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TESTIMONY OF THE PIPELINE SAFETY TRUST

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Presented by:

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**FOR THE
SUBCOMMITTEE ON ENERGY AND POWER
OF THE
COMMITTEE ON ENERGY AND COMMERCE
UNITED STATES HOUSE OF REPRESENTATIVES**

**HEARING TO
EXAMINE PIPELINE SAFETY REAUTHORIZATION**

MARCH 1, 2016

Summary of Testimony

Today we would like to focus our testimony on the following issues that represent things that Congress can fix within the pipeline safety statutes

Lack of Emergency Order Authority

Needed Harmonization of Criminal Penalties - 49 USC § 60123

Needed Improvements in Spill Response Planning

Cost-Benefit Requirements - 49 USC § 60102

Actions of Private Persons - Title 49 USC § 60121

No Permit Required to Operate a Pipeline

Funding Pipeline Safety Information Grants to Communities - 49 USC § 60130

We also would like to speak to some concerns we have with some of the language in the **Securing America's Future Energy: Protecting our Infrastructure of Pipelines and Enhancing Safety Act** that the Senate has been considering

Section 6005 - Statutory Preference

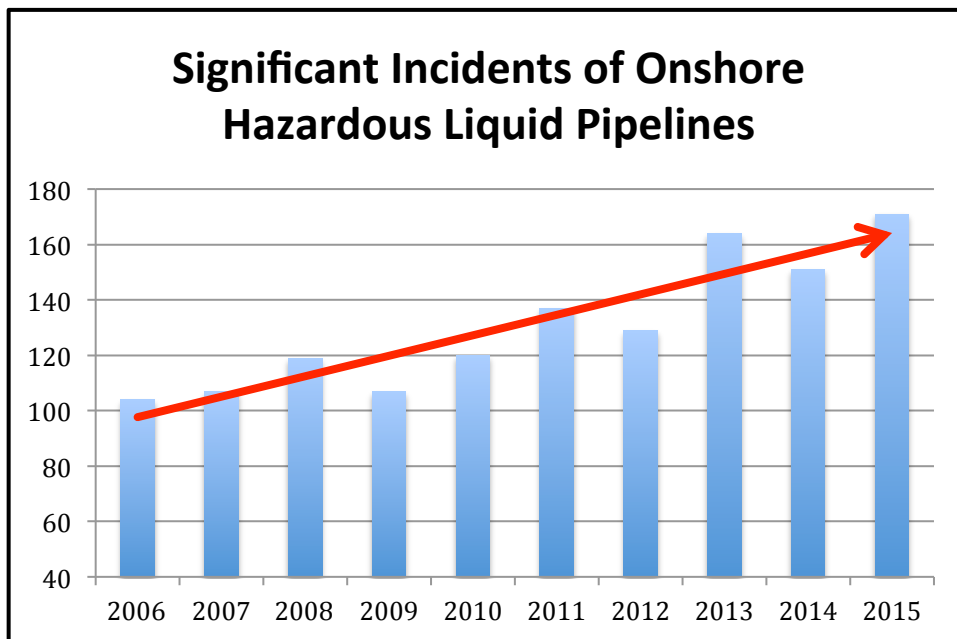
Section 6009 - Inspection Report Information

Section 6016 - Underground Natural Gas Storage Facilities

Section 6021 – Small Scale Liquefied Natural Gas Facilities

Good morning Chairman Whitfield, ranking member Rush, and members of the Committee. Thank you for inviting me to speak today on the important subject of pipeline safety. My name is Carl Weimer and I am the Executive Director of the Pipeline Safety Trust. I am also a member of the Pipeline and Hazardous Materials Safety Administration's (PHMSA) Technical Hazardous Liquid Pipeline Safety Standard Committee. I also serve on the Governor-appointed Washington State Citizens Committee on Pipeline Safety, and bring a local government perspective to these discussions as a three term elected member of the Whatcom County Council in Washington State.

The Pipeline Safety Trust came into being after a pipeline disaster that occurred nearly seventeen years ago - the 1999 Olympic Pipeline tragedy in Bellingham, Washington that left three young people dead, wiped out every living thing in a beautiful salmon stream, and caused millions of dollars of economic disruption. While prosecuting that incident the U.S. Justice Department was so aghast at the way the pipeline company had operated and maintained their pipeline, and equally aghast at the lack of oversight from federal regulators, that they asked the federal courts to set aside money from the settlement of that case to create the Pipeline Safety Trust as an independent national watchdog organization over both the industry and the regulators. We have been trying to fulfill that vision ever since, but the increase in the number of significant incidents over the past decade, driven primarily by releases from liquid pipelines from causes well within pipeline operators' control, makes us sometimes question whether our message is being heard.



PHMSA Significant Incident Data – 2/19/2016

Today I would like to dedicate my testimony in the memory of Peter Hayes. I met Mr. Hayes in 2010 shortly after a Chevron pipeline dumped oil into the Red Butte Creek drainage in Salt Lake City for the second time in a single year. Mr. Hayes was raising his family in a home that sat on the banks of Red Butte Creek and he was extremely concerned about the possible long-term health effects to the people in that area who were not evacuated immediately and experienced many different health symptoms associated with exposure to crude oil. He pushed hard for better emergency response, and for someone to follow up with a study to determine whether people so exposed would experience any long-term health problems. No one ever did such a study. In a tragic twist of fate Mr. Hayes came down with a rare lung disease that may in part be caused by exposure to environmental pollutants, and died last year. The need for studies on the health effects from exposure to oil spills has long been a void in our pipeline safety system, and was recently again called for by a National Academy of Science panel working on a study required by Congress. I will speak to that more in my testimony, and hope you will read the Op-ed attached at the end regarding Mr. Hayes to give you some context for why this is so important.

Last year as discussions regarding PHMSA's reauthorization began we told the House Energy and Commerce Committee:

“While we have many ideas for further ways to increase pipeline safety, perhaps a straight reauthorization of the current program this year would allow PHMSA to expand and train staffing as new levels of funding allow, finally produce all the rules and reports they have yet to produce, and address the long list of recommendations from the NTSB. We would support a quick straight reauthorization, as long as Congress remains actively involved in oversight to ensure the Administration is doing the things they have been charged with.”

We still believe that a relatively quick and simple reauthorization without a huge new load on mandates on PHMSA is preferable, but as others have suggested ideas for reauthorization we would like to provide you with some of our thoughts as well.

Often in these hearings on reauthorization or oversight the focus is on how PHMSA has failed to implement various mandates, moved too slowly on regulatory initiatives, not provided information to the public in a timely manner, or even lacks the will to make the pipelines safer. While we agree that those things are all important and fair game at such hearings, and you have heard many of those complaints from us in the past, today we would like to focus our testimony on how the pipeline safety system that Congress has created also has much to do with PHMSA's inability to get things done. PHMSA can only implement rules

that Congress authorizes them to enact, and there are many things in the statutes that could be changed to remove unnecessary barriers to more effective and efficient pipeline safety. The pipeline safety statutes are the responsibility of Congress, and today we will speak to issues where Congress needs to change things if there is a real desire to improve pipeline safety.

Lack of Emergency Order Authority

If after incidents or through inspections PHMSA finds a significant problem that cannot be remedied through the existing rules it can order an individual pipeline operator to immediately change their operation, but under the current rules PHMSA has no authority to issue such emergency orders industry-wide if the situation has the potential to cause significant harm from more than a single operator. Recent pipeline failures, such as the 2010 San Bruno tragedy, have highlighted this problem since during that investigation it became clear that potentially a significant portion of the entire industry had not been implementing necessary safety procedures. Currently all PHMSA can do in such situations is issue non-binding “advisories”, hope the industry pays attention, and then go through a multi-year rulemaking process to correct the problem. Other transportation administrations, such as the Federal Railroad Administration, do have authority to quickly issue emergency orders to correct potentially deadly situations as evidenced by **Title 49 USC § 20104. Emergency authority**. We ask that you put into this reauthorization bill a similar provision for PHMSA so they have the ability to rapidly address critical industry-wide safety issues.

Needed Harmonization of Criminal Penalties - 49 USC § 60123

Fortunately it is very rare that a pipeline operator violates the regulations in a way that would be considered criminal. Our organization, the Pipeline Safety Trust, was born from one of those rare incidents where an operator’s actions were proven to be so reckless as to kill members of the public and do uncounted environmental harm. In that case the U.S. Justice Department under President Bush did an outstanding job prosecuting that case, fining the company, and actually getting jail time for company employees. There have only been a handful of other incidents caused by such reckless behavior from pipeline companies since that case 16 years ago, but it is important not to create barriers that make it difficult to hold companies accountable when they knowingly or recklessly ignore the laws meant to keep people safe. The current statute that applies to pipeline safety - **Title 49 USC § 60123. Criminal Penalties** – sets an unusually high bar for holding companies accountable for criminal behavior. We ask that you align the pipeline safety rules under PHMSA with the Hazmat rules under PHMSA and change 60123 to adopt the “willfully or recklessly” language from the Hazmat statute in **Title 49 USC § 5124. Criminal Penalties**.

Needed Improvements in Spill Response Planning

Based on a congressional mandate the National Academy of Sciences (NAS) recently completed a study entitled **Spills of Diluted Bitumen from Pipelines: A Comparative Study of Environmental Fate, Effects, and Response**. In that study NAS noted some serious issues with the way that PHMSA reviews spill response plans and the required content of these important plans. For instance the study notes this significant shortcoming of how PHMSA reviews these spill plans compared to other agencies that review spill plans:

“At PHMSA, the review of plans is focused on completeness, using the Part 194 regulations as a checklist to ensure that all necessary components are present. Assuming the plan is complete, PHMSA’s long-standing position is that it is legally obligated to approve the plan, and that it has no discretion to evaluate its likely adequacy and effectiveness or to recommend improvements. By contrast, USEPA and USCG review plans in two stages, the first focusing on completeness and the second on adequacy.”¹

The study also found that different companies use different terminology for naming the fuels moving through their pipelines, and there was no requirement that specific Safety Data Sheets be included in the spill response plans

“In addition to the response plan itself, the Safety Data Sheet (SDS) submitted by the pipeline operator is potentially a vehicle for identifying the type of crude oil and its properties. In conjunction with the plan and other information sources, a detailed SDS containing the pertinent information would assist responders setting near-term priorities directly following a spill of diluted bitumen. It would also assist the public in understanding the nature and consequences of the spill. The Part 194 regulations recommend but do not require that response plans include SDSs for the crude oil being transported by the pipeline section.”²

These noted shortcomings put the public, emergency responders, and pipeline company employees at risk when responding to spills.

After the nearly one-million-gallon spill into the Kalamazoo River in Michigan in 2010 the National

¹ National Academy of Sciences, Spills of Diluted Bitumen from Pipelines: A Comparative Study of Environmental Fate, Effects, and Response, page 90

² National Academy of Sciences, Spills of Diluted Bitumen from Pipelines: A Comparative Study of Environmental Fate, Effects, and Response, page 92.

Transportation Safety Board recommended that the Secretary:

Audit the Pipeline and Hazardous Materials Safety Administration’s onshore pipeline facility response plan program’s business practices, including reviews of response plans and drill programs, and take appropriate action to correct deficiencies.³

Allocate sufficient resources as necessary to ensure that the Pipeline and Hazardous Materials Safety Administration’s onshore pipeline facility response plan program meets all of the requirements of the Oil Pollution Act of 1990.⁴

That audit has been underway in the Secretary’s Office for years now, but has still not been released. So we ask that as part of this reauthorization you direct PHMSA by a date certain to review and improve their regulations on spill response planning contained in Part 194, make necessary changes as noted by the NAS study, and at a minimum require:

- plans to be reviewed for adequacy and effectiveness
- language that makes it clear that specific Safety Data Sheets need to be included for each different type of oil carried
- language that makes it clear that plans need to identify all of the different types of transported crude oils using specific industry standard names

Spill response planning also brings up the need to clearly understand and address the human health effects of spills. The NAS study listed as a research need “Ecological and human health risks.” In many fairly recent pipeline failures, such as the Enbridge spill into the Kalamazoo River, the Chevron spill in Salt Lake City, and the Exxon Mobil spills into the Yellowstone River and in Mayflower Arkansas, people, and particularly children, experience a range of similar immediate health issues, some of them quite acute. This leaves the public wondering whether they were evacuated adequately and what the future long-term health effects of such exposures to a wide range of possibly toxic chemicals might be. The story I started my testimony off with regarding Peter Hayes who was exposed to chemicals during a pipeline spill in Salt Lake City, and then later developed and died of a rare lung disease helps bring this public concern home.

At the recent Aliso Canyon natural gas leak it was reported that ***“people from 600 households near the leak at the Aliso Canyon gas storage unit reported headaches, nosebleeds, nausea and other symptoms to***

³ http://www.nts.gov/_layouts/nts.recsearch/Recommendation.aspx?Rec=P-12-001

⁴ http://www.nts.gov/_layouts/nts.recsearch/Recommendation.aspx?Rec=P-12-002

county officials." That same article⁵ went on to report:

"We're dealing with a gap in the science," said [Michael Jerrett](#), professor and chairman of the Department of Environmental Health Sciences at the University of California, Los Angeles. "We just don't have a very good scientific understanding of what that means for long-term health effects."

In my own experience as an elected official serving on our Local Emergency Planning Committee and attending various tabletop emergency exercises I have often asked what is the threshold for particular chemicals that we use to inform the need to evacuate, and who has that monitoring equipment and how soon is it deployed? When I ask these questions the lack of answers confirms what we have heard nationally – no one really knows what the critical chemical thresholds are, and often equipment to monitor for chemical exposure at appropriate low levels is not available soon enough to make a difference.

If you are interested in more information about the lack of federal exposure guidelines, long-term health studies, and how this translated into confusion at a particular pipeline oil spill, we suggest you read the article **What Sickens People in Oil Spills, and How Badly, Is Anybody's Guess**⁶ by the Pulitzer Prize winning news organization InsideClimate News.

For these reason we ask that as part of this reauthorization you direct PHMSA to undertake another study with the National Academy of Sciences to better understand the potential long term health effects from pipeline failures, and provide recommendations for threshold levels that should inform evacuation decisions and necessary equipment to measure such thresholds as part of spill response plans.

Cost-Benefit Requirements Under 49 USC § 60102

The 5 years between 2010 and 2015 found us too often examining the failures that led to major pipeline incidents: Marshall, Michigan; San Bruno, California; Allentown, Pennsylvania; Sissonville, West Virginia; Harlem, New York; Mayflower, Arkansas; two spills into the Yellowstone River, and too many more. Against that backdrop of incidents and Congressional directives, NTSB and GAO recommendations, those five years also provided a perfect example of a broken regulatory process that left PHMSA incapable of producing a

⁵ **What Will Be the Health Impact of 100+ Days of Exposure to California's Methane Leak?**

<http://insideclimatenews.org/news/17022016/health-impacts-aliso-canyon-porter-ranch-methane-leak-california-social-gas>

⁶ <http://insideclimatenews.org/news/20130618/what-sickens-people-oil-spills-and-how-badly-anybodys-guess>

single major new safety rule. The reasons for the process not working are numerous. Among them:

- 1) information needed to produce new rules under the current cost benefit requirements is predominantly controlled by pipeline operators who are reluctant to agree to new reporting requirements that are necessary for PHMSA to meet cost benefit requirements to strengthen its rules - that is, if PHMSA can't find out where there are problems or how big they are, they can't make rules to fix them;
- 2) too few staff for PHMSA to undertake investigations and studies that might provide the agency additional information to quantify the potential costs and benefits;
- 3) a costly, duplicative, and unnecessary cost benefit analysis process; and
- 4) delays from the Secretary's Office and OMB that are beyond PHMSA's control

Some of those issues are being ameliorated by recent increases in PHMSA staffing levels, and we're hopeful those new staffers will allow PHMSA to more efficiently move rules forward. The duplicative and procedural hurdles are a different question, but they are something that Congress can do away with in this reauthorization.

In 1996, a concerted Congressional effort was made to insert cost-benefit analysis requirements into rulemaking requirements under a whole host of environmental protection and health statutes, presumably as a way to codify the requirements for regulatory cost benefit analyses put in place by Presidents Reagan and Clinton in Executive Orders. While those Congressional efforts ultimately fell short of wide spread success, the 1996 reauthorization of the pipeline safety program represents the only health and safety or environmental protection statute to contain an explicit directive to an administrative agency to base regulation of risk on a cost-benefit test.

PHMSA rulemaking is therefore subject to two sets of cost-benefit requirements - one under the Pipeline Safety Act and one under the Executive Order that requires an economic analysis of every major rule reviewed by OMB before being published as a proposed rule and subject to comment. We urge you to put PHMSA's rulemaking on an even playing field with all other agencies by amending 49 USC § 60102 to eliminate references to the risk assessment/cost-benefit analysis in §60102(b)(2)(D) and (E); §60102(b)(3), (4), (5) and (6). PHMSA would remain subject to the requirements of the Executive Orders requiring a cost benefit analysis of major rules proposed by any agency, and the requirements for transparency in rulemaking provided by the existing statute and procedures.

A clear example of problems excessive cost benefit analysis can cause can be seen in the lack of regulation of rural natural gas gathering lines. According to a briefing paper from PHMSA⁷ they estimate that there are 230,000 miles of such gathering lines in the country, with over 210,000 miles of these gathering lines falling outside of any federal or state pipeline safety regulation. Many of these lines are the same size and pressure as transmission pipelines, so pose the same risk. The regulation of these lines has been one of our top priorities for years now, and it is now one of the state regulator's top priorities also. In 2010 the state regulators passed a resolution⁸ that says in part:

WHEREAS: In the newer gas gathering systems, it is not uncommon to find rural gas gathering pipelines up to 30" in diameter and operating at a MAOP of 1480 psi.

NOW THEREFORE BE IT RESOLVED: That NAPSUR urge PHMSA to modify 49 CFR Sections 192.8 and 192.9 to establish regulatory requirements for gathering lines in Class 1 areas:

Since these 210,000 miles of pipelines are unregulated no one collects any information about their location, construction, size, pressure, risks, failure incidents, etc. Since no one collects any information it is nearly impossible for PHMSA to pass regulations because how can they quantify the required costs or benefits? Knowing full well that the industry will challenge any such regulation PHMSA finds itself in a no win situation based on cost benefit requirements that effectively make it impossible to move forward on needed rules without first going through years of information collection, (which will also be opposed by industry), to be able to complete a cost benefit analysis.

Actions of Private Persons - Title 49 USC § 60121

After the PG&E pipeline failure and explosion in San Bruno California in 2010, as the systemic issues with PG&E's pipeline system and the questionable regulatory history of the California Public Utility Commission became better known, the City and County of San Francisco became concerned about the safety of the PG&E lines under its own streets. They sought the help of the federal courts to require PHMSA to reject the State of California's certification that its natural gas regulatory system was sufficient under the Pipeline Safety Act to take responsibility for regulating the safety of intrastate natural gas lines. Unfortunately, the courts decided that the statutory language in 49 USC 60121(a)(1) that allows for an individual to seek an injunction against another person, including the United States, did not allow an individual to seek an

⁷ PHMSA Briefing Paper, Onshore Gas Gathering, Technical Pipeline Safety Standards Committee Meeting, March 2011

⁸ <http://www.napsr.org/SiteAssets/NAPSUR-Resolutions-Open/201002%20Gas%20gathering%20line%20class%201%20Resolution.pdf>

injunction against the United States *in its role as regulator*. The court instead relied on similar language in the Endangered Species Act previously interpreted by the Supreme Court in holding that the statute did not provide a basis for the City's claim. The court's analogy to the Endangered Species Act and its interpretations failed to give meaning to the Congressional language of the PSA authorizing injunctive relief against the US in the pipeline safety context, *where its only role is that of regulator*, and not an operator or permit applicant. The courts' interpretation rendered that provision of the PSA meaningless. We are very happy to see that this Committee has language in the discussion draft of the Pipeline Safety Act of 2016 that will restore what we believe to have been Congress' original intent: to make abundantly clear that when the federal regulators fail to fulfill a duty imposed under the PSA, the courts may enforce those duties by issuing injunctions against the United States. We hope you will work with other committees and the Senate to ensure such language is included in the bill that is eventually agreed upon and passed.

No Permit Required to Operate a Pipeline

Under the current statutes there is no requirement that a pipeline company obtain any permit or permission to operate a pipeline in this country. The public finds this hard to understand since we all need a permit to operate our cars, and many of us need permits and government inspections to replace a hot water tank, or build a deck on the back of our homes. How can it be that someone can operate a huge pipeline, carrying tons of potentially explosive materials, across multiple states, and not have to obtain some sort of permit for its operation? The benefit of requiring PHMSA to issue permits to operate transmission pipelines is that would provide the agency another tool to ensure the safety of those pipelines, and a regular review interval for such permits would force the agency to ensure that the company is still following all necessary rules. Permits could also provide the public, local governments, and academics their only real opportunity to review and comment on the companies' safety operations, which may help provide important local information and new ideas, and should ultimately improve pipeline safety.

Funding Pipeline Safety Information Grants to Communities - 49 USC § 60130

In 2002 Congress established a Community Technical Assistance Grant program to ensure better education and involvement of the communities by helping to provide **“technical assistance to local communities and groups of individuals relating to the safety of pipeline facilities in local communities.”** This relatively small grant program has allowed local government to obtain and implement GIS data so their departments better understand where pipelines are, implement programs to better prepare emergency personnel to respond to releases of fuels, and examine ways they can use their planning and zoning authority to increase the safety of people and pipelines. It has allowed small utilities to better train their personnel and utilize new

leak detection equipment. It has helped fund the development of important new pipeline protection programs such as the marine pipeline location and education program in Louisiana to ensure better awareness of underwater pipelines by the shipping industry. And it has allowed communities that have experienced pipeline failures and contentious pipeline issues, such as Salt Lake City, Fort Worth, San Bruno and Contra Costa County , CA to bring their citizens together to better understand the pipeline safety system that exists, an accurate view of the risks posed, and ways that citizen can make pipelines even safer.

Here are just a few examples of some of the 160+ grants that have been awarded under this program:

Michigan FY 2014 – Miss Dig System received grant to produce information about the importance of using the One Call System and follow up survey to test effectiveness.

Kentucky FY 2014 – City of Olive Hill received grant to purchase a remote gas leak detector, provide GIS mapping of pipelines, and provide educational outreach to schools and senior centers to increase public safety

Texas FY 2015 - Permian Basin Regional Planning Commission received grant to address the public safety and economic resiliency challenges associated with rapid economic growth due to oil and gas drilling and a growing pipeline infrastructure

Tennessee FY 2014 – Oak Ridge Utility District received grant to develop a system whereby it can notify its customers of safety related issues via email or mobile devices in case of emergencies.

We were happy to see the commitment to this program in the funding authorization in the bill the Senate has been working on, and we ask you will support this grant program also. For reasons that still have not been explained, in the rush to pass a budget in December the appropriations for this program were lost. We hope you will do all you can to make sure that the program is not only authorized, but also actually funded through necessary appropriations.

Concerns we have with the Senate’s **Securing America’s Future Energy: Protecting our Infrastructure of Pipelines and Enhancing Safety Act**

Section 6005 - Statutory Preference

Under sections 6003 and 6005 of the bill being considered in the Senate, PHMSA is required to report on a regular basis the status of their rulemaking efforts, and to prioritize their efforts on mandated and rules

currently in progress over starting new rulemakings. We certainly support the reporting requirements to hold PHMSA accountable and to make clear to the public and Congress the status of various rulemaking efforts. We do have concerns that the prioritization language in Section 6005 may further delay long-identified needed rules, or needed new rules that may be identified through investigations or incidents. The National Transportation Safety Board, the National Academy of Sciences, and PHMSA themselves have identified many needed rules. Even in the current rulemaking on hazardous liquid pipelines PHMSA has identified a number of important initiatives regarding the identification of High Consequence Areas, leak detection, valve placement, automated valves, and integrity verification that have not been addressed in the current proposed rule, but have been put off to “future” rulemakings. We would hate to see new rules on these issues delayed even further because of such prioritization language, or some mistaken interpretation of the language. We ask that you make it clear that such prioritization language does not further delay long talked about and needed rules from progressing.

Section 6009 - Inspection Report Information

We support the goal of this section, which is to provide some timely feedback and certainty to operators regarding recent inspections. It is unclear to us whether the 30-day requirement is adequate for producing the final inspection report, or whether that needs a slightly longer time period – say 60 or 90 days. Clearly one way this section can be improved would be a requirement that all such final inspection reports be made publicly available on PHMSA’s enforcement website. The National Energy Board of Canada and the Washington Utilities and Transportation Commission recently began to post all such inspection reports to their public websites to increase the transparency and public understanding of their efforts. The vast majority of such reports find little or nothing wrong with a pipeline and posting the reports is a great way to help the public better understand the inspection process and gain trust in the inspection system.

Section 6016 - Underground Natural Gas Storage Facilities

The Aliso Canyon natural gas storage disaster has finally made clear the need for minimum standards for the underground storage of gas. Such standards have been requested for decades, and in 2010 the state pipeline regulators through their National Association of Pipeline Safety Representatives passed a resolution to urge PHMSA to:

“Develop regulations and policies to address the assessment of the integrity of existing wellbores used for the purposes of storing natural gas or hazardous liquids; the safe operations and construction of natural gas and hazardous liquid storage wellbores; and the safe operation of the geologic formations used for gas and hazardous liquid storage.”

We are happy to see the Senate and now the House considering ways to ensure that finally such minimum standards get adopted. While the language in the Senate bill is a good first start we think there are ways to improve upon it to ensure we get truly the best regulations after having to wait so long. Here are the steps we hope you will adopt:

- Give PHMSA the authority to adopt emergency temporary standards as soon as possible (as we previously pointed out the need for Emergency Order authority) that include the provisions spelled out in their February Advisory Bulletin ADB-2016-02⁹, and the recently created API storage recommended practices, API RP 1170 and API RP 1171, along with other standards determined appropriate by the Secretary.
- Direct PHMSA by a date certain to prescribe regular minimum standards for underground storage facilities through their typical rulemaking process so as to ensure the possible inclusion of ideas from state regulators, academics and the public along with those of the industry. In developing such standards, PHMSA shall look beyond current "consensus standards" by conducting its own independent analysis of risks, and risk control options, and include a full range of stakeholders in reviewing that analysis.
- Add in the statute a definition that makes clear that any storage facility that falls wholly within the borders of a single state is considered an **intrastate** facility, and that a state authority may adopt additional or more stringent regulations for such facilities.

We would like to stress that while the API standards may be a good starting point, there are important things they do not include, so a PHMSA led analysis, and a regular rulemaking that allows a range of stakeholders to provide additional suggestions is very important. Even the API makes this point when in the section discussing the scope of the API 1171 Recommended Practice they state:

“The contents of this Recommended Practice are not all inclusive, or intended to replace the utilization of detailed information found in textbooks, manuals, technical papers, or other documents. This document is intended to supplement, but not replace, applicable local, state, and federal regulations.”¹⁰

⁹ <https://federalregister.gov/a/2016-02228>

¹⁰ API Recommended Practice 1171, First edition, September 2015, Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs, Page 1

If you need good language that includes most everything we believe needs to be included in underground storage regulations we suggest you start with H.R. 4578 recently introduced by California Representative Sherman.

Section 6021 – Small Scale Liquefied Natural Gas Facilities

We support the adoption of minimum safety standards for permanent small scale liquefied natural gas facilities. Such facilities can provide an alternative fuel for the shipping and trucking industries with many benefits including reduced emissions, costs, and noise. While we support the proposed regulations and the growth in this industry the wording in the Senate bill leaves many questions. In particular the definition of Small Scale Liquefied Natural Gas Facility is imprecise and leaves too much up to interpretation. At a minimum the definition needs to be modified to include a phrase such as “is not a facility under the jurisdiction of the Federal Energy Regulatory Commission.”

Because of the nature of the product the larger LNG import and export facilities fall under a regulatory system that includes many fairly prescriptive rules meant to ensure the safety of surrounding communities. The language in the Senate bill seems to push a risk-based regulatory system built upon industry-developed standards and best practices. We ask that any authorization for PHMSA to move forward on new rules for these facilities requires the agency to equally weigh the failures that have been caused by operators who do not properly assess the risks to their pipelines, the difficulties in enforcing risk-based systems, and the wisdom of allowing the regulated industry to draft their own regulations.

We make this request for good reason. Two liquid pipeline incidents in the past few years exemplify major failings of the industry-dominated risk-based rulemaking process followed by PHMSA under the existing statutory dictates. In both instances, an operator failed to identify or mitigate for a particular risk or threat to its pipeline, and those risks ultimately manifested in ruptures of their lines - one spilled 1500 barrels of oil into Montana's iconic Yellowstone River, and one spilled 5,000 barrels of dilbit into a Mayflower, Arkansas subdivision, sickening residents and threatening the quality of a large heavily used lake and wildlife refuge. In each case, ExxonMobil argued in PHMSA enforcement proceedings that its integrity management and operational plans were in compliance with PHMSA's risk-based minimum federal pipeline safety regulations, so the fact that there had been a spill could not be held against them.

The horror of this scenario is twofold: First, that the regulations encourage operators to believe that failures of this size do not necessarily mean that an enforceable pipeline safety violation has occurred. The risk-based regulations, often based on industry-developed standards, completely fail to establish a

measurable standard for sufficiency of an integrity management plan or its implementation, creating a regulatory environment that is so ambiguous as to be nearly unenforceable. The regulations don't say "Take all necessary measures" to prevent a pipeline failure, they just say "take measures." It's as if rather than establishing a speed limit of 60 miles per hour, PHMSA's rules merely caution operators to do the best they can to drive safely.

And the second horror, following from the first, is that in certain circumstances, ExxonMobil's belief may be right. Without a rulemaking process that allows the creation of clear standards for integrity management plans through an open non industry-controlled process, and without any regulatory approval process for those plans, the existing system relies upon the discretion of operators to make the right choices, to take *enough* measures to protect public safety and the environment. Recent incident history suggests that reliance is too often misplaced.

Thank you again for this opportunity to provide this testimony. The Pipeline Safety Trust hopes that you will closely consider the concerns we have raised and the requests we have made. If you have any questions now or at anytime in the future, we would be pleased to answer them.

Op-ed: He fought Red Butte spill with all he had, and then he died

Dr. Brian Moench

First Published Oct 02 2015 05:30AM

<http://www.sltrib.com/opinion/3010259-155/op-ed-he-fought-red-butte-spill>

Most Salt Lake City residents probably no longer think much about the 2010 oil spill that shockingly filled Liberty Park with oil. I will never be one of them.

I just attended the funeral of a friend and wonderful school teacher who had made a lasting impression on my own children and hundreds of others. As their science and biology teacher, he was a model for his profession. Many years after they had graduated from his classroom, he still remembered my children in detail and asked how they were doing in their higher education, in their careers, and in life. I wish I could say that he died of old age. He didn't. He died a relatively young man, still in the prime of life, of a rare disease which occurs in only about one in 5,000 people — Idiopathic Pulmonary Fibrosis.

IPF is a fancy term for severe scarring of the lungs that usually shortens a person's life, often being fatal within a few years or even months. "Idiopathic" means the cause is unknown. A long list of exposures and conditions can lead to pulmonary fibrosis, or are associated with it. The National Institute of Health and Mayo Clinic state workplace toxins, environmental pollutants, dust, and smoking increase the risk of IPF. Injury to the lungs can lead to the body's overreacting to the injury, eventually leading to scarring. In my friend's case, he was in excellent health, vigorously active in many outdoor activities, with no risk factors for IPF until June 12, 2010 — an event that dominated the last few years of his life.

He lived on Red Butte Creek, and his family was one of the most exposed to the vaporized toxins of the spilled oil. He told me with emotions boiling over how his teenage son was rendered temporarily comatose and blind and taken to the hospital. For weeks, and likely months, benzene and other toxic VOCs filled the air in his house and backyard at levels that were well beyond workplace OSHA standards.

Shortly after the Red Butte spill, an important study was published in one of the most highly respected medical journals, demonstrating that oil spill workers exposed for as little as four hours a day for two weeks, showed evidence of persistent adverse health impacts. Two years after participating in clean-up of the Prestige oil spill off the coast of Spain, exposed fishermen still showed increased rates of respiratory symptoms, and elevated markers of lung damage, suggesting permanent airway injury. They had more chromosomal abnormalities, the kind often examined in environmental studies as an early indicator of increased cancer risk. The authors concluded exposure to oil sediments, even for short periods, can have lasting health consequences.

My friend became perhaps the most motivated, knowledgeable and energetic citizen in working to hold accountable both Chevron and those government officials who brokered an ultimate settlement. Those of us involved in the effort admired his persistence and determination that Chevron not be allowed to continue risking another spill. When the second Chevron spill occurred, his concerns were obviously validated. When we learned that city and state officials allowed Chevron to avoid paying for a health study of the people exposed to the spill, he and I shared dozens of e-mails and conversations venting our frustrations that Chevron had been let off the hook.

In January 2013, he e-mailed me his chest x-rays and the startling news that he had been diagnosed with terminal IPF. The tragic irony began to sink in, that the person who worked the hardest to get appropriate health care and follow up for Red Butte residents may have become its first casualty. Like many of the victims of various types of pollution, cause and effect in individual patients often can't be firmly established. But the only risk factor in his history was inhalation of vaporized oil sediments, and for a longer period of time than what has been demonstrated to result in permanent lung injury in others.

I usually deal in statistics and the abstract in discussing the pollution and public health consequences of dirty energy. Now, for me and hundreds of others, those statistics have forever become engraved with the face of a beloved teacher, Peter Hayes.

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