

## Oil, Gas, and Hazardous Liquid Pipelines Face Many New Safety Requirements

by Brad Raffle and Joseph R. Herbster

*On January 3, President Obama signed into law the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (a title strongly influenced by current political issues). This act, sponsored as H.R. 2845 by Representative Bill Shuster (R-Pa.), brings sweeping changes to the nation's pipeline safety law, imposing a variety of new design, construction, testing, operation, maintenance, and emergency response requirements for the nation's 2.3 million miles of pipelines for natural gas, petroleum, and hazardous liquids.*

The new law was among the few pieces of bipartisan legislation coming out of a highly divided Congress. Passage was due, in part, to gas pipeline disasters that killed 19 and hospitalized more than 100 people across the nation in 2010 and killed six people in 2011.

The law amends Title 49 of the U.S. Code, primarily in Chapter 601, and reauthorizes the Pipeline Safety Improvement Act of 2002 (PSIA) through fiscal year 2015, including funding for programs administered by the Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA). Highlights of the new law are presented below.

### **Higher Penalties**

PHMSA's administrative penalty authority was doubled to as high as \$200,000 per violation per day, up to a cap of \$2 million for a related series of violations such as a failure to accurately mark the location of pipeline facilities in the vicinity of a demolition, excavation, tunneling or construction project. The prior caps were \$100,000 and \$1 million. The new penalty caps will no longer apply in the case of judicial enforcement actions initiated by the Department of Justice. Also, PHMSA is given expanded authority to investigate accidents related to pipeline safety and may now seek penalties against any person who obstructs such an investigation, e.g., failure to make available for the Department of Transportation all records and information that in any way pertains to the accident being investigated.

In addition to enabling PHMSA to collect higher penalty levels, the new law authorizes PHMSA to collect design review fees and authorizes levels of PHMSA funding equal to 2010 levels with the expectation that

actual outlays will ultimately reach authorized levels, whereas historically they have been far below the levels authorized. Specifically, PHMSA will look to increase its full-time inspection and enforcement staff to 135 employees by September 30, 2014, which will trigger a provision allowing the agency to add an additional 10 full-time inspection and enforcement staff members, if needed.

### **State “One-Call” Programs to Prevent Pipeline Damage by Excavators**

The new law eliminates exemptions and strengthens the requirements that states must impose, as a condition to receiving grant funding, to ensure that all underground excavation entities, including government entities, participate in one-call programs to notify pipeline operators of planned excavation activities that could cause safety threats. Within two years, the Department of Transportation (DOT) must report its findings on a study to assess the need for stronger one-call requirements.

### **Automatic and Remote-Controlled Shutoff Valves and Excess Flow Valves**

Current law required the DOT to evaluate the feasibility of automatic or remote-controlled shut-off valves by 1998. The new law calls for new PHMSA regulations (if appropriate) within two years, requiring the use, where feasible, of automatic or remote-controlled shut-off valves for newly constructed or entirely replaced transmission pipeline facilities. Such valves typically cost between \$100,000 and \$500,000 per valve, depending on the size of the pipeline. Within two years, the law also requires formal PHMSA evaluation of the feasibility of excess flow valves for multifamily and small commercial facilities, based on recommendations from the National Transportation Safety Board.

A focused study is required concerning the ability of such technology to reduce hazardous liquid or gas pipeline release risks from existing pipeline segments that traverse High Consequence Areas (HCAs). HCAs, where current PHMSA regulations mandate pipeline “integrity management” requirements, are areas containing high population densities, water crossings that could affect commercial navigation or environmental resources sensitive to damage from hazardous liquid releases. The new law also calls for DOT to list all HCAs as part of its National Pipeline Mapping System, promote greater awareness of these maps among emergency responders and other interested parties, and provide greater access to the response plans that pipeline owners and operators must maintain under 49 C.F.R. Part 194.

### **Verification and Documentation of Maximum Allowable Operating Pressure**

The new law requires all operators of gas transmission pipelines to verify the maximum allowable operating pressure (MAOP) of their pipeline system components and report MAOP exceedances that result in the use of a pressure relief device within 5 days of the exceedance. Further, PHMSA must issue regulations that will require testing of previously untested natural gas transmission pipelines operating in HCAs at pressures greater than 30 percent of specific minimum yield strength.

### **Cover Over Buried Pipelines**

Based on reports that at least one major pipeline rupture may have stemmed from erosion of its soil cover by fast-moving water currents, the new law requires a study of this issue, with a report that may call for new regulations to address this risk in HCAs.

## Possible Expansion of Pipeline Integrity Management Requirements Beyond High Consequence Areas; Leak Detection Requirements

The newly enacted law requires PHMSA to evaluate whether integrity management requirements should be expanded to cover pipeline systems operating outside of HCAs. This evaluation is to include an assessment by the U.S. Comptroller General as to whether such an expansion of the integrity management requirements would mitigate the burden now facing natural gas pipeline companies to implement “class upgrade” or “class location” activities when development encroaches upon a previously isolated or remote pipeline corridor. The evaluation will also compare the effectiveness of risk-based re-evaluation intervals versus the current seven-year reassessment interval.

These aspects of the new law are closely linked to PHMSA’s Advance Notice of Proposed Rulemaking from August 2011, which invited comment on whether the agency should revise and strengthen integrity management requirements. See 76 Fed. Reg. 53086 (August 25, 2011). PHMSA has already suggested that it will either make more pipeline mileage subject to integrity management rules or it will strengthen and expand non-integrity management requirements. Further, PHMSA has hinted that new integrity management regulations will shift away from the performance-based approach that is common in health and safety regulations, instead requiring specific compliance measures such as periodic excavations and the use of certain pipeline risk analysis models.

In addition, the law requires PHMSA to submit a report to Congress within one year that describes leak detection systems utilized by operators of hazardous liquid pipeline facilities and transportation-related flow lines. PHMSA regulations to mandate new integrity management and leak detection systems are authorized by the new law, but House Republicans insisted upon and secured passage of statutory language that effectively requires Congressional input during the two- to three-year period before these regulations are adopted. Among the new issues pipeline operators will be expected to address in their integrity management programs are seismic risks.

## Cast Iron Gas Pipelines

Current law requires PHMSA to monitor the rate of industry progress in replacing and maintaining those segments of their pipeline systems made of cast iron. Cast iron is more vulnerable to corrosion and integrity loss. The new law adds teeth to this survey and tracking program and combines it with new information gathering authority for PHMSA.

## Accident Notification

The new law calls for PHMSA regulations requiring notification of PHMSA and the National Response Center no more than one hour after confirmed discovery of pipeline accidents or incidents, followed by descriptions of the incident and its effects within no more than 48 hours. Current regulations require that an incident is reported and revised descriptions are provided at “the earliest practicable moment following discovery,” but do not set an outer limitation on when such reports must be made.

## Expansion of PHMSA Authority to Additional Pipeline Categories

The law directs PHMSA to evaluate the need for new or enhanced regulation of pipelines carrying certain biofuels, carbon dioxide, diluted bitumen, onshore and offshore gas and hazardous liquid gathering lines, and non-petroleum hazardous liquids such as chlorine, when such liquids are piped by chemical manufacturers across land not owned by the manufacturer and to which the public has access. Significantly, the new law asks PHMSA to determine if offshore hazardous liquid gathering lines should be subjected to the

same requirements as onshore gathering lines. If so, PHMSA will go through a notice and comment rule-making for such regulations and would assume regulatory authority over a type of pipeline that was previously excluded from the agency's jurisdiction.

### Clean Water Act (CWA) Amendments

The new law amends the CWA to authorize DOT to supplant the U.S. Environmental Protection Agency as the agency authorized to require recordkeeping and inspections with respect to transportation-related onshore facility response plans.

### Practical Effects of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011

Aside from the significant changes the new law will make on pipeline safety compliance, there are several practical effects of this legislation for pipeline owners and operators. First, we expect that capital expenditures for new pipeline projects may be substantially higher as a result of the regulations that will be put in place pursuant to these amendments. Not only will new and replaced pipelines require additional safety equipment, such as automatic or remote-controlled shut-off valves, but risk analyses may become considerably more labor-intensive as a result of new integrity management regulations. Expenditures on existing infrastructure could be affected as well, as several categories of pipeline may become subjected to new or strengthened regulations.

Second, with new safety rules come new liability risks, not only from significantly increased administrative penalties, but also from the duties that those rules create from a tort liability perspective. Violation of a health and safety rule can be introduced as evidence of negligence in 32 states and constitutes *negligence per se* in 14 states.

Third, this legislation may have an impact on the hotly contested fate of the Keystone XL project. The enactment of more stringent pipeline safety rules could provide sufficient political cover for the current administration to approve the pipeline without appearing to acquiesce on issues of safety and environmental protection.

Considering the changing landscape of pipeline safety laws and the potential risks inherent in any such change, owners and operators must take increasing care in developing new pipeline projects or replacing existing facilities.

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If you have any questions about the content of this advisory, please contact the Pillsbury attorney with whom you regularly work, or the authors below.

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