# one hundred fourteenth congress Congress of the United States

House of Representatives COMMITTEE ON ENERGY AND COMMERCE 2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6115

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# MEMORANDUM

# February 29, 2016

# To: Subcommittee on Energy and Power Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

#### **Re:** Legislative Hearing to Examine Pipeline Safety Reauthorization

On <u>Tuesday, March 1, 2015, at 10:00 a.m. in room 2123 of the Rayburn House</u> <u>Office Building</u>, the Subcommittee on Energy and Power will hold a legislative hearing to "Examine Pipeline Safety Reauthorization." The hearing will focus on a discussion draft of reauthorization legislation entitled "The Pipeline Safety Act of 2016."

# I. BACKGROUND

The Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (Pipeline Safety Act) reauthorized and made a number of reforms to the Pipeline and Hazardous Materials Safety Administration's (PHMSA) pipeline safety program.<sup>1</sup> Current authorization for PHMSA's pipeline safety program expired on September 30, 2015.

PHMSA, an agency within the U.S. Department of Transportation (DOT) collects data on the nation's pipeline infrastructure in order to develop and implement Federal safety regulations. The agency provides oversight of more than 2.6 million miles of natural gas and hazardous liquid pipelines.<sup>2</sup> PHMSA administers the minimum pipeline safety standards, accident and safety reporting procedures, pipeline integrity management, data monitoring, leak detection, and

<sup>&</sup>lt;sup>1</sup> 49 U.S.C. §60101.

<sup>&</sup>lt;sup>2</sup> Pipeline and Hazardous Materials Safety Administration, *Annual Report Mileage Summary Statistics* (Jul. 1, 2015) (online at www.phmsa.dot.gov/pipeline/library/data-stats/annual-report-mileage-for-gas-distribution-systems).

emergency response plans. PHMSA also has some authority to regulate gas storage facilities under the Pipeline Safety Act.

The Pipeline Safety Act included 42 Congressional mandates of PHMSA with regard to the Federal pipeline safety program.<sup>3</sup> While PHMSA has fulfilled some of these mandates, 26 remain incomplete.

# II. PIPELINE INCIDENTS AND CONCERNS

A series of high-profile pipeline and storage incidents, coupled with an increase in the construction of new crude oil and natural gas pipelines, has revived concerns about the safety of the nation's pipelines and pipeline regulation by PHMSA.

# A. Los Angeles Aliso Canyon Natural Gas Storage Facility

In October 2015, the Aliso Canyon natural gas storage field in Los Angeles, California was discovered to be leaking substantial amounts of methane into the environment. The leak may be emitting between 40 and 64 tons of methane every hour, increasing California's methane emissions by a quarter. By the beginning of 2016, over 78,000 metric tons of methane had been estimated to have escaped into the atmosphere from the facility. Thousands of households were relocated as nearby residents reported adverse health impacts including nausea, nosebleeds, headaches, and vomiting. While it is likely those symptoms were related to chemical odorants intentionally added to the gas, reports indicated toxins such as hydrogen sulfide and benzene might also be present in the air.<sup>4</sup>

On February 11, 2016, the Southern California Gas Company, a subsidiary of Sempra Energy, which owns the facility, announced that it had temporarily plugged the leak and was in the process of permanently sealing the well.<sup>5</sup> According to press reports, the cause of the leak may have been a company practice wherein Southern California Gas Company had been using both narrow metal tubing and a steel casing surrounding the tubing to deliver larger volumes of gas. The outer casing, which would otherwise have served as a safety barrier in case of failure of the narrow tube, may have failed under high pressure, resulting in the subsequent release.<sup>6</sup>

*i.* <u>H.R. 4578, the Underground Gas Storage Safety Act</u>

<sup>3</sup> Pub. L. No. 112-90 (2012).

<sup>4</sup> 2016: California's 'Staggering' Leak Could Spew Methane for Months, Inside Climate News (Jan. 4, 2016).

<sup>5</sup> Energy Secretary: Porter Ranch Gas Leak Symptom Of Age, CBS News (Feb. 16, 2016) (online at losangeles.cbslocal.com/2016/02/16/energy-secretary-porter-ranch-gas-leak-symptom-of-age).

<sup>6</sup> Aliso Canyon Gas Operations Won't Resume Anytime Soon, Associated Press (Feb. 23, 2016) (online at ww2.kqed.org/news/2016/02/23/aliso-canyon-gas-operations-wont-resume-anytime-soon).

As a result of the Aliso Canyon situation, Rep. Brad Sherman (D-CA) — who lives in the Porter Ranch neighborhood most directly affected by the leak — introduced H.R. 4578, the "Underground Gas Storage Safety Act" which would bolster regulation of such underground facilities. H.R. 4578 would require the Secretary, in consultation with other Federal agencies to "prescribe strong minimum safety standards for underground gas storage facilities." The legislation would require operators to have comprehensive processes, procedures, plans, mitigation measures, periodic assessments and reassessments, and emergency plans in place to maintain the safety and integrity of underground gas storage facilities. It would also allow states to set more stringent standards for intrastate facilities and set interim standards for facilities based upon standards developed by the American Petroleum Institute.

The discussion draft, which is detailed further below in section III of this memo, would also address the regulation of underground gas storage facilities. The draft's provision regarding storage differs somewhat in its approach from H.R. 4578. For instance, the discussion draft does not provide for interim standards, is less prescriptive, and allows the Secretary two years (rather than 180 days) to promulgate standards.

#### B. Santa Barbara Plains All American Pipeline

On May 19, 2015, an estimated 101,000 gallons of crude oil spilled into the Pacific Ocean from a pipeline operated by Plains All American Pipeline, L.P. along the Santa Barbara County coastline.<sup>7</sup> The spill occurred after the onshore pipeline designated Line 901 ruptured. Line 901 is a 24-inch, 10.6 mile that transports crude oil between Las Flores Canyon and Gaviota, California.<sup>8</sup> PHMSA's preliminary findings show that the rupture occurred after Plains Pipeline's pumps were shut off and restarted, which sent high volumes of oil down the pipeline at high pressure.<sup>9</sup>

On June 25, 2015, the Committee sent a bipartisan letter to Plains Pipeline requesting documents on the company's maintenance and integrity operations.<sup>10</sup> Mechanical failures on the

<sup>7</sup> *California: Cleanup of Oil on Beaches Has Cost \$69 Million, Company Says*, The New York Times (Jun. 10, 2015) (online at www.nytimes.com/2015/06/11/us/california-cleanup-of-oil-on-beaches-has-cost-69-million-company-says.html?ref=topics).

<sup>8</sup> PHMSA, U.S. Department of Transportation Issues Corrective Action Order to Plains Pipeline, LP (May 22, 2015) (online at www.phmsa.dot.gov/pipeline/us-department-oftransportation-issues-corrective-action-order-to-plains-pipeline-lp).

<sup>9</sup> Corrosion Burst Santa Barbara Pipeline – Regulators, Environment and Energy Publishing: Greenwire (Feb. 18, 2016) (online at www.eenews.net/greenwire/stories/1060032570).

<sup>10</sup> House Committee on Energy and Commerce, *Letter from Chairman Upton and Ranking Member Pallone to Mr. Greg Armstrong, Chairman and CEO, Plains Pipeline, L.P.* (Jun. 25, 2015).

company's pipeline network have resulted in more than a dozen spills which have released nearly 2 million gallons of oil and other hazardous liquids in the U.S. and Canada over the past decade. This figure does not include the recent spill in Santa Barbara.<sup>11</sup>

# C. <u>Michigan Enbridge Oil Spill</u>

On July 26, 2010, 819,000 gallons of oil spilled near Marshall, Michigan, from Enbridge Energy Partners' Lakehead System. Enbridge experienced an abrupt drop in pressure on Line 6B on July 25, but did not discover the leak until the following day, after several emergency calls from members of the public.<sup>12</sup> The spilled oil entered the Talmadge Creek and flowed into the Kalamazoo River, a tributary to Lake Michigan.<sup>13</sup> The oil was carried 30 miles downstream and was ultimately contained approximately 80 river miles from Lake Michigan.

# D. <u>San Bruno Pacific Gas and Electric</u>

On September 9, 2010, a natural gas pipeline operated by Pacific Gas and Electric Company (PG&E) exploded in San Bruno, California in the suburbs of San Francisco. The explosion left a crater 167 feet long and 26 feet wide, and resulted in eight deaths and multiple injuries.<sup>14</sup> The blast and ensuing fire also destroyed 38 homes and damaged 70 homes.<sup>15</sup>

The 30-inch diameter pipeline was installed in 1956 and is designated Line 132. PG&E monitored Line 132 for corrosion through direct assessments, which involve indirect inspection combined with limited direct examination. PG&E did not employ advanced "smart pig" technology, which involves using an instrument laden device that moves through the interior of the pipeline. Many industry observers, including the Pipeline Safety Trust, a nonprofit organization that advocates for pipeline safety, are "pretty skeptical about direct assessment."<sup>16</sup> Despite this, PHMSA records show that 63 percent of the natural gas pipelines in the U.S. are inspected by direct assessment, and not "smart pig" technology, because the pipes are so old or twisted that a "smart pig" device is unable to move through the pipeline.<sup>17</sup>

<sup>13</sup> Environmental Protection Agency, *EPA's Response to the Enbridge Oil Spill* (online at www.epa.gov/enbridgespill/) (May 13, 2011).

<sup>14</sup> California Public Utilities Commission, *Report of the Independent Review Panel, San Bruno Explosion* (June 8, 2011).

<sup>15</sup> *Id*.

<sup>16</sup> San Bruno Pipeline test method seen as flawed, San Francisco Chronicle (Sept. 18. 2010).

<sup>17</sup> Most U.S. gas lines not inspected with latest technology, MSNBC.com (Sept. 14, 2010).

<sup>&</sup>lt;sup>11</sup> Owner of ruptured oil pipeline has history of big spills, fines, LA Times (Jun. 5, 2015) (online at www.latimes.com/local/california/la-me-oil-spill-plains-20150605-story.html#page=1).

<sup>&</sup>lt;sup>12</sup> Timeline of the Enbridge Oil Spill, The Michigan Messenger (Aug. 5, 2010).

On January 3, 2011, the National Transportation Safety Board (NTSB) released safety recommendations revealing that the ruptured area was not made of seamless API 5L Grade X42, as stated in PG&E records, but rather five sections of pipe including short pieces, called "pups," with various seam welds. The recommendations called upon PG&E to "[a]ggressively and diligently" search for all verifiable pipeline construction and testing records and use them to find valid maximum allowable operating pressure to avoid future incidents.<sup>18</sup>

On February 14, 2012, the City and County of San Francisco sued DOT in District Court for having "abjectly failed" to enforce federal gas pipeline safety standards for more than a decade prior to the deadly explosion of a PG&E gas transmission line in San Bruno…"<sup>19</sup> On July 30, 2015, the Ninth Circuit affirmed the District Court's dismissal of the suit as well as the ruling that the Pipeline Safety Act citizen suit provision does not authorize mandamus-type citizen suits against PHMSA. Since the ruling, safety advocates have pushed Congress to restore what they believe was Congress' intent to allow citizens to sue PHMSA to compel it to carry out its non-discretionary responsibilities under the Act (mandamus). Advocates argue that this is particularly important to all stakeholders given PHMSA's long record of failing to carry out its mandated responsibilities. To address this situation, the discussion draft contains language clarifying that the Act does, in fact, provide for mandamus-type suits.

# E. <u>Substandard Steel Used in Pipeline Construction</u>

Between 2007 and 2009, a number of pipe mills produced steel pipe for U.S. pipeline companies that failed to comply with the American Petroleum Institute Grade 5L X70 standard.<sup>20</sup> On May 21, 2009, the PHMSA issued Advisory Bulletin ABD-09-01, describing inconsistent chemical and mechanical properties leading to piping with as much as 15 percent lower yield strength than required. The bulletin advised pipeline owners and operators to review pipe specifications, prior test results, and documents to determine if their pipelines might be affected by this problem.<sup>21</sup>

<sup>19</sup> San Francisco City Attorney, *Herrera sues feds for failing to enforce gas pipeline safety standards before and after San Bruno blast* (Feb. 14, 2012) (online at http://www.naturalgaswatch.org/wp-content/uploads/2012/02/SF-PHMSA-complaint.pdf).

<sup>20</sup> Use of Substandard Steel by the U.S. Pipeline Industry, Plains Justice (Jun. 28, 2010) (online at http://plainsjustice.org/files/SubstandardSteelReport.pdf).

<sup>21</sup> Dept. of Transportation, Pipeline and Hazardous Material Safety Administration, *Advisory Bulletin ADB-09-01* (May 21, 2009) (online at

http://www.phmsa.dot.gov/portal/site/PHMSA/menuitem.ebdc7a8a7e39f2e55cf2031050248a0c/ ?vgnextoid=fb74e5b91c761210VgnVCM1000001ecb7898RCRD&vgnextchannel=8590d95c4d0 37110VgnVCM1000009ed07898RCRD&vgnextfmt=print).

<sup>&</sup>lt;sup>18</sup> National Transportation Safety Board, *Safety Recommendation P-10-2,3 and P-10-4* (Jan. 3, 2011).

PHMSA addressed this situation through an advisory, in part because it currently lacks a comprehensive emergency order authority to address imminent, industry-wide safety hazards. The Pipeline Safety Act does provide PHMSA with authority to issue a Corrective Action Order to a single operator; however, an emergency order would apply to all pipeline operators or systems that face a common imminent hazard. In meetings with committee staff, PHMSA has requested Congress provide the agency with emergency order authority to prohibit a dangerous practice or to address situations that result in unsafe conditions (use of the substandard pipe), practices, or activity in interstate pipeline transportation poses a threat to life or significant harm to property or the environment. Currently, there is nothing to address this in the discussion draft.

# III. SECTION BY SECTION DESCRIPTION OF THE DISCUSSION DRAFT

#### Section 1. Short title; References; Table of Contents.

The short title of the legislation is "The Pipeline Safety Act of 2016."

#### Section 2. Regulatory Updates.

Requires the Secretary of Transportation, not later than 120 days after enactment and every 90 days thereafter, to report to Congress on outstanding legislative mandates for which no interim or final rule has been issued. The Secretary's report is required to include, for each outstanding regulation, a description of the work plan, timeline for completing such mandated regulation, current staff allocations, relevant resource constraints, and any other details that affect the progress of the rulemaking process.

#### Section 3. Statutory Preference.

Requires PHMSA to complete the rulemaking process for regulations required by the Pipeline Safety Act of 2011 or any other law for which more than two years have passed since the statutory deadline before beginning any new rulemaking process. However, the section also provides an exception to allow the Administrator to begin a new rulemaking if the Secretary determines there is a significant need and notifies Congress of that determination.

#### Section 4. Integrity Management Review.

Requires GAO to report to Congress on integrity management programs for natural gas and liquid pipeline facilities within 18 months after PHMSA issues final rules for such programs pursuant to the Pipeline Safety Act of 2011.

#### Section 5. Technical Safety Standards Committees.

Changes current law to more readily provide for state pipeline regulators who are not public utility commissioners to serve on PHMSA's technical safety standards committees. The revised provision would require the Secretary to consult with "utility

regulators," in addition to a national organization representing state commissioners, when choosing participants for technical safety standards committees.

#### Section 6. Inspection Report Information.

Requires DOT (or the relevant state authority in the case of delegated authority) to conduct a post-inspection briefing with a pipeline operator Secretary not later than 30 days after the completion of a pipeline inspection. The language requires the briefing outline any concerns and, to the extent practicable, provide written findings of the inspection.

#### Section 7. Improving Damage Prevention Technology.

Directs the Secretary to study and report to Congress on methods to improve third-party damage prevention programs for pipeline facilities.

# Section 8. Direct Hire Authority for Pipeline and Hazardous Materials Safety Administration

This section contains the text of H.R. 3823, legislation introduced by Rep. Gene Green on October 23, 2015 to provide the PHMSA Administrator with direct hiring authority. Under the provision, the Administrator would have the authority to appoint qualified candidates to positions without regard to sections 3309 through 3319 of title 5 of the U.S. Code until December 31, 2019. This section also requires PHMSA to report to Congress on the use of the direct hire authority provided and its efforts to hire women, minorities, and veterans as inspectors.

# Section 9. Information-Sharing System.

Requires the Secretary to convene a working group to consider the development of a voluntary information-sharing system. The purpose of such a system would be to encourage collaborative efforts to improve inspection information feedback and sharing. The working group would be comprised of PHMSA, industry stakeholders, safety advocates, research institutions, state pipeline safety inspectors, and labor representatives.

#### Section 10. Nationwide Integrated Pipeline Safety Regulatory Database.

Directs DOT, within 18 months of enactment, to report to Congress on the feasibility of establishing a nationwide integrated pipeline safety regulatory inspection database to improve communication and collaboration between PHMSA and State pipeline regulators. Among other things, the report would include a description of efforts underway to test a secure information system for the database; a description of progress in establishing standards for "maintaining, collecting, and presenting pipeline safety regulatory inspection data"; and recommendations for how to implement a secure information-sharing system for the database.

# Section 11. Underground Gas Storage Facilities.

Requires the Secretary to issue minimum, uniform safety standards for the operation and integrity management of underground gas storage facilities (those storing natural gas, flammable gas, or toxic or corrosive gas) by no later than two years after the date of enactment. The provision defines "underground gas storage facility" as a gas pipeline facility that stores gas in an underground facility such as a depleted oil well or "a solution-mined salt cavern reservoir." The section also provides for user fees for the program established by the provision and allows for a state to "participate in the oversight" of the facilities.

# Section 12. Requirements for Certain Hazardous Liquid Pipeline Facilities.

Directs operators of onshore, underwater pipeline facilities located at depths greater than 150 feet below the surface to conduct internal inspections every year, and other types of integrity assessments on a risk-based schedule. Currently, hazardous liquid pipelines in high consequence areas are required to be inspected not less than once every five years. As drafted, it appears that this new requirement would apply to only a single pipeline at this time.

# Section 13. Response Plans.

Requires PHMSA and pipeline operators to ensure that emergency response plans include procedures and a list of resources for responding to a worst case discharge of oil, including when it may impact navigable waters or adjoining shorelines that may be covered in whole or in part by ice.

# Section 14. High Consequence Areas.

Directs the Secretary to consider the Great Lakes to be a USA ecological resource (as defined in section 195.6(b) of title 49, Code of Federal Regulations) for the purposes of determining whether a pipeline is in a high consequence area (as defined in section 195.450 of that title).

# Section 15. Actions by Private Persons.

Clarifies that a person may bring a civil action to compel PHMSA to perform a nondiscretionary regulatory duty.

# Section 16. Authorization of Appropriations.

Reauthorizes PHMSA's gas and hazardous liquid programs, One-Call Notification grants program, Emergency Response Grants, Community Pipeline Safety Information Grants, State Damage Prevention programs, and Pipeline Integrity programs. The provision also allows the Secretary discretionary authority to access user fees or other sources of funding if funding is not made expressly available for grants under section 60130.

#### **IV. WITNESSES**

The following witnesses have been invited to testify:

#### Panel One:

**The Honorable Marie Therese Dominguez** Administrator Pipeline and Hazardous Materials Safety Administration

#### Panel Two:

**Donald Santa** President and CEO Interstate Natural Gas Association of America

#### **Ron Bradley**

Vice President of Gas Operations PECO Energy (on behalf of the American Gas Association)

# **Andrew Black**

President and CEO Association of Oil Pipe Lines

#### Norman J. Saari

Commissioner Michigan Public Service Commission (on behalf of the National Association of Regulatory Utility Commissioners)

**Carl Weimer** Executive Director Pipeline Safety Trust