

DOT RESPONSES TO U.S. PIPELINE EXPLOSION CONCERNS

Baltimore: People Are Still Getting Killed (DOT staff names redacted)

Mon, Aug 10, 2020 9:30 pm

Robert A Leishear, Ph.D, P.E., PMP leishear@aol.com

To ...@dot.gov, ...@dot.gov, ...@dot.gov

Explosions like the one in Baltimore can be stopped along with resultant death. I have completed some research on the San Bruno and Carlsbad explosions, but some additional modeling is needed to present a convincing publication. I am certain that all of the facts and the mathematics fit together to explain the complex physics of pipeline explosions, but computer models will present specifics and visualizations to convince others. Convincing others is essential to save lives. I expect to publish next year.

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From: Robert A Leishear, Ph.D, P.E. [<mailto:leishear@aol.com>]

Sent: Friday, June 07, 2019 5:27 PM

To: (PHMSA) <...@dot.gov>; (PHMSA) <...@dot.gov>; ... (PHMSA) <...@dot.gov>

Subject: PHMSA Acceptance of Pipeline Explosions and Deaths

Waiting until PHMSA gets around to action will result in continuing deaths. I spent the day yesterday visiting my Congressman and Congressional staff members in Washington, D.C. to discuss pipeline fatalities and environmental damages, along with other piping explosions and multi-billion dollar piping damages. Rather than wait for PHMSA processes, I have decided to include some gas pipeline research in a DOE proposal to investigate similar explosions in nuclear power plants. If DOE support is provided, explosions research and corrective actions can start before the end of this year. Congressional endorsements were offered to support my research, which will follow my proposal submission to DOE. Even though I find your decision to let people die to be a fatal mistake, I endorsed future PHMSA funding in all Congressional meetings, where I believe that PHMSA is essential to pipeline safety, albeit wrong on this national emergency safety issue.

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In a message dated 5/28/2019 3:14:19 PM Eastern Standard Time, leishear@aol.com writes:

We disagree. There was much discussion that can be shortened as follows.

- Pipeline explosions and deaths can be stopped, using recent technology discussed in the attached emails.
- Fatalities and pipeline ruptures have been incorrectly evaluated by PHMSA in past reports.
- PHMSA does not believe that my white paper meets requirements.
- I believe that my white paper met all requirements.
- Contract awards are complete, and the decision is irreversible.
- I was encouraged to join a year long process to correct this emergency situation, where I may engage in that process.
- Fatalities are acceptable until proposed research is considered at some unknown later date.
- I voluntarily spent three years and more than \$100,000 to prove conclusions with respect to piping ruptures and industrial explosions.
- Government agencies, including PHMSA, provide no funding to support this research to save lives.

Thanks for your time.

Robert A. Leishear, Ph.D., P.E.

In a message dated 5/25/2019 8:51:04 PM Eastern Standard Time, leishear@aol.com writes:

Loss of life is secondary to bureaucratic processes. The PHMSA decision suggests that this national emergency situation be considered at some unknown later date, where years are required to change ASME Standards, and ASME implementation may never be adequate. Perhaps more than a year will be required to pursue PHMSA research as suggested, and, as you noted, research may or may not ever proceed. This decision is tantamount to saying, "Worry about it later, let people die until we get around to it". Many have died from pipeline explosions, many more will follow. Oil and gas pipeline explosions can be stopped. Deaths can be stopped.

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In a message dated 5/25/2019 2:47:37 PM Pacific Standard Time, ...@dot.gov writes:

I don't believe the opinion will change from what was sent in the letter, at least as it relates to this last solicitation. Your proposal just didn't make it through per our process. We'll explain more on Tuesday.

However that doesn't mean the dialogue needs to stop on the technical aspects of what you're proposing and considerations through other initiatives. As the letter also stated and mentioned on our phone call, we encourage you to submit to the other ongoing solicitation for research gaps. I know you indicated you questioned the value of submitting, or at least concerned with the timing it would take. I can't say that process will move very quickly and certainly can't guarantee it would move through if you do submit, but it's something new we're trying, a process

nonetheless and another opportunity we have to consider. It's ultimately your choice on whether or not you want to submit.

The discussion on implementing changes to address any gaps via standards (particularly those we incorporate in our regulations) is also a worthwhile path to consider. For that approach, we'd of course have to defer to the standard development process to vet, and I know that doesn't happen overnight. Still, it is a good path to continue to work through, and good to help get additional consideration from a variety of stakeholders.

...

From: Robert A Leishear, Ph.D, P.E. <leishear@aol.com>
Sent: Saturday, May 25, 2019 12:37 PM
To: ... (PHMSA)
Cc: ... (PHMSA); ... (PHMSA)
Subject: Re: Visit and ASME Code Compliance with respect to explosions

My preference is to change PHMSA opinion with respect to this proposed research. The issues, though complex, can be summarized. 1) I invented the theory to stop pipeline ruptures and explosions. 2) This theory has been proven and published. 3) Deaths will continue until corrective actions are taken. 3) CPM can be used to monitor, control, and prevent pipeline ruptures and explosions. 4) My proposed research is essential to CPM methodology. 5) PHMSA support is required for research. 6) Together, we can save lives.

Sent from AOL Mobile Mail
Get the new AOL app: mail.mobile.aol.com

On Saturday, May 25, 2019, ... (PHMSA) <...@dot.gov> wrote:

Hello Dr. Leishear,

Let me discuss further through the chain about the possibility of an in person meeting June 5. I can already say though I'm unfortunately unavailable as I'm on business travel that day and I know some others are out. In the meantime though I have been looking more into the language on dynamic effects in ASME B31.1 compared to what's in B31.4, 8 and some other standards with language like combined stresses. As mentioned on our phone call I'm personally on B31.8. I am planning to be at B31 code week. We have other colleagues on B31.4 who I believe will be there as well.

Regardless of whether we can make the June 5 meeting happen, I do think we should still proceed with the phone call with ... and me Tuesday to discuss further why your white paper wasn't accepted.

....

From: Robert A Leishear, Ph.D, P.E. <leishear@aol.com>
Sent: Saturday, May 25, 2019 4:18 AM
To: ... (PHMSA); ... (PHMSA); ... (PHMSA)
Subject: Visit and ASME Code Compliance with respect to explosions

I will be available for a meeting on the afternoon of June 5th in Washington, D.C. If preferred, I can provide a slide show on pipeline explosions, which would be based on planned presentations to the ASME B31.1, B31.3, and B31.4 Piping Committees. These presentations will take place at the B31 Code Week in September, but that presentation can be provided to PHMSA, where the presentation is summarized as follows.

All ASME Codes are presently inadequate with respect to pipeline explosions and fatigue ruptures caused by fluid transients. To address this severe shortcoming, I serve as the Project Manager, and member of the ASME B31 Mechanical Design Committee, the B31.3 Piping Committee, and the Section VIII High Pressure Vessel Committee to change the ASME Codes accordingly. To do so, a new standard slowly proceeds, which is titled "ASME B31D, Design of Piping Systems for Dynamic Loads from Fluid Transients". The presentation supporting this Standard will include a survey of the fundamental physics of fluid transients and explosions, along with the scope of this national disaster.

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In a message dated 5/24/2019 12:45:31 PM Eastern Standard Time, leishear@aol.com writes:

There are numerous issues with respect to API 1130, but my proposal meets the basic paragraphs cited below. Specifically, current SCADA systems do not adequately measure explosion transients that occur inside pipelines, and SCADA systems do not measure pressure transients that result in pipeline fatigue ruptures. The proposed research will quantify pipeline damages with respect to measurement techniques. This proposal has the added benefit of predicting gas pipeline ruptures and measuring gas pipeline explosions as well. As noted in other emails, the causes of oil and gas pipeline explosions and ruptures have been misunderstood for decades, lives are at risk, and this research presents an opportunity to stop disastrous consequences.

This publication focuses on the design, implementation, testing and operation of CPM systems that use an algorithmic approach to detect hydraulic anomalies in pipeline operating parameters. There are numerous issues with respect to API 1130, but my proposal meets the paragraphs cited below. Specifically, current SCADA systems do not adequately measure explosion transients that occur inside pipelines, and SCADA systems do not measure pressure transients that result in pipeline fatigue ruptures. This proposal has the added benefit of predicting gas pipeline ruptures and measuring gas pipeline explosions as well. As noted in other emails, the causes of oil and gas pipeline explosions and ruptures have been misunderstood for decades, lives are at risk, and this research presents an opportunity to stop disastrous consequences. The primary purpose of these systems is to provide tools that assist pipeline controllers in detecting commodity releases that are within the sensitivity of the algorithm. It is intended that the CPM system would provide an alarm and display the related data to the pipeline controllers to aid in decision-making. CPM is intended usually as a tool to be used by the pipe-line controller in the safe operation of the pipeline. The CPM system may: a. Possess accurate commodity release alarming. b. Possess high sensitivity to commodity release.

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In a message dated 5/22/2019 4:11:42 PM Pacific Standard Time, leishear@aol.com writes:

Talk to you on Tuesday. As I mentioned today, I disagree with this PHMSA decision that will result in loss of life. Even so, a discussion should be informative. I also attached another email that was sent to PHMSA.

Thanks for your time.

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In a message dated 5/22/2019 1:27:14 PM Pacific Standard Time, ...@dot.gov writes:

Hello Dr. Leishear,

It was a pleasure to talk with you today. As promised on the call, we'll have a follow-up call next week, Tuesday May 28 at 2pm Eastern, to discuss why your proposal did not meet the requirements. The letter was intended to provide the explanation, but on Tuesday's call we can expand on the explanation provided in the letter. ..., a contract specialist from our Acquisition Services division, will be joining us on the call.

Thank you for your interest in pipeline safety.

...

...

Engineer

Engineering and Research Division

U.S. DOT PHMSA Office of Pipeline Safety

Office: 202-493-0595

Cell: 202-420-9169

[...@dot.gov](#)

In a message dated 5/18/2019 10:31:21 AM Pacific Standard Time, leishear@aol.com writes:

PHMSA Inaction Will Kill People

A clearly identified explosion hazard has been provided, which constitutes a potential national emergency – people will continue to die until action is taken. Based on years of research, the basic theory has been presented in attached emails to monitor pipeline performance and stop explosions, yet the PHMSA fails to act. The PHMSA and the NTSB reported explosions with uncertain causes for decades, and I provided that missing explosion cause, yet the PHMSA fails to act. Accordingly, gas and oil pipeline safety is in jeopardy. We can work together to stop explosions and death.

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From: Robert A Leishear, Ph.D, P.E. [<mailto:leishear@aol.com>]

Sent: Saturday, May 18, 2019 7:16 AM

To: ... (PHMSA) <[...](#)>

Cc: ... (PHMSA) <[.....@dot.gov](#)>; ... (PHMSA) <[...a@dot.gov](#)>

Subject: Re: Leishear Letter, Clarifications

To be clear, this new discovery demonstrates the common cause of pipeline ruptures and explosions in the oil and gas industries, and the recommended research will prevent deaths. The current recommended PHMSA decision will be of little value to the families of people who die in the interim. This research presents an opportunity for you and I to save lives. Please reconsider and let us work together. At present, I am the foremost expert anywhere in this field of research, where I have dedicated a major part of my life to preventing industrial fatalities.

My dedication is demonstrated by the fact that I have spent the past three years performing full time volunteer research at a personal cost of more than \$100,000 to understand pipeline failures and explosions to prevent accidental fatalities and environmental damages. Resulting from this research, this technological breakthrough affects pipelines throughout the oil and gas industries, and the PHMSA turns away from this opportunity to save lives.

Not only that, but I technically disagree with the decision to disapprove my research proposal, since my research would have demonstrated the applicability and use of high pressure transducer measurements to stop accidents. Present SCADA systems do not measure pressure transients that cause fatigue cracks and consequent ruptures in pipelines or explosion pressures, where SCADA records data every four minutes, and pressure transients and explosions occur at higher frequencies that are not captured by SCADA. In other words, SCADA records are inadequate to reach conclusions during accident conditions, and my proposed research will determine appropriate monitoring frequencies and appropriate timing triggers for high frequency data collection to minimize data accumulation during off-accident data recording. In my emails, I noted gas pipeline explosions, as well as oil pipeline explosions, since my research would be applicable to both types of explosions, and prevent deaths. Specifically, the investigation of accident conditions using computer modeling can quantify the instrumentation requirements to accurately record accident pressures that cause piping ruptures and explosions.

Current CPM systems are inadequate to prevent pipeline ruptures and record the sequence of events during pipeline explosions in order to complete competent explosion investigations. My proposal met the following requirements: "The scope should include a variety of factors including instrumentation and uncertainty to understand constraints from pressure and/or flow calibration, alarm management, filtering and/or prioritization, the ability of using machine learning to assist with alarm management, and protocols to address steady state versus transient conditions ... pressure monitoring or flow measurement points along ...technology that can optimize/balance reliability with sensitivity of the entire CPM system. Changes in technology and control room management (including human factors) should aim to reduce the volume of liquid hydrocarbon leaked..." However, my proposal did not address artificial intelligence, where I substituted human intelligence – this comment may seem somewhat cynical, but the use of artificial intelligence to solve this complex problem instead of understanding the underlying rupture and explosion process will not work. I was also informed by PHMSA staff that an explanation of why my proposal does not meet these requirements would be provided. This explanation has not yet been provided.

As far as competitive bidding is concerned, what is the price for loss of life? Previous PHMSA explosion analyses and reports have been incorrect for decades. This major discovery represents an emergency situation for the oil and gas industries, where lives are at stake, and PHMSA defers action to some future, nebulous date by requesting that I submit a request for later consideration. This suggestion is tantamount to, "Worry about it later, lives do not matter". This major discovery and suggested research presents an opportunity to do the job right, and stop explosions and deaths. Again, please reconsider your decision, and let us work together to save lives and families.

Thanks for your time.

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In a message dated 5/16/2019 3:25:24 PM Pacific Standard Time, ...@dot.gov writes:

Dr. Leishear,

Please find attached a letter from me with further information regarding PHMSA Research opportunities.

I appreciate your interest in pipeline safety and encourage you to respond to our Special Notice.

Ms. ...

Deputy Administrator

Pipeline & Hazardous Materials

Safety Administration

U.S. Department of Transportation

1200 New Jersey Avenue, SE

Washington, D.C. 20590

In a message dated 5/16/2019 2:46:46 AM Pacific Standard Time, leishear@aol.com writes:

I question the validity of the Carlsbad report, where 12 people were killed. From the data in the report, an internal pipeline explosion obviously occurred, and there was no mention of this fact. Also, Line 1103 was in service, but there was no mention of upstream customer actions at the time of the explosion, where a simple pressure change could ignite air and gas in the pipeline. A common theme of multiple gas pipeline explosions is that explosions occur at low points in pipelines, where lower molecular weight air may accumulate due to the lower density of air with respect to methane - presumably methane was the gas in the pipeline at the time of various explosions. If air was present in the pipeline, the presently assumed accident scenario is highly suspect. Structural dynamics has been overlooked in all PHMSA investigations, and apparently gas dynamics, pipeline contents, and combustion for a combined gas process have been overlooked as well. I offered to perform research and independently investigate these obvious investigation errors in PHMSA and NTSB investigation methods but was turned down, apparently due to higher PHMSA priorities. Your decision was fundamentally flawed, since loss of life should be your highest priority, and your mistake will cost lives. Even though your decision will result in the loss of lives, you do not take the time to contact me for discussions, answer my emails, or even provide details of why my proposal was declined, where I was promised that you would provide an explanation. Again your decision will kill people. Bureaucracy kills!

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In a message dated 5/14/2019 7:32:26 PM Pacific Standard Time, leishear@aol.com writes:

During this accident the pressure spiked from 359 psig to 396 psig, which causes an equivalent maximum pressure of 507 psig. Again, the PHMSA failed to consider dynamic effects on hoop stresses in

pipng that lead to catastrophic failures. There is a monumental problem with PHMSA and NTSB explosion investigations, where finding flawed investigation reports is a quite simple process, i.e., find nearly any PHMSA pipeline explosion report and look for the pressure changes. Even so, corrosion is related to some explosions, where I have not fully assessed the scope of this problem in the absence of funding. Even if you do not contract me as the inventor of this theory and foremost expert in this area of research, hire someone to further investigate explosions and perform competent calculations. Perhaps the PHMSA should initiate conversations? My contact information is provided below of course.

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In a message dated 5/14/2019 6:24:54 PM Pacific Standard Time, leishear@aol.com writes:

The following photo is consistent with a fatigue crack that started when "the pressure had increased from 1,170 pounds per square inch gage (psig) to 1,352 psig when the rupture occurred". The equivalent maximum pressure was 1898 psig. Perhaps PHMSA is starting to see a pattern.

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In a message dated 5/14/2019 6:09:24 PM Pacific Standard Time, leishear@aol.com writes:

According to the report listed above, high pressure was release to a low pressure system, where that pressure may have been as high as 200 psig. According to my peer reviewed publications, the equivalent maximum pressure induced in the low pressure system was 800 psig, which was well above the 75 psig design pressure. I assume that the PHMSA is not considering dynamic effects. Unfortunately the PHMSA is consistent with respect to inadequate safety evaluations.

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In a message dated 5/13/2019 3:19:27 AM Pacific Standard Time, leishear@aol.com writes:

Clearly stated, the failure of PHMSA to accept documented new technology results in stress corrosion cracks that lead to pipeline explosions throughout the U.S., and people will die. The full extent of this problem cannot be discerned without PHMSA support. Even if my research request goes unawarded, how can PHMSA simply ignore the cause of pipeline explosions. Until the underlying cause of fatigue related ruptures is recognized, the explosion problem cannot be resolved, and lives are in jeopardy.

As stated below, PHMSA inaction risks lives, and responses are not even provided, which I clearly do not understand due to the gravity of this concern. My credentials to make these claims are well established, as described in detail on my website and in the attached resume. Unanswered emails do not absolve PHMSA responsibility for neglect of this serious problem that will kill people.

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In a message dated 5/13/2019 9:42:57 AM Eastern Standard Time, leishear@aol.com writes:

Given the violent nature of this piping explosion, trapped air in the piping may have contributed to a blast inside the piping. Again, pertinent theory that I have published has been ignored during explosion investigations. I published the Leishear Stress Theory to explain cracking and stress corrosion cracking of pipelines, and I published the Leishear Explosion Theory to explain piping and explosions. Neither theory has been considered during any PHMSA findings, and the opportunity to study corrective actions was declined by the PHMSA. Lives are at stake, while the PHMSA fails to perform adequate safety

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From: leishear@aol.com
To:@dot.gov, ...@dot.gov, phmsa.pipelinesafety@dot.gov
Sent: 5/13/2019 3:19:27 AM Pacific Standard Time
Subject: Unsafe PHMSA Explosion Investigations

Clearly stated, the failure of PHMSA to accept documented new technology results in stress corrosion cracks that lead to pipeline explosions throughout the U.S., and people will die. The full extent of this problem cannot be discerned without PHMSA support. Even if my research request goes unawarded, how can PHMSA simply ignore the cause of pipeline explosions. Until the underlying cause of fatigue related ruptures is recognized, the explosion problem cannot be resolved, and lives are in jeopardy.

As stated below, PHMSA inaction risks lives, and responses are not even provided, which I clearly do not understand due to the gravity of this concern. My credentials to make these claims are well established, as described in detail on my website and in the attached resume. Unanswered emails do not absolve PHMSA responsibility for neglect of this serious problem that will kill people.

In a message dated 5/13/2019 2:37:37 AM Pacific Standard Time, leishear@aol.com writes:

Incorrect equations and analysis are used by the PHMSA for accident investigations, where pipe wall dynamics need to be considered. The referenced failure analysis is but one example of the scope of the problem that has been overlooked during PHMSA failure investigations. New technology is available to better understand pipeline accidents.

PHMSA should evaluate piping dynamics when accident investigations are performed. In the noted investigation (ID 122980), there is no mention of dynamic effects during pressure transients. During this accident, the pressure was increased from 800 psig to 1000 psig in 50 psig increments, and then the pressure was decreased slightly. My point is that this calculation, and many previous PHMSA investigations, do not consider these dynamic effects at all. For example, assuming that the pressure changes were near instantaneous, and assuming 5% damping as a conservative approximation, the dynamic pressures are approximated in the figure below, where fatigue cycling will, of course, cause the stress corrosion cracking noted in the 122980 report. My goal is to make pipelines safer, and my ASME textbook is only part of the many thousands of hours of voluntary research that allow me to quickly provide the graph below for insight into this complex failure analysis method.

As noted in my previous research proposal, Fluent studies can more accurately investigate this problem, where only an equivalent pressure is provided in the figure below. The intent of the equivalent pressure approximation in the figure below is to show that dynamics play a critical role in all cracks, stress corrosion or otherwise. A more accurate approximation would graph strain versus time, but this simplification is one way to view the problem, since the pipe schedule is unavailable in the referenced report, and a more concise strain comprehensive calculation requires the wall thickness for completion. Again, PHMSA calculations are incorrect and overlook recent technology - first published in 2002 -and pipeline safety is therefore in jeopardy. If the wrong equations are used, safety investigation conclusions cannot be correct.

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In a message dated 5/6/2019 10:09:01 AM Pacific Standard Time, leishear@aol.com writes:

I was informed in a recent NACE class that recent pipeline explosions included a weld seam rupture. As noted below, this type of accident can be prevented, but some additional research is required to ensure safety. Fortunately, no one was killed. Continuing explosions may not be so fortunate.

In a message dated 4/24/2019 10:22:41 AM Eastern Standard Time, leishear@aol.com writes:

I am disappointed that loss of life and environmental disasters can be prevented, but no action is being pursued by PHMSA. Although my conversations with an accountant to discuss complex engineering issues was pleasant, the fact remains that engineers currently believe that corrosion is the reason that pipelines explode, where fluid transients are the actual cause of pipeline ruptures and explosions. Deferring my research to some unknown future date, or deferring to some unknown future call for papers, simply delays the response. The cause of pipeline ruptures is known, and application of theory to pipelines is essential for safety.

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In a message dated 4/23/2019 3:07:33 PM Eastern Standard Time, leishear@aol.com writes:

I spoke with ... today - nice lady. She mentioned that she would have someone provide a link to a white paper website, where an earlier referral took me to 32,000 PHMSA proposals. She also mentioned that further information will be provided to explain that my research to this call for white papers is inapplicable. This research is overwhelmingly important to pipeline safety.

There was also an error in a previous email that was subsequently clarified - I thought - such that, the email should have stated, "I assume that my paper was denied, but the referenced title is incorrect. The title should have been Oil Pipeline Ruptures, Fires, and Gas Pipeline Explosions".

Thanks for your consideration.

Robert A. Leishear, Ph.D., P.E.

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In a message dated 4/21/2019 2:11:10 AM Eastern Standard Time, leishear@aol.com writes:

Pipeline safety was jeopardized when my white paper was dismissed from consideration. As stated below, " Any future explosions, fires, and pipeline breaks that can be attributed to non-performance of this research will, essentially, be the fault of the PHMSA". For example, deaths occurred in the first space shuttle accident, engineers warned of the dangers before the accident, and a report was written after the accident that the deaths could have been prevented. In the second space shuttle accident, engineers warned of the dangers before the accident, and a report was written after the accident that the deaths could have been prevented. Here we are again, an engineer warns of the dangers before a series of accidents, and deaths are a possibility. However, the PHMSA has the opportunity to prevent writing reports after accidents occur about how deaths and environmental havoc could have been prevented. Please reconsider my proposal to stop catastrophic pipeline failures. Your choice.

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In a message dated 4/20/2019 11:40:47 AM Eastern Standard Time, leishear@aol.com writes:

Re: Pipeline Explosion Liability: PHMSA Research Announcement #693JK3191RA01 Notification

Any future explosions, fires, and pipeline breaks that can be attributed to non-performance of this research will, essentially, be the fault of the PHMSA. Perhaps I should have titled the white paper, "Oil Pipeline Ruptures, Fires, and Gas Pipeline Explosions", where these consequences are the definition of catastrophic failures discussed in my paper. As noted below, I will consider future re-submission of my research to PHMSA, but I was surprised that further research on this phenomenal discovery was turned down for consideration. The continuing failures of oil and gas pipelines should be stopped. This email is intended to make a very clear statement of the dangers to our country that can be avoided through my research, which of course will not be considered in the near future due to this PHMSA decision.

Thank you

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In a message dated 4/19/2019 12:17:18 PM Eastern Standard Time, leishear@aol.com writes:

Thanks for your consideration. I will likely submit a revised proposal to a later research announcement, since this research can stop pipeline breaks across the world.

Robert A. Leishear, Ph.D., P.E.

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803-641-6753

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In a message dated 4/18/2019 8:43:31 AM Eastern Standard Time, ...@dot.gov writes:

Mr. Leishear,

We thank you for submitting a White Paper entitled "Crack Prevention Using High Frequency Pressure Transducers" (WP #786), in response to the U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) RA #693JK3191RA01.

A total of 44 responsive White Papers were reviewed/evaluated and 32 proposed projects were selected for further consideration by a joint panel of technical experts.

We regret to inform you that your White Paper was not among those selected for further consideration. Our decision was based on the evaluation criteria established in the Research Announcement and other considerations. This decision does not reflect any major technical shortcomings in your White Paper, but rather the need for DOT to make difficult choices among a number of worthy White Papers submitted for consideration to the program.

We anticipate releasing announcements that address various aspects of Pipeline Safety Research and Development in the future. If your organization has a continued interest in Pipeline Safety Research and Development, I would encourage you to periodically review either of the following websites for further information regarding upcoming announcements: 1) Federal Business Opportunities (FedBizOpps) or 2) PHMSA Research Development Website at <http://primis.phmsa.dot.gov/rd/announcements.htm>. Your interest in improving the safety of Pipeline Operations in our country is appreciated.

Sincerely,

...

Acquisition Services Division

Pipeline and Hazardous Materials Safety Administration

Department of Transportation

Telephone: (202) 366-5102 | ...@dot.gov



Post-rupture fire. At lower left of fireball can be seen the 85-foot-tall support structures for the pipeline suspension bridges.



Picture of crater and ruptured pipeline.



Ruptured pipe.

