



Safeguarding the Energy Pipeline Transportation System & the PIPES Act of 2006

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Pipelines are crucial to the U.S. Economy.

Whether heating our homes and businesses or providing the energy supplies for cars, trucks, trains, and airplanes, the transportation of energy products via natural gas and liquid pipelines is critical to our way of life. During the Third Annual Legal Issues and Policy Roundtable, which was attended by pipeline CEOs and held in Annapolis, Maryland in July of 2005, then-U.S. Transportation Secretary Norman Y. Mineta singled out pipelines as the “unsung heroes of our economy.”¹ Since that time, numerous administration and congressional officials have come to better understand the critical role played by our nation’s pipeline infrastructure. In many respects, the pipeline infrastructure fulfills the same role for energy products as the Eisenhower Interstate Highway System fulfills for commercial motor vehicles. True, the development of the pipeline infrastructure was not the result of a government program, but these “energy highways” crisscross the nation and to a casual observer appear very similar to the interstate highway system. In fact, more than one confused observer has asked why the federal agency responsible for regulating pipelines would have maps of the interstate highway system on their walls?

Pipelines are the “arteries of the Nation’s energy infrastructure, the safest and least costly way to transport energy products . . . [and] provide the resources needed for national defense, heat and cool our homes, generate power for business and fuel an unpar-

alleled transportation system.”² Products transported through the more than 2.3 million miles of regulated lines account for approximately 64 percent of the total energy products consumed in the United States each year.³

When one considers the sheer volume of shipments transported safely each day by pipelines, it is easy to see why for over fifty years this mode of transportation has provided our nation with the safest, most cost effective, and most reliable mode of transportation for large volume energy shipments. A transportation system devoid of the approximately 2.3 million miles of pipe would make the transportation of energy products a daunting logistical challenge. For example, a single pipeline transporting 150,000 barrels per day moves a volume equivalent to 750 tanker trucks, or a train of seventy-five rail tank cars.⁴

In addition, according to the Bureau of Transportation Statistics 2001 Annual Report, sixteen pipeline transportation fatalities occurred in 2000.⁵ By contrast, other modes of transportation incurred significantly higher fatalities for goods shipped, especially when analyzed for deaths per billion tons shipped.

Given the capacity constraints facing our national highway and rail sys-

	<u>Truck</u>	<u>Rail</u>	<u>Water</u>	<u>Pipeline</u>
<i>Deaths</i>	5,282	937	119	16
<i>Ton Miles (Billions)</i>	1,249	1,546	646	853
<i>Deaths/ Billion Ton</i>	4.229	0.606	0.135	0.018

Chair’s Corner

Bonnie Angermann-Stucker

Greetings from the Nation’s Capital! Section members have been working hard to set up our fall calendar. Upcoming events include the John T. Stewart Memorial Writing Competition, run by honorary board member Bernard Diederich. The competition will be open to all law students on any transportation topic, and there is a cash prize as well as a DC reception for the winner. In other news, Nancy Kessler, a senior attorney-advisor in the Department of Transportation’s Office of General Counsel, has taken over as secretary for T&TLS. Welcome Nancy! Nancy is already planning a luncheon program entitled “Shrinking the Carbon Foot-print: Aviation Industry Challenges,” to be held on Friday, September 7 from 12-1:30 p.m. Please see our advertisements for both the writing competition and the lunch program later in this edition.

We are always looking to hear from you as far as what types of events and articles that you favor, so don’t hesitate to contact us with any input you may have! ❖

tems, coupled with the prohibitive costs and higher risk of transporting such massive shipments of flammable gases and liquids, it is easy to see why

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the national pipeline system is critical to our economy.

Pipelines carry two major types of energy sources: gas and hazardous liquids. Although natural gas and refined petroleum products account for the vast majority of materials moved through pipelines, hydrogen, carbon dioxide, ethanol, and other products are also routinely shipped via pipeline. Pipeline nomenclature varies somewhat depending upon whether it is a liquid or gas line, but all pipelines can be generally grouped into gathering, transmission, and distribution categories based upon their particular function. For instance, pipelines that collect the product from the sources, either from wells on land, wells offshore, or from shipping, are gathering lines. Transmission lines transport the products to power plants, large industrial customers, and to municipalities and distant markets, such as airports or to tank storage at fuel terminals, for further distribution. Distribution lines transport natural gas to industrial customers, which then deliver the gas to businesses and homes.

Federal Government Oversight of the Pipeline Industry.

On December 29, 2006, following months of intense negotiations between the Bush Administration and numerous congressional committees, the President signed into law the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006, commonly referred to as the "PIPES Act." The PIPES Act reauthorizes the Pipeline and Hazardous Materials Safety Administration (PHMSA) through 2010. This article will analyze the PIPES Act and preceding legislation that has formed the pipeline oversight program in place today. In order to place the PIPES Act in its proper context, the article will also discuss the history and role of federal oversight of the pipeline industry. PHMSA is responsible for overseeing

the safety of approximately 2.3 million miles of interstate liquid and gas pipelines. To many PHMSA, pronounced "(Fim-Sá)," is a new agency within the U.S. Department of Transportation (DOT). In reality, it has been around for a very long time, albeit under different names. Today's organization was created in 2004 following passage of the Norman Y. Mineta Research and Special Programs Reorganization Act.⁶

Since its creation in 1966, the DOT has been responsible for coordinating all transportation activities and policy within the country. The department consists of various policy and administrative offices within the Office of the Secretary as well as numerous operating modal administrations charged with carrying out the regulatory and operational oversight of the transportation industry. During the first George W. Bush Administration (2000-2004), those semi-autonomous modal administrations included:

- Federal Aviation Administration (FAA);⁷
- Federal Highway Administration (FHWA);
- Federal Motor Carrier Safety Administration (FMCSA);⁸
- Federal Railroad Administration (FRA);
- Federal Transit Administration (FTA);
- Maritime Administration (MARAD);⁹
- National Highway Traffic Safety Administration (NHTSA);
- Research and Special Projects Administration (RSPA);
- Saint Lawrence Seaway Development Corporation;¹⁰ and
- United States Coast Guard (USCG).¹¹

By mid-2004, Transportation Secretary Mineta announced that a reorganization of RSPA and its offices (Volpe Research Center, the Office of Hazardous Materials Safety (OHMS), the Office of Pipeline Safety (OPS), Transportation Safety Institute (TSI),

and the Office of Emergency Transportation (OET)) was required in order to increase the effectiveness of these programs. The reorganization proposal submitted to Congress—The Norman Y. Mineta Research and Special Programs Reorganization Act—which was subsequently named in his honor, divided RSPA into two distinct operating administrations, the Research and Innovative Technologies Administration (RITA) and the Pipeline and Hazardous Materials Safety Administration (PHMSA).

PHMSA itself contains several sub-offices, but the two most recognizable are the Office of Hazardous Materials Safety (OHMS) and the Office of Pipeline Safety (OPS). The offices work together to oversee the secure movement of hazardous materials by pipelines with OPS leading the effort in establishing pipeline safety policy and enforcing the various pipeline-specific congressional mandates. This now allows a single entity to concentrate on transportation of dangerous goods by all modes of transportation.

A Stepping Stone to the PIPES Act: Pipeline Safety Improvement Act 2002.

Although there has been much legislation affecting pipelines over the years, perhaps none was as far reaching as the Pipeline Safety Improvement Act of 2002 ("PSIA"). Signed into law on December 17, 2002, PSIA reauthorized the pipeline safety program from 2002-2006. To many however, PSIA wasn't simply the most recent in a long string of pipeline authorizations; it was a piece of legislation with sweeping mandates and impacts upon the industry. Moreover, the final language was only reached after contentious, and at some points heated, debate. Nonetheless, PSIA is now seen as the vehicle through which pipeline safety oversight came of age. According to Vice-Admiral Thomas J. Barrett, USCG (Ret.), the current Administrator of PHMSA, PSIA was a "most important mile-

stone ... [because] it set the stage in law for a systems approach to managing and reducing pipeline risks."¹² For the first time, legislation was proposed and enacted which adopted a systematic, risk based, management approach to the pipeline safety program. PSIA started what is today the centerpiece of PHMSA's regulatory programs, using scientific data to quantify and address the inherent risks and resulting potential consequences associated with transporting large quantities of energy products through pipelines. PSIA remains the foundation upon which PHMSA's programs, and the resulting PIPES legislation, are based. This section discusses the key PHMSA programs established by PSIA.

Integrity Management Programs

Under PSIA, PHMSA was entrusted with issuing regulations that prescribed standards for the implementation of an integrity management program. Shortly after the passage of the Act, PHMSA complied with PSIA requirements and promulgated regulations setting forth the baseline standards for integrity management programs for pipelines in high consequence areas (HCAs) and the elements of the integrity management program.¹³

For the first time, pipeline operators were required to prepare and implement "integrity management programs" for gas and liquid pipelines in HCAs.¹⁴ This law, still in effect today, requires each operator of a pipeline facility to assess gas transmission pipeline segments in approximately 20,000 miles of highly populated areas for safety threats, such as incorrect operation and corrosion, and implement a written integrity management program to reduce the risks. Specifically, an integrity management program is a "set of safety management, analytical, operations, and maintenance processes imple-

mented in an integrated and rigorous manner in order to assure operators provide protection for HCAs."¹⁵

The integrity management rules for natural gas differ slightly from the hazardous liquids integrity management rules due to significant variations in consequence management arising from the different properties of each type of line. For example, a natural gas pipeline rupture usually results in vertical venting of product into the atmosphere, whereas a liquid pipeline rupture generally results in the product runoff conforming to the topography of the surrounding earth. Thus, the definitions for HCAs for natural gas and hazardous liquid pipelines differ based on the potential safety concerns each poses. HCAs for natural gas pipelines are defined as those highly populated and condensed areas or those areas that lie within 100 yards of a building or well defined outside area, such as a park or outdoor theatre.¹⁶ For liquid pipelines, HCAs include commercially navigable waterways; high population areas¹⁷ with 50,000 or more people or a population density of at least 1,000 people per square mile; other populated areas, with a concentrated population as defined by the Census Bureau; and "Unusually Sensitive Areas."¹⁸

As required by PSIA, PHMSA regulations set forth the baseline standards for integrity management programs for pipelines in HCAs and the elements of the integrity management program.¹⁹ Specifically, the regulations identified and described four acceptable baseline assessment methods to assess the integrity of the pipelines:

- 1) internal inspection, also known as inline inspection, ILL, and pig testing²⁰;
- 2) hydrostatic pressure testing;
- 3) external direct assessment, which includes data gathering, analyzing, and post assessment evalua-

TransLaw News

AVIATION MATTERS

*Compiled by Nancy Kessler,
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These highlights of aviation legal matters will bring practitioners up to date on the latest U.S. Department of Transportation initiatives.

ENFORCEMENT AND CONSUMER PROTECTION

Airline Overscheduling Investigation

In May, the Department of Transportation's (DOT) Office of Aviation Enforcement and Proceedings sent letters to 15 airlines that, in the first quarter of calendar year 2007, had chronically late flights. The flights at issue were those that operated at least 45 times over the three month period and arrived at the gate late (defined as more than 15 minutes past their published arrival time) more than 70 percent of the time during that period. The Enforcement Office considers the continued publishing of schedules that list chronically late flights to be unrealistic scheduling in violation of 14 CFR § 399.82 as well as an unfair and deceptive practice prohibited by 49 U.S.C. § 41712. Within the next 90 days, the carriers must adjust their schedules or operations for each chronically late flight such that their schedules are made realistic, or risk immediate enforcement action.

Airline Oversales and Denied Boarding Compensation Rule-making

On July 10, the DOT issued an Advance Notice of Proposed Rule-making seeking comments on amending the rules relating to oversales and denied boarding compen-

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tion; and

4) any other method that can provide an equivalent understanding of the pipe's condition.²¹

The integrity management program elements, contained in 29 CFR Part 195 must, at a minimum, include the following:

1) identify all HCAs;

2) develop a baseline assessment plan that identifies the potential threats to the pipeline by using the above described methods;

3) integration of assessment results with other relevant information to improve understanding of the pipe's condition;

4) repair of pipeline defects found by the assessment results within certain deadlines;

5) conduct periodic baseline reassessments;

6) take measures to prevent and mitigate threats to the HCAs, such as reducing third party damage; and

7) maintain records that document compliance with the program.²²

Assessments of all pipelines *that can affect* HCAs must be completed by December 17, 2012. Note the specific use of the words "that can effect" are intentionally broad.

PSIA requires periodic reassessments of the pipelines within seven years.²³ Along with reassessing the pipes, operators must implement preventive or mitigative measures to address the most significant threats identified by the risk analysis. These include improving corrosion control monitoring; enhancing control center operator training; installing automatic shut-off valves; improving leak detection system capability; conducting emergency drills with local emergency responders; and replacing pipe segments with pipe of heavier wall thickness.²⁴

Operator Qualification Programs

PSIA also required pipeline facilities to develop and implement qualifica-

tion programs for individuals performing sensitive tasks.²⁵ After receiving input from industry leaders and state and federal regulators, PHMSA set forth regulations for operator qualification ("OQ") requirements that apply to individuals who perform operations or maintenance tasks that affect the operation or integrity of the pipeline.²⁶ The pipeline operator must evaluate and assess whether an individual can perform the covered tasks and recognize and react to abnormal operating conditions.²⁷ An evaluation can consist of a written examination, oral examination, work performance history review, or observation during performance on the job, on the job training, or simulations.²⁸ An operator must document the qualification methods and the individuals who are qualified, the tasks they are qualified to perform, and the dates of current qualification.²⁹ Federal and state pipeline inspectors must ensure that operators are evaluating their employees and contractors.³⁰ If the inspections reveal violations of the OQ requirements, enforcement actions will be taken pursuant to current agency policy.

Public Awareness Programs

Pipeline operators must conduct public awareness programs to educate the public on various issues, including the use of the "One-Call" system prior to excavation and other damage prevention activities, the hazards associated with unintended releases from the pipeline facility, the physical indications that such a release may have occurred, the steps to be taken for public safety in the event of a release, and how to report an event.³¹ The program must be implemented in accordance with the American Petroleum Institute's (API) Recommended Practice (RP) 1162.³²

In this continuing education program, operators must include ways to advise affected municipalities, school

districts, businesses, and residents of pipeline facility locations. Additionally, operators must review their programs for effectiveness and modify the program as necessary. In June 2006, PHMSA issued an advisory opinion to inform operators how to submit their written public awareness programs to PHMSA for review.³³

Additional elements of PSIA

PSIA impacted pipeline safety in numerous other ways. For instance, penalties for violations of safety standards increased by 400 percent from \$25,000 to \$100,000.³⁴ Agencies are required to work together to formulate a program of research, development, demonstration, and standardization to enhance the integrity of pipeline facilities.³⁵ Employees are protected from discrimination if the employee provides information to an employer or the government about a violation of pipeline safety.³⁶ Operators must provide the secretary with a map of pipelines for use in creating a national pipeline mapping system.³⁷

PSIA's Impact

Thanks to the regulations established by PSIA and PHMSA's oversight, pipeline failures and accidents have declined over the last five years. From 1996–2000, an average of sixty-two serious incidents was recorded.³⁸ This number declined to an average of forty-five incidents from 2001–2006. The success of PSIA belies the extremely high level of concern and at times outright opposition against the bill as it progressed through congress. At the end of the day, however, all agree that PSIA worked, and worked well. As declared by Congressman Petri, the "2002 safety bill was an overwhelming success."³⁹ Against this backdrop, PHMSA began drafting the next reauthorization bill during the Summer of 2005 for congressional consideration prior to the expiration of PSIA on September 30, 2005.

The PIPES Act

Internal drafting of a new reauthorization bill to carry PHMSA forward may have begun in 2005, but it was suddenly and unexpectedly interrupted by Hurricanes Katrina and Rita. The Bush Administration's reauthorization proposal was delayed by almost six months while the agency was consumed with facilitating, and in many cases, directly supervising and directing, critical pipeline infrastructure repair and hazardous materials transportation into and out of the affected areas in the storms' aftermath. While the hurricanes may have delayed the submission of the proposed legislation, they provided the agency, and the Bush Administration, with an opportunity to modify the proposed legislation, taking into account many lessons learned during the intervening period.

The PIPES Act widens previous legislative requirements by placing more emphasis on damage prevention, enhancing state programs' oversight of pipelines, and clarifying PHMSA's responsibilities during natural disasters.⁴⁰ As stated by Representative Don Young of Alaska, it "keeps us moving in the same positive direction as the 2002 pipeline bill."⁴¹ The bill was first introduced in the House of Representatives on July 13, 2006 by Representative Young, then-chairman of the powerful House Transportation and Infrastructure Committee and Representative Thomas Petri of Wisconsin, then-chairman of the House Subcommittee on Railroads, Pipelines, and Hazardous Materials.⁴² The new draft legislation would not, however, be a replay of the contentious 2002 PSIA. While there were some compromises made, the bill quickly negotiated the various committees and was passed by voice vote in the House on December 6, 2006. The PIPES Act was passed by the Senate by unanimous consent on December 7, 2006 and President Bush signed the act into law on December 29, 2006.

The remainder of this article will explore the key components of the PIPES Act, its potential impact, and the ways in which practitioners and companies that stand to be affected by the act can still influence the regulations that will be promulgated by PHMSA.

Executive Confirmation

One far-reaching, and perhaps the least understood, impact of the PIPES Act on pipeline operators is the new requirement that companies submit a statement by a senior company executive attesting to the accuracy of annual and semi-annual pipeline integrity management program performance reports.⁴³ Although PHMSA must establish procedures for certification before implementation of this program will occur, the law requires the executive to attest to PHMSA that they have personally reviewed the report and, to the best of the executive's knowledge, the report is true and complete. According to Admiral Barrett, PHMSA "needs to increase management's accountability and place additional attention on the importance of having more precise information to target safety risks."⁴⁴ Considered by some to be a Sarbanes-Oxley "lite" for pipelines, the agency's intent is to ensure executive accountability over integrity management programs without the need to increase the agency's enforcement resources in light of several instances where senior company executives had not provided sufficient oversight of their company's programs.

Damage Prevention

The PIPES Act focuses on damage prevention from construction activities. According to PHMSA, construction related damages have increased by 50 percent from 1996 to 2005.⁴⁵ By contrast, Virginia and Minnesota, states which already have strong damage prevention programs in place, have seen a 50 percent reduc-

tion in construction damage.⁴⁶ By enforcing the practice of calling before digging, both of these states have fewer than three damages per 1,000 call tickets.⁴⁷ The success of these state programs influenced many of the third party damage prevention provisions adopted in the PIPES Act.

Section 2 of the PIPES Act provides for significant additional protocols and authorizes the assessment of a civil penalty by state agencies in order to address incidents arising from damage caused by construction-related activities.⁴⁸ A person who engages in demolition, excavation, tunneling, or construction in the vicinity of a natural gas or hazardous liquid pipeline must first use the state's One-Call system to establish the location of the underground pipeline, cannot disregard the markings established by a pipeline operator, and is required to promptly report pipeline damage. Any pipeline operator who fails to respond to a location request to prevent damage or who fails to take reasonable steps to ensure accurate marking is subject to civil penalties for One-Call violations. By expanding what PSIA first began in 2002, the new law is applicable to excavators and operators alike and seeks to reduce the number of violations, and in turn, reverse the increasing trend of excavation incidents. Although the program is designed to address third-party damage, operators must also continue to pay close attention to these new requirements in order to avoid an enforcement action.

As a part of this new national program, the Common Ground Alliance⁴⁹ (CGA) and PHMSA obtained a national three digit number from the Federal Trade Commission to facilitate ease of use. Launched by CGA and current Secretary of Transportation Mary Peters on May 1, 2007 during a public event on the National Mall in Washington, D.C., "811" went live across the country thereby replacing numerous toll free "800" numbers

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which varied from state to state.

The PIPES Act also contains incentives in the form of grants for states to implement damage prevention programs to reduce excavation damage to pipelines. States, which oversee 90 percent of operator compliance, had complained that ever-increasing federal oversight and regulatory responsibilities were unfairly requiring them to absorb cost increases associated with carrying out the program.⁵⁰ In response, the PIPES Act increased the federal share in grants for state programs from 50 percent to 80 percent. In order to be eligible to receive grants, states must demonstrate that they have made substantial progress towards establishing an annual pipeline safety program certification and a qualified damage prevention.

The act also makes a grant available to promote public education and awareness of the One-Call national excavation damage prevention phone number, 811.⁵¹ The secretary is entrusted with the authority to choose the appropriate entity to conduct this program and is authorized to spend \$1 million through September 30, 2008.

Low-Stress Pipelines

In February 2006, approximately 270,000 gallons of oil leaked into Alaska's Prudhoe Bay, the largest spill in the region's history.⁵² In response to the Prudhoe Bay oil spill, the PIPES Act provides for new federal oversight of previously unregulated low-stress (i.e., low-pressure) hazardous liquid pipelines.⁵³ The cause of the spill was a dime-size hole in a corroded low-stress pipe which some believe was caused by inadequate operating and maintenance procedures by the operator of the pipeline. Due to the winter climate and the small size of the leak, the event went undetected for five days before a field worker smelled crude oil, resulting in damage to over two acres of land. To make matters worse, additional pipe defects were uncovered by the operator following new inspections

mandated by PHMSA.

As a result of this incident, congressional pressure was immense and stringent language was inserted into the act, mandating coverage of *all* low-stress lines. Previously, the agency had exempted lines, regardless of size, operating at less than eighty percent of maximum operating pressure (MAOP) because they had low probability for a major safety accident. PHMSA had already proposed expanding the new safety requirements in order to cover additional miles of lines operating in or near environmentally sensitive areas and the agency's formal public proposal, begun in 2004 and made public in August 2006, proposed safety requirements addressing the most common threats to the integrity of the low-stress rural lines: corrosion and third-party damage. The proposal did not however cover smaller lines in rural areas away from environmentally sensitive areas where risks were considered minimal.⁵⁴

The PIPES Act now requires PHMSA to complete the rulemaking and issue regulations by December 31, 2007 and such regulations are to comply with the act's requirement that all low-stress lines be covered. However, perhaps one fact lost in the public outcry following the Prudhoe Bay spill is that most low stress lines are very small in diameter and short in distance and thus, any leak would not approach the amount of crude oil released by the 34-inch line on Alaska's North Slope. Requiring all lines to adhere to the full spectrum of regulatory oversight may in fact prove counterproductive to overall production capabilities as many smaller operators may find marginal lines are no longer profitable.

Transparency

The PIPES Act ensures the transparency of pipeline safety enforcement.⁵⁵ By December 31, 2007, PHMSA must provide to the public a

monthly updated summary of all pipeline enforcement actions taken. This monthly report will give the public "valuable insight into areas where problems exist, and [give] pipeline operators a forum to demonstrate they have been corrected."⁵⁶

Excess Flow Valves

Another important aspect of the PIPES Act is the requirement that PHMSA prescribe minimum standards for integrity management programs for distribution pipelines.⁵⁷ The minimum standards require operators of natural gas distribution systems to install excess flow valves (EFVs) and report annually on the number of excess flow valves installed on single family residence service lines connected to natural gas distribution systems. EFVs are designed to prevent explosions by shutting off gas flow when a service line ruptures.

However, PHMSA vigorously opposed this prescriptive requirement as misguided and instead argued that while EFVs appear to work in certain cases, they do not represent a major breakthrough in safety technology and in some cases, may cause more harm than good. EFVs are designed to close a one-way check valve when a massive leak is detected, in theory shutting off the flow of gas to a residence. While the valve is effective against a guillotine break in a line close to the foundation of a residence such as may occur from excavation, the valves are wholly ineffective against most common leaks, such as occurs when a pilot light is extinguished, or a leak occurs from a breach of the pipe. In these cases the residence will still fill with gas and therefore EFVs may provide a false sense of security. Moreover, the quality and impurities commonly found in natural gas in various geographic locations around the country may in fact render installation of EFVs futile. Finally, the valves will not generally

work if installed on master meter and liquefied petroleum gas systems.

Despite the PIPES Act's language, which allows the agency to decide through rulemaking which lines will be exempted⁵⁸, the agency has already hinted in a letter to Senator Lautenberg⁵⁹ that it has decided to cover all lines except for those mentioned above. It will be incumbent for those interested in this issue to present comments during the notice and comment period as agency discretion is still very much in play for many aspects of the rule.

Human Factors Management Plan

The act also directs PHMSA to develop standards to reduce risks associated with human factors, including fatigue, in pipeline control centers.⁶⁰ By June 1, 2008, PHMSA must issue regulations to require pipeline operators to develop, implement, and submit for approval a human factors management plan to reduce risks in control centers. The plan must include a maximum limit on the number of hours a controller in a control center can work. Additionally, by December 31, 2007, PHMSA must issue regulations providing that, after a notice and an opportunity for a hearing, if the Secretary determines a pipeline has a condition posing a threat to safety, property, or the environment, the pipeline operator must take corrective action to remedy the condition.⁶¹

Increase in Training Grants and Personnel

The PIPES Act also increases the emergency response management and training grants to state and local governments, by four million dollars each year, up to a total of ten million per year.⁶² States had expressed concern that the various requirements since the enactment of PSIA needed to be offset by an increase in federal to state matching grant funds. The cur-

rent formula requires states to match federal dollars 50/50. The PIPES Act will, over a period of years, provide significant additional dollars to states by requiring them to only match 20 percent of federal grants. It remains to be seen whether the states will continue to fund pipeline safety programs moving forward as has been the case in the past or whether their resolve will be undermined by other more pressing state budgetary priorities.

The PIPES Act also requires training standards for emergency responders to ensure that they have the ability to protect nearby persons, property, and the environment from the effects of accidents involving pipelines. The International Association of Firefighters strongly supports the PIPES Act's requirements of training standards for emergency responders and additional funding because the number of injuries resulting from gas and hazardous liquid accidents can be significantly reduced through appropriate training. "It is extremely important that emergency responders are not simply trained, but are trained at a level appropriate to their response."⁶³ The increase of funding will assure that the firefighters and emergency medical personnel are adequately trained to "contain any release from a safe distance, keep it from spreading, and prevent people, property and the environment from harmful exposure."⁶⁴

In addition to ensuring that emergency responders are trained, the PIPES Act ensures PHMSA will be able to carry out the Act's safety advances by increasing the number of positions for pipeline inspection and enforcement personnel from 100 in fiscal year 2007 to 135 by 2010.⁶⁵

Reassessment Inspections

The PIPES Act, like PSIA, contains a seven-year reassessment measure. Most regrettably, Congress did not incorporate the Bush Administra-

tion's proposal to modify the seven-year period for natural gas pipelines. As Representative Robin Hayes explained during the House debates, the seven-year reassessment period was a compromise between two versions of legislation and was not based on scientific standards.⁶⁶ Congress ordered the Government Accountability Office (GAO) to audit the program and determine the optimum period for conducting inspections. After interviewing 52 operators, the GAO released its report in September 2006 with the conclusion that the seven-year requirement is too "conservative" and does not adequately address PSIA's safety objectives.⁶⁷ The GAO noted that inspections, to date, have revealed few serious problems that would not have been discovered during other inspections leading some to believe that serious pipeline incidents involving corrosion are rare.⁶⁸ The majority of the operators interviewed believed that they could safely reassess their pipelines every ten, fifteen, or twenty years as prescribed by industry standards. Therefore, instead of a "one-size-fits-all" approach, the GAO recommended a risk-based approach for reassessment,⁶⁹ which would factor in the age, location, soil conditions, climate, metallurgy, and changing population near a pipeline, making reassessments appropriately tailored to the corrosion threats faced by pipeline segments.⁷⁰

In November 2006, Admiral Barrett informed the Committee on Commerce, Science, and Transportation that PHMSA strongly favored a "systems-based approach to assessing and managing safety related risk" and urged Congress to grant the Secretary broader authority to adjust the inspection intervals on the basis of risk factors.⁷¹ According to Admiral Barrett,

For integrity management programs to be effective, operators must be free to focus on making

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the best use of information as it becomes available . . . reliance on prescribed seven year retest intervals as established in current law goes against this process. It seems a disincentive to the continuous evaluation and readjustment of a dynamic systems approach that is a basic element of an ongoing “whole-health” review of a pipeline system. The goal is to regularly and systematically utilize the most current information about the pipeline system so that it may be maintained to operate safely in the best condition for the longest amount of time.⁷²

Wishing to avoid potential controversy by repealing the fixed re-assessment interval, Congress did not implement the GAO’s findings or PHMSA’s wishes to permit pipeline operators to reassess pipeline segments on a risk-based approach. Instead Congress extended the pre-existing federal mandate and requested PHMSA review the GAO’s findings and submit further legislative recommendations to Congress within 60 days of the PIPES Act’s passage.⁷³ In other words, it dodged the issue altogether.

At a recent congressional hearing, however, PHMSA testified it has the authority to waive the seven-year reassessment interval on a case-by-case basis.⁷⁴ However, there is no established agency procedure to consider or grant specific waiver requests, although the agency has been consulting with the industry on waiver protocols since last October. Affected pipeline companies would be wise not only to work closely with PHMSA officials to understand the mechanism and protocols to be used for obtaining relief, but should be proactive in doing so as the agency formulates new regulatory language to comply with the Congressional mandate. It is unclear, however, whether many operators will choose to seek a waiver given the potential for significant legal liability should an incident occur while oper-

ating on the waiver.

Integrity Management and GAO’s Recommendations

The PIPES Act also directs PHMSA to take into consideration the recommendations from the GAO’s report on Integrity Management released in September 2006, around the same time as their report on the reassessment period. PHMSA must review incident reporting requirements and modify reporting criteria by December 31, 2007.⁷⁵ As part of the PSIA, Congress had directed the GAO to assess the integrity management program’s effects on public safety. The GAO interviewed 51 gas pipeline operators, surveyed all state pipeline agencies, and interviewed agency officials, pipeline safety advocacy groups, and state pipeline agencies.⁷⁶ The GAO found that as of December 31, 2005, operators had assessed 33 percent of pipelines in HCAs and completed over 2,000 repairs. This process is highly beneficial for the approximately 68 percent of the population that live near gas transmission pipelines.

The integrity management program is costly however, and most operators were required to dedicate additional resources in order to hire additional staff or contractors to fulfill the program’s assessment and documentation requirements. PHMSA developed tools to help inspectors, but the GAO found that operators had still not done enough in properly documenting their policies and procedures and that factors such as the price of gas should be reflected in the incident reporting requirements.⁷⁷ Thus, the GAO’s recommendations include revisions to the current definitions of a reportable incident to consider changes in the price of natural gas and establishing consistent categories of causes for incidents and leaks on all gas pipeline reports.

Grants to Universities

Through the PIPES Act, Congress authorized the secretary to award

competitive grants to universities with pipeline safety and security expertise to establish and conduct pipeline safety and technical assistance programs, in conjunction with PHMSA.⁷⁸ The program can include courses in safety and security of pipeline systems, incident and risk management, integrity management, consequence modeling, detection of encroachments and monitoring of rights-of-way, and vulnerability assessment of the systems.

Miscellaneous Provisions

Other provisions of the PIPES Act include bringing direct sales lateral pipelines under federal oversight by including them in the definition of a gas pipeline facility; restoring pipeline operations that have been or are anticipated to become disrupted by manmade or natural disasters; and reporting on the inadequacies of current leak detection systems.⁷⁹

Conclusion

Almost every section of the PIPES Act requires action by PHMSA. Thus, before the regulations set forth in the PIPES Act are actually implemented, the secretary must receive input from those affected by this law. The first public meeting to discuss new statutory requirements for low stress pipelines occurred on February 12.⁸⁰ PHMSA specifically requested information on how the regulations will impact the operators of low-stress pipelines and the agency published a supplemental notice of proposed rulemaking in the Federal Register on May 18.

The lesson for the interstate pipeline industry is clear: Companies that stand to be affected by the newly enacted PIPES Act and upcoming interpretive rulemaking procedures at the PHMSA, the DOT’s Office of General Counsel, and the Office of Management and Budget would be prudent to weigh in with federal regulators at the earliest opportunity in

order to protect their vital business interests.

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ENDNOTES

¹Honorable Norman Y. Mineta, U.S. Sec'y of Transp. to the Ass'n of Oil Pipe Lines, Remarks at the American Petroleum Institute and Hunton & Williams' Third Annual Legal Issues and Policy Roundtable (July 28, 2005).

²H.R. REP. NO. 109-717, at 10 (2006).

³PHMSA, Pipeline Safety Q & A, www.phmsa.dot.gov/media/pipeline_qa.html (last visited March 15, 2007); Written Statement of Thomas J. Barrett, Adm'r, PHMSA, Oversight Hearing on Discussion Draft of the Pipeline Safety and Reliability Improvement Act of 2006 Before the Subcommittee on Energy and Air Quality Committee on Energy and Commerce (July 27, 2006), available at www.phmsa.dot.gov/news/HOUSEEnergy-Barrett07-27-06.pdf/ [hereinafter Barrett Written Statement Before Energy and Air Quality Subcommittee].

⁴TRANSMISSION PIPELINES AND LAND USE: A RISK-INFORMED APPROACH 20 (Transp. Research Bd. ed., 2004) [hereinafter TRANSMISSION PIPELINES AND LAND USE].

⁵BUREAU OF TRANSP. STATISTICS, TRANSP. STATISTICS ANNUAL REPORT 142, 159, 174 (2001).

⁶H.R. 5163, 108th Cong. (2004) (enacted).

⁷Formally the "Civil Aeronautics Board", an independent agency.

⁸Created in 2000; formally the "Office of Motor Carriers" (OMC) of the Federal Highway Administration.

⁹Includes the United States Merchant Marine.

¹⁰US component of US-Canadian joint venture corporation.

¹¹Transferred to the Department of Homeland Security.

¹²Barrett Written Statement Before Energy and Air Quality Subcommittee, *supra* note 3.

¹³Pipeline Safety: Pipeline Integrity Management in High Consequence Areas (Gas Transmission Pipelines); Proposed Rule, 68 Fed. Reg. 18, 4278 (Jan. 28, 2003) (to be codified at 49 C.F.R. pt. 192) [hereinafter Proposed Rule].

¹⁴Pub. L. No. 107-355, § 14, 116 Stat. 2985, 3002-3005 (2002).

¹⁵PHMSA Pipeline Safety Program; Stakeholder Communications: Briefing: Integrity Management, available at primis.phmsa.dot.gov/comm/IM.htm.

¹⁶49 C.F.R. § 192.903 (2007).

¹⁷High population area means an urbanized area as defined by the Census Bureau.

¹⁸49 C.F.R. § 195.450 (2007). An Unusually Sensitive Area is an ecological resource or drinking water area that is unusually sensitive to environmental damage from a hazardous liquid pipeline releases, such as the water intake for a community water system or an area containing an imperiled, threatened or endangered species. 49 C.F.R. § 195.6 (2007).

¹⁹Pipeline Safety: Pipeline Integrity Management in High Consequence Areas (Gas Transmission Pipelines); Proposed Rule, 68 Fed. Reg. 18, 4278

(Jan. 28, 2003) (to be codified at 49 C.F.R. pt. 192) [hereinafter Proposed Rule].

²⁰A pig is a device which is inserted inside the pipeline for the purpose of cleaning, dimensioning, or inspecting the integrity of the line.

²¹*Id.* at 68 Fed. Reg. 18, 4280.

²²*See* 49 C.F.R. § 192.911.

²³As will be discussed further in Sections IV(H)-(I), the seven year interval was picked as a compromise, without regard to a technical or safety basis, between various factions which had argued for shorter or longer timeframes. 152 Cong. Rec. H8842.

²⁴49 C.F.R. § 192.935; PHMSA Pipeline Safety Program; Stakeholder Communications: Briefing: Integrity Management, available at primis.phmsa.dot.gov/comm/IM.htm

²⁵Pub. L. No. 107-355, § 13, 116 Stat. 2985, 2999-3002 (2002).

²⁶49 C.F.R. § 195.501.

²⁷49 C.F.R. §§ 195.503, 195.505.

²⁸49 C.F.R. § 195.503.

²⁹49 C.F.R. § 195.507.

³⁰PHMSA established an OQ form around nine elements in order to assist inspectors in examining an operator's OQ program. *See* Dep't of Transp., Protocol Questions, available at primis.phmsa.dot.gov/oq/protocols.htm.

³¹Pub. L. No. 107-355, § 5, 116 Stat. 2985, 2988-89 (2002). The One Call law requires at least 48-hour advance notification to the state One Call center prior to any excavation in order to minimize excavation damage of gas, electric, and other utility lines. PSIA authorized a toll-free number for this purpose. Pub. L. No. 107-355, § 17, 116 Stat. 2985, 3008 (2002).

³²49 C.F.R. § 1192.616. Developed by industry representatives, federal and state pipeline safety regulators, and the public, the API RP 1162 provides guidance and recommendations for the development of a public awareness program. For instance, it delineates the intended audience, messages

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to be communicated, frequency of the message, and the best delivery method. See Am. Petroleum Inst: Public Awareness Programs for Pipeline Operators, API Recommend Practice 1162, Dec. 2003, available at: committees.api.org/pipeline/standards/docs/1162nonprintable.pdf

³³Pipeline Safety: Submission of Public Awareness Programs, Notice, 71 Fed. Reg. 116 (June 16, 2006).

³⁴Pub. L. No. 107-355, § 8, 116 Stat. 2985, 2993 (2002).

³⁵Pub. L. No. 107-355, § 12, 116 Stat. 2985, 2997-2999 (2002).

³⁶Pub. L. No. 107-355, § 6, 116 Stat. 2985, 2989-2993 (2002).

³⁷Pub. L. No. 107-355, § 15, 116 Stat. 2985, 3006 (2002).

³⁸See PHMSA Stakeholder Communications: Serious Pipeline Safety Incidents, primis.phmsa.dot.gov/comm/reports/SerPSI.

³⁹Hearing on H.R. 5782, 152 Cong. Rec. H8839.

⁴⁰Barrett Written Statement Before Energy and Air Quality Subcommittee, *supra* note 3, at 4.

⁴¹Hearing on H.R. 5782, 152 Cong. Rec. H8839 (statement of Rep. Don Young)

⁴²152 Cong. Rec. H 5222.

⁴³Pub. L. No. 109-468, § 16, 120 Stat. 3486, 3496 (2006).

⁴⁴Written Statement of Thomas J. Barrett, Adm'r, PHMSA, Oversight Hearing on Discussion Draft of the Pipeline Safety and Reliability Improvement Act of 2006 Before the Committee on Commerce, Science, and Transportation, at 4 (November 11, 2006), available at www.phmsa.dot.gov/news/SENATECommerce-Barrett11-16-06WrittenTestimonyPSReauth.pdf [hereinafter Barrett Written Statement Before Commerce, Science, and Transportation Committee].

⁴⁵Barrett Written Statement Before Commerce, Science, and Transportation Committee.

⁴⁶*Id.* at 4.

⁴⁷*Id.* at 5.

⁴⁸Pub. L. No. 109-468, § 2, 120 Stat. 3486, 3486-89 (2006).

⁴⁹The Common Ground Alliance (CGA) is a member-driven association dedicated to ensuring public safety, environmental protection, and the integrity of services by promoting effective damage prevention practices. Officially formed in 2000, the CGA represents a continuation of the damage prevention efforts embodied by the *Common Ground Study*. Sponsored by the U.S. Department of Transportation and completed in 1999, this Study represents the collaborative work of 160 industry professionals who identified best practices relating to damage prevention. For more information see: www.commongroundalliance.com.

⁵⁰See Barrett Written Statement Before Energy and Air Quality Subcommittee, *supra* note 3, at 6.

⁵¹Pub. L. No. 109-468, § 3, 120 Stat. 3486, 3489-90 (2006).

⁵²See John Roach, *Alaska Oil Spill Fuels Concerns Over Artic Wildlife, Future Drilling*, NATIONAL GEOGRAPHIC NEWS, March 20, 2006, available at news.nationalgeographic.com/news/2006/03/0320060320_alaska_oil.html.

⁵³Pub. L. No. 109-468, § 4, 120 Stat. 3486, 3490 (2006).

⁵⁴Written Statement of Thomas J. Barrett, Adm'r, PHMSA, Oversight Hearing on BP Pipeline Failure Before the Committee on Energy and Natural Resources, at 5 (September 12, 2006), available at www.phmsa.dot.gov/news/SENATEEnergy-BarrettSept12.pdf; Pipeline Safety: Protecting Unusually Sensitive Areas From Rural Onshore Hazardous Liquid Gathering Lines and Low-Stress Lines, Notice of Proposed Rulemaking, 71 Fed. Reg. 172, 52504 (Sept. 6, 2006).

⁵⁵Pub. L. No. 109-468, § 6, 120 Stat. 3486, 3491 (2006).

⁵⁶152 Cong. Rec. H8839.

⁵⁷Pub. L. No. 109-468, § 9, 120 Stat. 3486, 3493 (2006).

⁵⁸152 Cong. Rec. S11535.

⁵⁹The Letter from PHMSA was reprinted in the federal register.

⁶⁰Pub. L. No. 109-468, § 12, 120 Stat. 3486, 3494-95 (2006).

⁶¹Pub. L. No. 109-468, § 13, 120 Stat. 3486, 3495-96 (2006).

⁶²Pub. L. No. 109-468, § 18, 120 Stat. 3486, 3497-98 (2006).

⁶³152 Cong. Rec. H8841 (letter from International Association of Firefighters).

⁶⁴*Id.*

⁶⁵Pub. L. No. 109-468, § 18, 120 Stat. 3486, 3497-98 (2006).

⁶⁶152 Cong. Rec. H8842.

⁶⁷*Id.* at 24.

⁶⁸U.S. Gov't Accountability Office, Natural Gas Pipeline Safety: Risk-Based Standards Should Allow Operators to Better Tailor Reassess-ments to Pipeline Threats, GAO-06-945 (Sept. 2006), available at www.gao.gov/cgi-bin/getrpt?GAO-06-945 [hereinafter Risk-Based Standards].

⁶⁹Written Statement of Thomas J. Barrett, Adm'r, PHMSA, Oversight Hearing on BP Pipeline Failure Before the Committee on Energy and Natural Resources, at 6 (September 12, 2006), available at www.phmsa.dot.gov/news/SENATEEnergy-BarrettSept12.pdf.

⁷⁰152 Cong. Rec. H8842; Risk-Based Standards, *supra* note 42, at 24.

⁷¹Barrett Written Statement Before Commerce, Science, and Transportation Committee, *supra* note 36, at 4.

⁷²*Id.*

⁷³Pub. L. No. 109-468, § 25, 120 Stat. 3486, 3500 (2006).

⁷⁴Barrett Written Statement Before Commerce, Science, and Transportation Committee, *supra* note 36, at 4.

⁷⁵Pub. L. No. 109-468, § 15, 120 Stat. 3486, 3496 (2006).

⁷⁶U.S. Gov't Accountability Office, Natural Gas Pipeline Safety: Integrity Management Benefits Public Safety, but Consistency of Performance Measures Should Be Improved, GAO-06-946, at 1-2 (Sept. 2006), available at www.gao.gov/cgi-bin/getrpt?GAO-06-946 [hereinafter Integrity Management Benefits].

⁷⁷*Id.* at 3.

⁷⁸Pub. L. No. 109-468, § 24, 120 Stat. 3486, 3500 (2006). ♦