PHMSA must develop an information handling and protection plan for SSI handled at the State

and local levels and establish a policy that holds information handlers fully accountable for any disclosure of SSI information at the State and local levels.

2. Cybersecurity of Online Database

Federal governments' and government contractors' computer networks are not immune to unauthorized, third-party access. Successful compromises range from successful 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; to access designs for many of our nation's most sensitive advanced weapons systems; to stealing passwords and metadata.

The recent FBI arrest of a federal employee of the Commerce Department for theft of U.S. Army data underscores the severe risk of compiling sensitive critical infrastructure data. The National Inventory of Dams is remarkably analogous to the NPMS and demonstrates that safety information may be readily compromised, even inside a military organization. Inter-agency dam safety data sharing is a parallel risk to the stated NPMS intent to share information.

Specific to DOT, the DOT Office of Inspector General (OIG) has conducted multiple information security audits over the years. In 2010, the OIG issued audit findings in a report titled, "Timely Actions Needed to Improve DOT's Cybersecurity (Report Number: FI-2011-022)" and most recently, the OIG published information security findings in "2013 DOT Has Made Progress, But Its Systems Remain Vulnerable To Significant Security Threats" (Report Number: FI-2014-006). DOT is demonstrating progress with improving its information security program, however, it remains evident that DOT still has a ways to go. 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.

As a matter of prudence, AGA does not support the online collection of this level of pipeline detail. 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.

3. Physical Security

With the location of all critical assets and vulnerable pipeline segments as well as the listing of this information 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 that PHMSA recognizes that the disclosure, whether intentional or not, increases the physical vulnerability of pipeline assets and the risk to public safety.

D. Burden

AGA believes that PHMSA has vastly underestimated the burden for operators to comply with the proposed information collection. The burden on operators goes well beyond the collection and integration of data into an operator's GIS. Operators must also ensure that each of the pipeline attributes complies with the format proposed by PHMSA and can be submitted in the format required by PHMSA. The exercise of manipulating the pipeline attribute format will lead to significant internal data scrubbing with no pipeline safety benefits.

Due to the unique mapping systems and capabilities found within the AGA membership, many operators will be providing PHMSA with detailed comments that include an estimated burden for the company to comply with the current NPMS proposal. Below, Table 1 offers a short list of actual gas transmission pipeline company's current capabilities within GIS, necessary modifications to meet PHMSA's proposal and the estimated burden to do so. AGA provides this information to PHMSA so that it will have a better appreciation for the additional work that needs to be completed by some of its member utilities to comply with the current proposal. Although not provided as an example, there are some gas transmission pipeline operators that do not currently have a true, robust GIS system and therefore may have significantly higher expenses than those outlined below.

Table 1. Burden Associated with PHMSA NPMS Proposal

Company	# Transmission Pipeline Miles	Required System & Data Modifications	Estimated Burden
A	< 1,500 Miles	<ul style="list-style-type: none">• Centerline Surveys• Conflation Exercises• Implementation of advanced Document Management Systems• Data Integration & Development	\$17.5M
B	> 2,500 Miles	<ul style="list-style-type: none">• Centerline Surveys• Conflation Exercises• Implementation of advanced Document Management Systems• 10+ Year Program for Data Integration & Development• Expanded use of ILI Tools	\$20 M

PHMSA must also consider the additional physical and cyber security costs an operator will incur as a result of submitting sensitive information to entities outside the control of the operators including an assessment of the operator's increased physical and cyber security risks and actions an operator must take to mitigate these risks. AGA suggests a review of the North American Electric Reliability Corporation Critical Infrastructure Protection (NERC CIP) program for value consideration.

E. Impact on the Gas Transmission Annual Report

PHMSA has not indicated how the Gas Transmission Annual Report will be modified after the changes to the NPMS have been implemented. Although, PHMSA has made references to improvements that will facilitate reporting as a result of the enhanced NPMS, AGA cannot provide input on the supposed burden reduction of the annual report submissions at this time. PHMSA should not presume there will be a reduction in the amount of time operators spend submitting information under the Gas Transmission Annual Report, based on its perception of how the annual report may be revised in the future to align with the NPMS.

F. AGA's Proposal – A Phased Approach

1. Positional Accuracy

AGA understands PHMSA's desire to narrow the centerline positional accuracy of pipeline segments submitted by transmission pipeline operators. PHMSA has stated the first submission

of enhanced centerline positional accuracies to the NPMS could potentially go into effect for the 2016 submission of December 31, 2015 pipeline data. However, AGA proposes a phased approach to achieving the universal goal of a more accurate NPMS. AGA's proposal mirrors the proposal submitted by the Interstate Natural Gas Association of America (INGAA). Table 2 shows the phased approach with detailed descriptions.

Table 2. Phased Approach to Narrowing of Centerline Positional Accuracy

Phase	NPMS Submission	Proposed Centerline Positional Accuracy
1	2016	Best Current Available Accuracy *with operators providing their best estimate of accuracy
2	2023	70% of Pipeline Miles = 50 foot accuracy Remainder = 100 foot accuracy

Phase 1

In order for operators to achieve additional centerline positional accuracy beyond current capabilities, a significant amount of time and resources are required. It will be necessary for many operators to take additional field readings or perform a complete survey of the pipeline system in order to meet the new centerline positional accuracy standard and obtain the requested attributes in a geospatial format. It will be technically impossible for operators to gather the information needed, at the accuracy required, to meet PHMSA's information request by the end March 2016 submission of 2015 data. In addition, due to the timing of this proposal, operators are unable to appropriately budget for the additional resources needed to conduct significant work in 2015. PHMSA should remain cognizant of the challenges operators face whenever there is a change in information reporting. In the event that the final, modified NPMS Information Request is significantly delayed, it may become appropriate to delay the reporting of 2015 data until a later date in 2016. A similar approach was utilized after significant changes to the Gas Transmission Annual Report in 2013.

AGA is proposing that Phase 1 of the new centerline positional accuracy requirements begin with enhanced transparency of each operator's current centerline positional accuracy. Operators would provide this enhanced transparency by submitting the centerline positional accuracy at various points throughout their transmission system. AGA believes a bucketed approach similar to what PHMSA is currently utilizing would be the simplest method to

capture this information. The submission of centerline positional accuracy through this means would eliminate the burden of immediate additional field work, provide operators with sufficient time to plan for developing enhanced centerline positional accuracy and attribute information, and sufficient time to achieve enhanced centerline positional accuracy and attribute information without disruption to existing budgeted priorities.

AGA believes PHMSA will find that many operators are currently capable of submitting a centerline positional accuracy of 200 feet, a significant improvement upon the current 500 foot requirement. In fact when AGA surveyed its members, they reported 91% of the mileage in Class 3, 4 and High Consequence Areas (HCAs) already achieves a centerline positional accuracy of less than 200 feet, while 89% of the miles in Class 1 and 2 locations has a 200 foot accuracy or better.

Phase 2

AGA believes it is important to have a risk based approach when embarking on a new pipeline safety initiative. The resources required to improve and modernize the NPMS are no exception. AGA proposes that operators first focus their resources on improving the centerline positional accuracy for pipelines operating near the greatest concentrations of the public: Class 3, Class 4 and HCAs and then continue the narrowing of the centerline positional accuracy for the remainder of their pipeline system.

As operators improve their geospatial knowledge of the centerline positional accuracy of the pipelines, operators would submit this improved accuracy to the NPMS during the yearly NPMS submittals. By the 2023 submission of December 31, 2022 data, AGA proposes that each operator provides a centerline positional accuracy of 50 feet or less for 70% of their transmission pipeline mileage including all mileage in Class 3, 4 and HCAs. During the intervening time period, operators will also continue to improve the centerline positional accuracy for the remaining 30% of transmission pipelines operating in Class 1 and 2 locations. Annually operators to provide updated transparent reporting of those accuracies.

Transmission pipeline operators will strive for less than 50 foot centerline positional accuracy when performing GPS surveys of the transmission pipeline. However it will be extremely

difficult to achieve a 5 foot accuracy without physically exposing the pipeline, thus creating an incredible financial and resource burden on the industry. There are also GPS survey limitations associated with nearby structures, weather interference and satellite positioning that can prohibit achieving PHMSA's proposed 5 foot accuracy.

2. Pipeline Attributes

Throughout the Information Collection Request, PHMSA identifies emergency response planning as a reason for expanding the number of pipeline attributes in the NPMS. However, AGA questions both the need for emergency responders to obtain the level of detail in the Information Collection Request to safely manage pipeline incidents in their jurisdictions as well as the desire for the emergency responders to have all of the requested information. In AGA's discussions with emergency responders, all have stated they do not need the degree of accuracy proposed by PHMSA and seek very limited attributes. For this reason, AGA again encourages PHMSA to utilize a working group, including emergency responders, to fully understand the emergency responders' need for additional pipeline attributes and how this information is best disseminated. Based on AGA's conversations with emergency responders, and without additional input from these key stakeholders, AGA cannot support the collection of all attributes PHMSA states will benefit emergency responders.

AGA urges PHMSA to recognize that every additional pipeline attribute submitted potentially increases the number of segments each operator will need to submit to the NPMS. The dynamic segmentation of the pipeline systems is directly correlated to the number of attributes provided. As the number of pipeline segments increases, so does the resources required to maintain, verify and update the data submitted annually to the NPMS.

Pipeline Attributes Required for Risk Based Inspections with No Security Concerns

The perceived need to expand pipeline attributes in the NPMS is directly and primarily linked to PHMSA's desire to perform inspections based on its own evaluation of the risk of pipeline systems. In an effort to aid PHMSA in the ease of scheduling risk based transmission pipeline audits, AGA proposes the following pipeline attributes to be submitted by operators in the 2016 submission of December 31, 2015 data.

1. Pipe Material

AGA supports the submission of Pipe Material as proposed by PHMSA and supports the formatting as outlined in the DRAFT NPMS Operator Standards Manual.

2. Pipe Diameter

AGA agrees that operators should submit a Nominal Pipe Diameter and believes the submission formatting should be in inches to three decimal places which remains consistent with the Gas Piping and Technology Committee Guidance for §192.105-Design formula for steel pipe. PHMSA should evaluate their current definition of “nominal pipe diameter” to insure there is no misunderstandings within the industry.

3. High Consequence Areas (HCAs)

AGA supports compliance with the Pipeline Safety, Regulatory Certainty and Job Creation Act AGA of 2011, Section 6 (a) *“The Secretary shall maintain, as part of the National Pipeline Mapping System, a map of designated high-consequence areas (as described in section 60109(a))”*² by submission of HCAs as proposed by PHMSA. AGA also supports the formatting as outlined in the DRAFT NPMS Operator Standards Manual.

4. Class Locations

AGA supports the submission of Class Locations as proposed by PHMSA and supports the formatting as outlined in the DRAFT NPMS Operator Standards Manual.

5. Low Stress

Although proposed only for hazardous liquid pipeline segments, AGA supports the collection of this attribute for gas transmission pipeline segments as well. However, AGA encourages PHMSA to modify the constraint to less than or equal to 30% SMYS as the designation for low stress natural gas transmission pipelines to align with the

² Pipeline Safety, Regulatory Certainty and Job Creation Act of 2011

delineation by Congress in the Pipeline Safety, Regulator Certainty and Job Creation Act of 2011. Due to the security concerns associated with the collection of % SMYS, which are described in the following section, AGA believes this attribute can be utilized by PHMSA in performing risk analyses of pipeline segments.

6. Pipe Coating

AGA proposes that operators indicate if the pipeline segment is effectively coated and / or cathodically protected through the submission of PHMSA's proposed "COATED" attribute. However, AGA disagrees with the necessity of providing the type of coating applied to the pipeline (COAT_TYPE). See below for additional details.

7. Commodity Detail

AGA does believe this attribute is a benefit to emergency responders and supports the collection of this information. In the event of a pipeline incident, knowing the commodity of the pipeline will allow emergency responders to respond with the most effective firefighting, hazardous material containment and clean-up approaches.

8. Year of Construction / Installation

AGA believes the Year of Construction / Installation should be clarified by specifying the year submitted be the year the pipeline segment was completed and placed in service. Some pipeline construction projects span multiple years and the current attribute description of "predominant year of original construction" could lead to entries based on when the majority of the pipe in a given project was installed even though the pipeline may not have been completed and placed in service until a subsequent year. This will also eliminate any confusion when a pipeline has repairs and replacements on a small segment of the line.

AGA appreciates PHMSA's desire to obtain the necessary pipeline attributes to perform general risk assessments as quickly as possible, but requests that PHMSA understand that the

following attribute will require both a significant records review and may not be immediately available to operators.

9. Seam Type

This attribute is an example of pipeline information that is currently being discussed as a part of an on-going large rulemaking, Safety of Gas Transmission and Gathering Lines Rule, that is still in development. As transmission pipeline operators continue their MAOP records search and other integrity verification activities, and add this information to their GIS, they may eventually be able to provide the Seam Type for most pipeline segments in the geospatial format requested.

Pipeline Attributes with Significant Security Concerns

AGA strongly urges PHMSA to delay any requirement that the following attributes be submitted to the NPMS until after a resolution of the industry's security concerns over the cybersecurity, information handling and physical security of the information contained in these attributes. AGA offers the follow comments on those attributes.

1. Percent Specified Minimum Yield Strength (% SMYS)

The % SMYS of a pipeline segment is a reflection of the pressure by which that pipeline operates. For individuals or organizations wishing to understand the vulnerable locations within a pipeline system, the areas operating at highest percent SMYS would be indicative of those high vulnerability areas. In the event that PHMSA is successful in designating specific information as Protected Critical Infrastructure Information (PCII), AGA believes the % SMYS should be one of those pipeline attributes designated.

Once the adequate security information designation and protection measures have been established, AGA proposes that operators submit the pipeline segment % SMYS based on the established MAOP. PHMSA's proposal of % SMYS calculated from the highest operating pressure during the year will require operators to collect the highest operating pressure for each transmission pipeline segment, calculate the % SMYS for each segment and then submit this data. Because the highest operating

pressure during the year will vary from year to year, PHMSA's proposal would require every operator to resubmit this attribute for every pipeline segment that has had a different maximum operating pressure from one year to another. Such an effort would significantly increase the burden of the proposed change.

When the security measures have been properly instituted, AGA proposes that the inclusion of this attribute, "SMYS," which will negate the need for PHMSA to collect the "LOW_STRESS" attribute described in the previous section.

2. Maximum Allowable Operating Pressure (MAOP)

For the same reasons listed above for %SMYS, the MAOP of a pipeline is a direct indication of the pressure at which the pipeline operates. To prevent the ability for undesirable entities to gain this information, AGA believes the MAOP of the pipeline should be protected with a PCII designation.

In addition, AGA believes that % SMYS provides PHMSA with better indication of the stress placed on a pipeline segment than MAOP. The MAOP holds less value overall in risk analysis as it is not indicative of the pipe material, grade, and other factors that impact the pressure capabilities of the pipeline.

3. Mainline Block Valve Locations

AGA proposes that the requirement for provision of 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 and creates a safety concern. AGA does not see significant benefit to first responders obtaining this 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.

4. Throughput

AGA believes there are significant security concerns and business sensitive information that can be gleaned from pipeline throughput data. In the Notice, PHMSA states they request throughput information “so States can better identify shortages and implement contingency plans for potential widespread pipeline service outages to maintain an uninterrupted flow of energy supplies.” Throughput is a time-stamped attribute and is not a good measure of pipeline capacity. The additional variability in storage capacities, line pack, flexibility in gas operations and daily variations in actual throughput makes this pipeline attribute of little value to both PHMSA and State regulators in attempting to identify shortages during the year or to develop or implement contingency plans. AGA is also concerned that there will be difficulty in insuring consistency of reporting for this attribute making the data attribute of little use.

Pipeline Attributes Requiring Further Discussion with PHMSA

The following attributes are not needed by PHMSA to perform a risk analysis on pipeline systems and their addition to the NPMS will not benefit pipeline safety. AGA encourages the development of a working group to discuss the needs of an effective NPMS where PHMSA and emergency responders have access to necessary information.

1. Abandoned Pipelines

AGA questions PHMSA’s need for this information and the value that it would bring to pipeline safety. The exclusion of abandoned pipelines in the NPMS will not impact PHMSA’s desire to do risk analyses on active transmission pipelines. AGA is concerned that the identification of abandoned pipelines in the NPMS will discourage excavators from utilizing their One-Call system in areas where abandoned pipelines are expected. This would create a significant security risk, as in many areas, abandoned natural gas pipelines are purchased and utilized by other utility companies as conduits for cable. By identifying the pipelines as abandoned on a nationally available data base, incorrect and potentially unsafe information would be displayed.

2. Wall Thickness & Pipe Grade

AGA believes Wall Thickness and Pipe Grade are not needed for PHMSA to perform a risk analysis on transmission pipeline segments. By indicating through the “LOWSTRESS” pipeline attribute if the transmission pipeline is operating above or below 30% SMYS, the recognized threshold of leaks versus ruptures can be considered. Therefore, the wall thickness and pipe grade attributes become redundant and are unnecessary for risk assessment.

3. Type of Pipe Coating

AGA believes this attribute is not needed for PHMSA to perform risk analysis. For risk analysis, the attribute of greater value is the “COATED” attribute, in conjunction with the attribute that indicates if the pipeline is cathodically protected. As long as a pipeline is effectively coated, the type of coating is not of needed to in evaluate the risk related to operating the pipeline.

4. Leak Detection

The method of leak detection utilized on a pipeline segment has an extremely minor significance in determining the risk of the pipeline unless the pipeline has a continuous monitoring system. In addition SCADA systems have limited value in effecting the risk from leaks for pipeline segments. The pressure monitoring by SCADA is generally not sensitive enough to detect leaks unless they are ruptures. The monitoring points are usually not frequent enough in a pipeline system to provide precise locations in timely manner compared to other detection methods.

5. Pipe Join Method

As discussed for the pipe grade and wall thickness attributes, the pipe join method or longitudinal joint factor is inherent in the design pressure and thus % SMYS calculated for the pipeline segment. Therefore, AGA believes that the inclusion of this attribute in the NPMS would be overly burdensome on operators, and provide little value, especially given that the pertinent information is embedded in the % SMYS calculation.

6. Mainline Block Valve Type

AGA does not support the submission of the Mainline Block Valve Type (VALVE_TYPE) or Operation of Valve (OPER_TYPE). This information does not aid PHMSA in its risk assessment of pipelines and therefore is unnecessary.

7. Inline Inspection

The question of whether a pipeline can accommodate inline inspection is actually a complicated question given recent advancements in technology. Pipelines that historically have been identified as non-piggable are now being reevaluated to determine if the pipeline can accommodate inline inspection with new or emerging technologies. Significant strides have been made in robotic inline inspection tools that will allow for even traditionally unpiggable pipeline segments to be internally inspected. Given the rapid change in technologies, and that this pipeline attribute may become meaningless for PHMSA's relative risk assessment of pipelines, AGA does support inclusion of this attribute.

8. Year of Last Inline Inspection and Year of Last or Direct Assessment

AGA does not believe there would be an increase in pipeline safety by submitting the year that the pipeline segment was last assessed. All transmission pipelines have received their integrity management baseline assessments and operators are using developed integrity risk management models to determine when the next appropriate assessment should occur. If PHMSA would like to question the interval by which pipeline segments are assessed, this should be discussed during an in-person transmission integrity management audit when a discussion can occur between the operator and inspector on the bases for that timing. The reasoning for the request of this attribute in the NPMS needs to be more fully communicated and understood before it is included in the required attributes.

9. Year & Pressure of Original and Last Hydrostatic Test

Requiring this attribute will significantly increase the segmentation of the pipelines submitted to the NPMS. Rarely is an entire pipeline replaced at one time. Instead, smaller partial segments of pipelines are replaced with potential integrity issues.

Pressure tests are then completed for the replaced segment. This attribute will require increased record submission that will add little value to the NPMS or system wide pipeline safety.

10. Installation Method if Pipe Crosses Body of Water Greater than 100 Feet in Width

AGA believes the inclusion of this attribute in the NPMS will lead to incorrect conclusions on the integrity risks associated with a pipeline segment. Operators are already including any risks associated with water crossings within their pipeline integrity risk models and can be discussed with their pipeline safety auditors. PHMSA has stated that this information would allow inspectors to determine potential depth of cover for pipelines, however the installation method utilized does not necessarily correlate to a depth of cover making the submission of this attribute unnecessary.

11. High Consequence “Could Affect” Areas

This would be a new concept to gas transmission pipeline operators and would require extensive conversations with PHMSA on how operators are expected to determine the “could affect” areas. There is no current standard for this determination and would result in inconsistent and thus meaningless data for PHMSA.

Natural Gas Infrastructure Audited by other Agencies

The following attributes requested by PHMSA are not directly linked to pipeline segments. In many cases the risk of these attributes is currently being captured within the Department of Homeland Security’s (DHS) Chemical Facility Anti-Terrorism Standards (CFATS). As described in the Department of Homeland Security’s Federal Register Notice on CFATS:

DHS regulates the security of chemical facilities that, in the discretion of the Secretary, present high levels of security risks... Under CFATS any chemical facility that possess any Chemicals of Interest at or above the applicable Screening Threshold Quantity must complete and submit to the DHS through the Chemical Security Assessment Tool certain consequence-based information. Any facility initially determined to be high-risk after DHS’s review of the facility’s relevant information that comes to the Department’s attention, is assigned a preliminary risk-based tier and must then submit to DHS a

*Security Vulnerability Assessment (SVA)... DHS evaluates the SVA and other relevant information to make a final determination as to whether the facility is high-risk and, if so, which tier it should be assigned to. Any facility that is finally determined to be high-risk must submit, obtain DHS approval of, and then implement a Site Security Plan that describes the security measures that the facility utilizes to meet the appropriate level of performance under applicable Risk Based Performance Standards.*³

Due to the comprehensive of risk analyses being performed on these facilities by DHS, AGA believes PHMSA does not need to include them in its risk analysis on transmission pipeline systems. Further, much of the information submitted by the owner/operators to DHS in response to the CFATS regulations is labelled as *Chemical-terrorism Vulnerability Information* (CVI) and as such, is subject to information protection requirements, which prevent such information from being comprehensively shared without the proper information protection measures in place. Facilities shall designate information about the facility that is specified in 6 CFR § 27.400(b)(1) to (8) as CVI. The process for a facility to seek designation of CVI under 6 CFR § 27.400(b)(9) is described in Section 5.3 of the *Revised CVI Procedures Manual*. PHMSA is advised to look into the CFATS regulation and CVI designation further so to not put a requirement on owner/operators that compromises their responsibility to the CVI restrictions.

- 1. Facility Response Plan**
- 2. Refinery / Gas Process / Treatment Plant Locations**
- 3. LNG Plants**
- 4. Storage Field Locations and Type of Storage**

Storage field facilities are usually subject to state regulation and inspection with additional safety requirements beyond those in 49 CFR 192. However, the pipelines found within storage fields would be covered by Part 192 and are already subject to the requirements of NPMS submission.

³ Federal Register Vol. 79 No. 159. Department of Homeland Security. "Chemical Facility Anti-Terrorism Standards."

Operators also believe that storage field footprints are proprietary information as they may be misused by natural gas producers who are looking to drill in the area of underground natural gas storage.

III. CONCLUSION

AGA supports PHMSA's efforts to modernize the NPMS. However, the NPMS modifications as proposed by PHMSA in the July 30, 2014 Federal Register effectively represent a complete overhaul of the NPMS and more closely resemble a significant rulemaking that has not completed the formal rulemaking process mandated by the Administrative Procedures Act. Such an overhaul warrants a significant exchange between industry, emergency responders, and Federal and State Regulators. All concerned stakeholders should participate in this dialogue to ensure that the modernization of the NPMS enhances pipeline safety while avoiding reporting requirements that have little pipeline safety value. Information collection requirements that do not benefit pipeline safety are an unreasonable burden on pipeline operators, increases the cost to consumers, and is a waste of government resources.

Approximately 60% of the nation's transmission pipeline mileage was constructed and installed prior to the 1970 effective date of the original pipeline safety regulations which contained the first adoption of a requirement for retention of pipeline records. Many records that 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 or have the locational accuracy requested in the notice. Therefore, it is unrealistic to require operators to collect and submit the requested detailed attributes for each pipeline segment in what may be as little as a year from the final information request. More time to develop the attribute information in the format requested by PHMSA, particularly for pre-1970 pipelines, and a phased implementation of the attributes required to be submitted is necessary.

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. AGA's proposal includes the collection and submittal of attributes that will meet the goals identified by PHMSA in its Information Collection Request in a way that will minimize the burden on the industry, the cost impact to customers, and keep resources focused on efforts that will improve pipeline safety.

Respectfully submitted,

Date: December 1, 2014

By:

A handwritten signature in dark ink, appearing to read 'CLS' followed by a stylized flourish.

Christina Sames

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