Testimony of Andrew J. Black, President & CEO, Association of Oil Pipe Lines (AOPL)
on Behalf of AOPL and the American Petroleum Institute (API)
to the U.S. House Committee on Energy & Commerce Subcommittee on Energy
Hearing on "The State of Pipeline Safety and Security in America" on May 1, 2019

On behalf of the Association of Oil Pipe Lines (AOPL) and the American Petroleum Institute (API), thank you for the opportunity to speak today about our industry's proactive efforts in pipeline safety and our priorities for federal Pipeline Safety Reauthorization.

AOPL represents liquids pipeline owners and operators transporting crude oil, petroleum products, like gasoline, diesel, jet fuel, and home heating oil, and industrial products, like propane and ethane. We have over 50 member companies which deliver over 21 billion barrels of crude oil and petroleum products annually over a 215,000-mile network of pipelines. AOPL members transport more than 97 percent of interstate barrel-miles.

API is the only national trade association representing all facets of the natural gas and oil industry, which supports 10.3 million U.S. jobs and nearly 8 percent of the U.S. economy. API's more than 600 members include large integrated companies, as well as exploration and production, refining, marketing, pipeline, marine businesses, and service and supply firms. They provide most of the nation's energy and are backed by a growing grassroots movement of more than 47 million Americans. API was formed in 1919 as a standards-setting organization. In its first 100 years, API has developed more than 700 standards to enhance operational and environmental safety, efficiency and sustainability.

Pipeline Safety Record

Pipelines are the safest way to deliver the liquid energy we all need and use every day. Pipelines deliver crude oil and petroleum products to their destination safely greater than 99.999 percent of the time. No other mode of transportation is as safe for the American people and the environment as pipelines.

Pipelines are getting safer. Over the last five years, pipeline operators have reduced the number of liquids pipeline incidents impacting people or the environment by 20 percent, as shown by government data publicly available from the U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA data also shows pipeline incidents impacting people or the environment caused by incorrect operation are down 38 percent over the last five years, and pipeline incidents impacting people or the environment caused by corrosion, cracking or weld failures are down 35 percent over the last five years.

Commitment to Pipeline Safety

AOPL, API and our member companies are fully committed to maintaining the highest standards and establishing a strong foundation with the public by continually striving for improvement through enhanced safety operations. And while greater than 99.999 percent of crude oil and petroleum products reach their destination without incident, pipeline companies are striving to address the remaining fraction of a percent to reach our shared industry-wide goal of zero incidents. The industry's ability to continually advance the safety of pipeline operations is based on three critical elements: (1) people, (2) technology and (3) safety culture. Education and training are constantly provided to industry employees to ensure they can operate the latest and greatest technologies. Similarly, employees are committed to developing a culture of safety that is continually assessed and improved. This three-pronged approach is designed first and foremost to prevent an incident from ever happening, but also ensures that the industry is prepared for any incident and can effectively respond in the rare instance that an incident occurs.

Our two associations and our member companies work hard to improve pipeline safety. We are transparent about where we are doing well and where we can do better. The pipeline safety statistics cited above come from the performance report developed jointly by AOPL and API to analyze pipeline safety data[1]. We use this analysis to guide our industry-wide safety programs focusing on key pipeline safety issues.

Through this strategic effort the pipeline industry has addressed key safety recommendations from Congress, the U.S. National Transportation Safety Board (NTSB) and PHMSA as well as issues identified through analysis of pipeline safety data. Recent safety accomplishments include developing new best practices for finding and fixing cracking in pipelines, managing leak detection programs, responding to pipeline emergencies and applying safety management systems to pipelines. API has also just released an updated best practice for inspecting and performing maintenance on pipelines utilizing the latest inspection technologies and analytical techniques.

The Importance of Industry-Wide Pipeline Standards

Liquid pipelines have not been waiting for Federal regulations to continue improving pipeline safety. The pipeline industry, led by API, continues to develop and revise critical standards and recommended practices for prevention, mitigation, and response activities to address pipeline safety. Since 1924, API has been the leader in developing voluntary, consensus-based, internationally recognized industry standards that promote safety and reliability. The API standards program is accredited by the American National Standards Institute (ANSI), the same organization that accredits similar programs at several national laboratories. In creating these industry consensus standards and recommended practices (RPs), API partners with the best and brightest technical experts from government, academia, and industry. This work supports the fulfillment of the National Technology Transfer and Advancement Act (NTTAA), which mandates that federal

[1] http://www.aopl.org/wp-content/uploads/2019/04/2019-API-AOPL-Pipeline-Performance-Report.pdf

agencies use technical standards developed and adopted by voluntary consensus standards bodies, as opposed to using government-unique standards.

Currently, API has more than 600 standards that are used globally by oil and natural gas operators. Here in the U.S., these standards are referenced more than 650 times in federal regulations, covering multiple government agencies, including PHMSA. Additionally, API's standards are the most widely cited petroleum industry standards by state regulators, with 240 API standards cited over 4,130 times in state-based regulations. Finally, API's standards are also the most widely cited standards by international regulators in the 14 major producing regions. AOPL members are proud to play a part in the development of many of these API standards.

Specifically, API has developed a number of standards to address pipeline safety in close coordination with subject matter experts from government, academia and industry. API RP 1173, *Pipeline Safety Management Systems (SMS)*, provides the framework for managing complex operations with safety as the top priority. It provides operators with established guidelines to manage risk, promote best practices, continuously improve safety performance and build a strong organizational safety culture from the leadership of a company all the way to an individual working in the field. Safety culture must be organically strengthened from within an organization, and API and AOPL work together with our members to effectively implement SMS across multiple pipeline sectors.

As U.S. production continues to grow and pipeline capacity does as well to keep pace, operators are motivated to develop a management system that ensures new pipelines are built to the appropriate specifications, keeping safety a priority. API RP 1177, *Steel Pipeline Construction Quality Management Systems*, outlines the steps needed for constructing safe steel pipelines, from purchasing the correct material to completing the right inspections prior to initiating operation.

While pipeline operators are taking significant steps to meet the goal of zero incidents, they must have a comprehensive mitigation strategy to reduce the impact should a release occur. Developed with industry, regulator and broad stakeholder input, API RP 1175, *Pipeline Leak Detection - Program Management*, outlines how to use multiple leak detection tools -- such as aerial overflights, ground patrols, and computational pipeline monitoring -- to create a robust and holistic program to identify a leak as soon as it occurs. In addition, the RP encourages senior leaders within companies to enforce a leak detection culture that promotes safety. Properly trained employees will also aid in mitigating incidents.

Pipeline operator qualifications (OQ) ensure companies properly prepare their personnel to perform high-risk duties, and continuous testing to verify the skills of qualified employees is a critical effort of operators. API has also developed RP 1161, *Pipeline Operator Qualification*, to give operators direction on ensuring those individuals performing high-risk tasks are appropriately trained and competent.

Should an incident occur, pipeline operators are ready to respond. Through coordinated emergency response programs with federal, state and local first responders and agencies, operators ensure timely, seamless and effective responses. API RP 1174, *Onshore Hazardous Liquid Pipeline Emergency Preparedness and Response*, completed by operators, regulators, and first responders, seeks to improve emergency response capabilities by providing a management system framework

for operators to ensure they are prepared to respond to any event in a coordinated way with our government and first responder partners. These RPs are just a few of the available documents developed in collaboration with federal and state regulators, academics and interested stakeholders, which through effective implementation and training will help improve safety across the industry.

Reauthorization Proposals

As stated earlier, to improve upon our strong safety record and reach our goal of zero pipeline incidents, it is imperative that the regulatory environment and PHMSA be positioned to meet current and future safety challenges. As such, there are three priority areas where PHMSA reauthorization can support the shared objective of industry and the regulating agency in advancing pipeline safety: 1) Harnessing Technology & Innovation, 2) Protecting Pipelines, People and Environment, and 3) Modernizing PHMSA and Pipeline Safety Regulations.

1. Harnessing Technology & Innovation

Harnessing technology to advance pipeline safety is a theme liquid pipelines are pursuing across industry and we recommend Congress adopt as well. For example, hi-tech tools can now scan pipelines like an MRI or ultrasound at the doctor's office, allowing pipeline operators to find issues early, perform maintenance and keep pipelines operating safely. The problem is federal regulations cannot keep pace with fast-moving technology innovations. In fact, outdated PHMSA regulations sometimes conflict with the latest knowledge and techniques.

It is imperative that PHMSA's regulations not hamper an operator’s ability to address potential problems through the application of the most innovative technology, critical engineering assessment processes and fit-for-purpose repair criteria based on data and sound engineering principles. Congress can do more to allow PHMSA and pipeline operators to improve safety by pilot testing innovations and learn from shared pipeline safety insights.

Specifically, operators are required to conduct timely assessments of pipeline integrity, and that may often be done effectively and efficiently with technology such as in inline inspection tools or “smart pigs”. However, a company’s ability to utilize the most advanced technologies in these inspections may be inhibited by the burdensome approval process in the use of alternative safety technology. Establishing clear parameters and deadlines associated with PHMSA's review, notification and approvals of alternative technology will help provide more certainty in the process and allow operators to utilize the latest, cutting-edge technologies to further pipeline safety.

With this in mind, 20-year old regulations that only allow new technologies to be used one rulemaking at a time must be updated. While those regulations reflected the technology and best thinking available at the time of adoption, they have not kept pace with advances in pipeline safety technology and modern engineering practices.

Our proposals for Congress to harness technology and innovation to improve pipeline safety include:

- creating a pilot program to test cutting edge pipeline safety technologies and newly developed best practices

- authorizing a Voluntary Information Sharing program encouraging joint stakeholder problem solving
- requiring regular PHMSA and stakeholder review of pipeline safety research and development advances
- encouraging voluntary discovery, disclosure, correction and prevention of pipeline safety violations

2. Protecting Pipelines, People and the Environment

A top reauthorization priority for us is protecting public safety and the environment from attacks on pipelines. Pipelines are the safest way to deliver the energy American families and consumers use every day, but they're still industrial facilities. Recent attacks on pipelines, either by turning valves in ways that threaten ruptures or other efforts to damage the pipelines are dangerous. Members of the public, surrounding communities and the environment are put in danger by attacks on pipeline facilities.

In October 2016, anti-pipeline activists staged simultaneous attacks on five crude oil pipelines in four states along the U.S.–Canada border. They targeted valve stations maintained by pipeline operators to stop the flow of product through the pipeline when necessary to conduct maintenance or isolate a pipeline segment during an emergency. After breaking the chains and locks on perimeter fencing, they entered the facility grounds and turned valves shutting off the flow of pipelines that together had a deliver capacity of 2.8 million barrels of crude oil a day, or around 15 percent of daily U.S. consumption. There were also attacks in 2017 and 2019 and admissions of damaging pipelines about to go into service.

After the 2016 attacks, Carl Weimer of the Pipeline Safety Trust said *"we think that illegally closing valves is a dangerous stunt that really does little to address these people's concerns. The Pipeline Safety Trust was founded in part because a valve closed unexpectedly causing a pressure surge that ruptured a pipeline killing three young men. Closing valves on major pipelines can have unexpected consequences endangering people and the environment. We do not support this type of action, and think it is dangerous."* We commend Mr. Weimer for separating legitimate policy concerns from dangerous activity that can hurt people and the environment.

For the safety of the public and the environment, Congress should do more to prevent threats to critical infrastructure like oil and natural gas pipelines. Loopholes exist in current pipeline safety criminal penalties that allow dangerous activity to escape punishment. While we certainly support the right to protest peacefully, we want to deter dangerous actions that can have significant public safety and environmental repercussions.

3. Modernizing PHMSA and Pipeline Safety Regulations

As PHMSA and the energy industry together continue to drive toward our shared goal of zero pipeline incidents, a modernized regulatory agency with the necessary tools, well-trained staff, and streamlined programs can bring needed certainty and consistency to the regulatory and oversight process. While the industry continues to work proactively through our standards development process and collaboration with regulators and other stakeholders to pursue our goal of zero incidents, there are additional regulatory reforms that we believe will help to further enhance pipeline safety.

In certain areas, outdated regulations drive inefficiencies and resource allocation to less impactful safety priorities. For example, in current regulations, pipeline operators are required to report pipeline incidents if they meet certain conditions, including a clean-up cost of $50,000 or higher. However, PHMSA set this threshold in 1984 and has not updated it for inflation since. As such, incident reporting based on the current-day costs would allow pipeline operators to better utilize and allocate resources toward more significant incidents. Keeping pace, Congress should require PHMSA to adjust its incident reporting dollar threshold for inflation.

Additionally, there are more than 650 API standards referenced in Federal regulation. As these standards are improved through the American National Standards Institute (ANSI)-accredited process at a minimum of every five years, Federal regulations often are unable to be updated in a timely manner to reflect these important leading practices within the industry. Currently, approximately 50 percent of the instances where PHMSA cites API standards are not referencing the most recent version of those standards. As API standards are updated or new ones are developed, PHMSA should execute a more timely and frequent review process that can use the existing rulemaking processes to incorporate by reference the latest edition of appropriate standards.

Our industry continues to place a great deal of emphasis and resources on research and development. Specifically, improvements to pipeline integrity inspection capabilities are a strategic objective that have driven our industry to invest in furthering in-line inspection tool detection, ultimately preventing incidents from occurring. For example, API is facilitating a more dynamic and interactive process between pipeline operators and technology vendors to ensure there is a unified approach to addressing challenges and maintaining the focus on achieving safer pipelines. As such, industry stands willing to explore opportunities to further strengthen collaboration with PHMSA on research and development, collectively shaping a longer-term strategy that drives innovation, informs regulations, and ultimately improves pipeline safety performance.

Lastly, the oil and natural gas industry strives to have well trained and qualified PHMSA pipeline inspectors to help bring certainty and consistency to the inspection and enforcement of federal pipeline safety regulations. However, pipeline inspectors frequently come into PHMSA with limited pipeline safety experience, and those that already have or gain experience often depart the agency to pursue more lucrative opportunities. As such, similar to other agency hiring authority for specialty positions, the ability to compensate pipeline inspectors at market rates through PHMSA's use of Schedule A employees with streamlined hiring and flexible pay levels would enhance PHMSA's ability to attract and retain expert pipeline inspectors.

AOPL and API recommend Congress improve PHMSA programs and regulations by:

- helping PHMSA hire and retain expert pipeline inspectors
- improving due process in PHMSA enforcement proceedings
- tailoring pipeline requirements to operating status
- adjusting PHMSA incident reporting requirements for inflation
- incorporating the latest best practices on inspections, repair and tank maintenance

API and AOPL oppose removing the current statutory requirement for the benefits and costs of PHMSA regulatory proposals to be identified. We believe there is no link between current PHMSA delays in rulemaking and the need to demonstrate benefits and costs of proposed

regulations. If anything, this requirement saves time by avoiding delays with the Office of Management and Budget were PHMSA to submit a rulemaking where the costs exceed the benefits. In our view, this requirement makes for rulemakings more focused on specific pipeline safety needs and less likely to be overly broad or needlessly burdensome. The American people, who ultimately pay the costs of regulation, deserve to know that the benefits of regulations outweigh their costs.

Additionally, this cost-benefit analysis requirement is a bipartisan provision based upon a fundamental good government principle, which was first added by a Democratic Congress. The current Executive Order requiring review of the costs and benefits of all agency regulatory proposals was issued by President Bill Clinton. A statutory requirement to consider costs and benefits in health, safety, and environmental regulations is not unique to PHMSA as Congress has, as a part of various acts, required the Occupational Health Safety Administration (OHSA), Mine Safety Health Administration (MSHA), and Environmental Protection Agency (EPA) to analyze costs and benefits during rulemaking.

That said, we believe there is a great amount of work that Congress can do to improve pipeline safety on a non-partisan or bipartisan basis as has been custom in prior reauthorization bills. Several of our proposals would specifically engage stakeholders from all ends of the political spectrum in the joint effort of pipeline safety. The Voluntary Information Sharing program is supported by labor unions, environmental groups, pipeline safety advocates, PHMSA and pipeline operators. Further attention to R&D would come in a forum which includes environmental groups, pipeline safety advocates, federal and state regulators and industry. Our proposal to help PHMSA hire and retain pipeline inspectors would be paid for by industry itself through user fees. All of these proposals are designed to improve pipeline safety.

Conclusion

Safety of the public and the environment is our industry's top priority, and collaboration with PHMSA and other government agencies only strengthens our ability to transport energy liquids across America with the fewest possible number of incidents. We are committed to promoting safety in all of our operations, helping to ensure that American families and businesses can efficiently access affordable and reliable energy. Again, thank you the opportunity to appear before you today.