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BEFORE THE
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE

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Thank you Chairman McCain and Senator Hollings for holding today's hearing and for the opportunity to speak to the Committee today about this very important issue – pipeline safety. My name is Kelley Coyner and I am the Administrator of the Research and Special Programs Administration (RSPA).

Within the Research and Special Programs Administration (RSPA), the Office of Pipeline Safety (OPS) is charged with regulating the safe and environmentally sound operation of the Nation's natural gas and hazardous liquid pipeline systems. Pipelines transport natural gas to 60 million residential and commercial customers. They also transport 60 percent of the crude oil and petroleum products that fuel our industry, our economy and our households. We have responsibility for over 2 million miles of pipelines involving approximately 2,400 operators, a number that has grown 10% since February 1997. Our regulations cover the design, construction, inspection, testing, operation, and maintenance of pipeline systems. We achieve compliance with our regulations through a partnership with state agencies, which assume regulatory and enforcement functions primarily as they apply to intrastate pipeline transportation, while the Federal government assumes these responsibilities for interstate pipelines.

Our mission is to ensure the safe, reliable, and environmentally sound operation of the Nation's pipeline transportation system. Consistent with the Department's Strategic Plan, we strive to eliminate pipeline-related deaths, injuries, and property damage, and reduce pollution to the environment. This year we set a new goal of reducing pipeline incidents caused by outside force damage by 25 percent over the next three years, five times higher than our previous goal. Other top priorities are reducing to zero the incidents caused by non-compliance with pipeline regulations and working with operators to reduce threats to pipeline integrity.

Over the past 30 years, there has been a steady decline in the overall number of pipeline incidents. While the rate of decline has slowed in the past decade, it remains moving in the right direction. Also on the decline is the number of oil pipeline spills to water. This is important because when pipelines spill into water, the results can be far-reaching, long-term, and significant. Of greater concern is the increasing number of fatalities – most, but not all, of which occur in gas distribution systems. The tragic consequences of the pipeline incidents in St. Cloud and Bellingham – to name only two – underscore the need for unremitting attention to the potential impact of pipeline transportation on people's lives. We are committed to improving the pipeline safety and environmental record.

Since the reauthorization of the pipeline safety program in 1996, we have continued to work to address the leading causes of pipeline failure and to reduce the impact of pipeline ruptures. Sadly, as the tragic deaths of three young people in Washington State reminded us last June, our work is far from done. Today I will describe the progress that has been made in tackling the key threats to pipeline safety in the United States and will outline the key issues that should be addressed in the reauthorization of the pipeline safety program.

The four leading causes of pipeline failure are (1) outside force damage, (2) corrosion, (3) human error, and (4) material defects. The Department of Transportation's Office of Pipeline Safety has taken aim at each of these challenges, which are addressed by the Administration's proposed Pipeline Safety and Community Protection Act of

2000.

Damage Prevention

The foremost threat posed by pipelines to safe and livable communities is incidents relating to outside force damage. Outside-force damage, including the failure to fix previously caused outside force damage, is the number one cause of pipeline incidents, accounting for half of those that result in fatalities. This kind of damage can be caused by excavation near pipelines and by natural forces such as flooding, mudslides, lightning, and heavy rains.

In 1999, Secretary Slater set a goal of eliminating 25% of excavation-related incidents over the next three years, and the Department will continue to provide strong Federal leadership to achieve this goal. We have seen some progress. In 1991, the Department received 202 reports of incidents caused by outside-force damage. By 1999, that number had declined to 117, or 42% of the earlier level. This progress is encouraging, but more work remains because the consequences of even a single incident can be so severe.

One of the Department's key damage prevention efforts is Dig Safely – a national public education campaign that Secretary Slater announced in June 1999. Our state partners in this campaign indicate that they are beginning to observe a decline in excavation-related damage.

In another damage prevention effort, the Office of Pipeline Safety convened 160 stakeholders from all areas of the excavation and underground facility communities and from state and local government. The result of this effort is Common Ground, a compendium of best practices in one-call systems and damage prevention programs throughout the country. We are implementing a new grant program to assist communities in reducing damage to underground facilities by implementing these best practices.

The Administration's legislative proposal provides for integrated testing to identify and locate damage to pipelines more quickly and efficiently. The proposal provides for research and development partnerships among government, industry, and academia to accelerate the introduction of new tools to avoid damage to these vital underground structures. The proposal also strengthens the Department's and citizens' authority to take enforcement action against those who ignore pipeline safety regulations and cause damage to pipelines.

Corrosion Detection and Prevention

The second leading cause of pipeline failure is operator's failure to address corrosion problems at their facilities. We have made some progress on preventing corrosion through the adoption of improved inspection technologies such as "smart pigs," the sensing devices that travel inside a pipeline and detect damage. While statistical analyses indicate the rate of incidents may be beginning to decline, we think that we can further improve our corrosion control standards.

We are currently working with the National Transportation Safety Board and state agencies to develop new standards for corrosion prevention, control, and detection. We expect to issue a proposed rulemaking for liquid pipelines by the end of this year and for natural gas pipelines next year. The integrated testing provision in the Administration's proposal would require operators to identify corrosion faster and more efficiently, and the research provision would enhance technology for corrosion prevention and detection.

Human Error

Another leading cause of pipeline failure is human error. Human error is different from excavation-related damage, which can be caused when someone strikes a pipeline while digging. Human error refers to pipeline failures caused by lack of appropriate operator training, operator fatigue, and similar factors that can cause an operator to perform inadequately or inappropriately on the job.

Our operator qualification rule, issued last fall, requires pipeline operators to develop and maintain a written qualification program to assess the ability of each worker. While this rule goes far in addressing some causes of human error, we also are looking at operator fatigue as another potential factor in pipeline incidents. RSPA is actively

involved in a DOT-wide initiative addressing the issue of operator fatigue to increase safety across transportation modes, including pipelines.

Material Defects

The fourth leading cause of pipeline failure is material defects. Such defects include faults in pipe material, manufacturing processes that cause defects, and welding technology that contributes to pipeline failures. The use of plastic pipe is increasing, and there is a need to collect information about the performance and reliability of plastic pipe. To address that need, RSPA is leading an interagency workgroup comprised of state, federal and industry partners that is investigating the development and application of advanced materials, including pipe strength and the long-term performance of plastic pipe. This workgroup will develop a database of all types of plastic pipe failures to detect trends with particular types of plastic pipe or pipe fittings.

The Administration bill provides for research and development partnerships that will help improve the tools that detect material defects in pipes.

Legislative Proposal

While I plan to spend the balance of my time discussing the Administration's proposal, I want to acknowledge the other proposals before the committee and express the Administration's interest in working with the Committee, other Members of Congress, and other stakeholders to enact pipeline safety legislation this year.

As you know, in January, Senator Murray introduced S.2004, the "Pipeline Safety Act of 2000." In April, Senator Hollings introduced the Administration's proposal by request, S. 2409, "The Pipeline Safety and Community Protection Act of 2000." Also in April, Chairman McCain introduced S.2438, the "King and Tsiorvas Pipeline Safety Improvement Act of 2000." What is most striking about the three bills is the degree to which they agree on fundamental principles. For example, all three bills reflect a desire to improve the public's right to know about pipeline activities in their communities. Similarly, all three bills address a need to improve the integrity of pipelines and to strengthen the tools available for enforcement of pipeline safety standards. This is not to say that there are no differences among the bills. Nevertheless, most of the differences among the three bills are in the approach, rather than in the specifics of the goal. With that in mind, I would like to explain the approaches taken in the Administration's bill.

Pipeline Safety and Community Protection Act of 2000 (S. 2409)

On April 11, Vice President Gore announced the Pipeline Safety and Community Protection Act of 2000. This proposal reflects the lessons we have learned in pipeline safety and includes provisions on integrated testing, community right to know, partnerships with states, research and technology for better monitoring tools, and stronger enforcement. The proposal reflects several key principles:

Integrated Testing – Successful pipeline protection must be based on an integrated, comprehensive use of information available to operators and regulators.

Community Right to Know – Communities have a right to know an operator's safety record and what operators and government are doing to protect them from pipeline incidents.

State Partnerships – State governments have a key role to play in the safety of pipelines.

Research and Development for Better Monitoring Tools – We need to improve and create innovative inspection and monitoring tools to identify defects more quickly and efficiently.

Stronger Enforcement – The existing enforcement provisions need to be updated to provide stronger sanctions for violations by operators and those who cause third-party damage to pipelines.

Integrated Testing

We recognize the need for a comprehensive safety program that will enable operators to assess and address all threats to pipelines. We recently proposed a rule to require operators of hazardous liquid pipelines to establish comprehensive programs to assess the condition of their pipelines and to use all available information – including the results of these assessments – to develop and carry out actions to maintain the safety of their pipelines. The proposed rule would require operators to integrate results of the testing with other information about risks that might impact the safety of their pipelines to more accurately identify areas where safety may be at risk.

This is a comprehensive approach to safety and testing that would require internal inspections, pressure testing, or other best-achievable technology to be performed on a periodic basis. The proposed rule clearly defines the criteria for analyzing the inspection or testing and would require specific measures for preventing and managing the consequences of pipeline failures.

The Administration's proposal mandates the completion of the integrated testing rulemaking. Under the proposal, we would quickly require large operators of hazardous liquid pipelines to provide additional protection in populated or unusually environmentally sensitive areas. The proposal would also require us to extend the rule within two years to small liquid operators and natural gas transmission lines. Within three years, we would be required to decide whether we should extend the regulations to other areas.

Community Right to Know

The Administration's proposal would make it easier for residents, businesses, and government officials to get information about pipelines in their communities. Pipeline operators would have an affirmative duty to carry out a continuing program of public education. Pipeline incident reports and safety-related condition reports would be made available to the public, and additional information such as maps and pipeline safety programs, would be made available to state and local emergency response authorities. Descriptions of the actions pipeline operators are taking to ensure pipeline safety also would be provided to local officials.

State Partnerships

We have a long history of working with states to protect pipeline safety, and the Administration's proposal would extend our partnership with states and authorize increased federal grants to support state safety efforts. The Office of Pipeline Safety and state agencies have collaborated on initiatives such as the Risk Management Demonstration Program, the National Pipeline Mapping System, and many of our damage prevention efforts. With their support, OPS continues to add state repositories to the National Pipeline Mapping System, make progress on the development of the risk-based approaches to pipeline safety, and remove barriers to state action on damage prevention. Each year, OPS and state partners hold national and regional meetings to promote information exchange on pipeline technology, inspection techniques, operational problems, significant incidents, and innovative approaches for strengthening the pipeline safety program. RSPA's 2001 budget requests a 30% increase in funding for state programs.

The legislative proposal would take the states' regulatory role even further – states could enter into agreements with the Department to participate in oversight of interstate pipelines. The Department would be authorized to reimburse up to 100 percent of a state's costs in monitoring new pipeline construction or investigating incidents. All states will be encouraged to be active in damage prevention, local preparedness and community right-to-know activities. This is a balanced approach that addresses states' concerns about participating in the oversight of interstate pipelines, without abdicating federal responsibility for the interstate transportation of energy products.

Data Improvement

This proposal also will improve data on pipeline safety. The proposal calls for the creation of a national depository to collect information about the precursors of pipeline

failures. This data is vital to ensure we are all focused on the right issues – and that we can measure our progress in addressing those issues. Additionally, the proposal reduces the threshold requirement for reporting hazardous liquid pipeline releases. Current regulations require operators of hazardous liquid pipelines to report any release greater than 2,100 gallons. Under the proposal, operators of hazardous liquid pipelines would be required to report any release greater than five gallons.

Research and Development for Better Monitoring Tools

The proposal calls for better and more innovative inspection and monitoring technologies. Internal inspection technology has improved, but still more improvement is needed. The bill calls for continued support for research partnerships with government, industry, and academia so that together, we can leverage our resources and our ability to develop innovative inspection tools and monitoring technologies. With better monitoring tools, we can better prevent and detect pipeline failures and protect lives and the environment.

Stronger Enforcement

Finally, the Administration proposal would strengthen both the Department's and citizens' enforcement authority by providing the pipeline regulatory program with the enforcement tools available to other public health and environmental statutes. The proposal strengthens the ability of citizens and local communities most directly affected by pipelines to seek penalties for violations of federal law in a judicial enforcement action. In addition, the proposal enables the Department to seek criminal sanction against the most egregious violators, including third party operators that damage pipelines.

Conclusion

The pipeline explosion that occurred in Washington State last year took the lives of three young people and forever changed the community of Bellingham. It is my hope that, working together, final legislation – influenced by important lessons learned from that tragic event – will be enacted as soon as possible.

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