Department of Transportation  
Pipeline and Hazardous Material Safety Administration  
Docket No. PHMSA-2010-0229  
Pipeline Safety; Safety of On-Shore Hazardous Liquid Pipelines

To whom it may concern:

The Pipeline Safety Trust is the only national public interest non-profit organization that focuses on pipeline safety. We do this by promoting pipeline safety through education and advocacy, by increasing access to information, and by building partnerships with residents, safety advocates, government, and industry, that result in safer communities and a healthier environment.

We appreciate this opportunity to comment on the scope of the hazardous liquid pipeline safety regulations. We would like to commend the Pipeline and Hazardous Material Safety Administration (PHMSA) on implementation of a variety of rules over the past ten years that have added to the safety of this country’s pipelines, as well as increasing access to valuable information that has significantly increased the transparency of many aspects of our pipeline system.

Expansion of Integrity Management (IM) Programs
We are particularly interested in the expansion of the Integrity Management Program that currently only 44% of the total miles of hazardous liquid pipelines in this country are required to meet. Since the Integrity Management Program for hazardous liquid pipelines began over 35,000 repairs have been made to pipelines as required by the regulations, and an additional 80,000 repairs have been made to pipelines that were identified during inspections that were associated with these regulations. This represents thousands of potential future problems that have been corrected due to this one set of regulations. Those are impressive safety gains, but even so some questions remain that we think PHMSA needs to analyze and explain.

First off, even with the additional layer of regulations a number of large and very damaging incidents have occurred in the past year within sections of pipelines that are included in the Integrity Management Program. These failures call into question either the effectiveness of the regulations or the implementation of those regulations by the operators. We would like PHMSA to explain whether the multiple failures this past year on the Enbridge system, or on the Chevron pipeline in Salt Lake City are an indication that the regulations need to be more prescriptive in their nature to ensure companies are being protective of the public and sensitive environments.
While overall we are supportive of the Integrity Management Program we also would like PHMSA to explain how it is that while significant pipeline incidents on hazardous liquid pipelines have been declining overall, the trend for significant incidents is actually trending upwards for the pipeline mileage within the Integrity Management Program (see figure 1 below). Since the additional layer of Integrity Management regulation covers the pipelines within High Consequence Areas (HCAS), we would expect the downward trend to be greatest in these pipelines.

While the two above concerns may indicate that even more work still remains to be done to fully implement the Integrity Management Programs, it is also our belief that it was always the intention to expand the reach of Integrity Management after the initial implementation period was complete. Since many of the pipeline segments within the IM program have now been inspected at least twice it seems like the industry now has the expertise and the infrastructure developed to expand this valuable program.

It is our belief that the best and most efficient way to expand the IM program is to adopt rules to expanding it to all hazardous liquid transmission pipelines. We ask that PHMSA undertake a rule making to implement such an expansion so the initial round of inspections are complete within the next five years. Some in the industry have argued that this inclusion of all pipeline miles would be too expensive and undermine the basic “premise of risk-management that considers both the likelihood and consequences of an incident.”¹ We disagree with this assessment since without an IM program a company has little way to measure the “likelihood” of an incident at all.

We also disagree that this would be too expensive to implement this expansion of the IM Program since the industry themselves have stated numerous times that they are already undertaking IM type inspections on the vast majority of their pipelines. For example:

“In fact, approximately 80% of the national network or 130,000 miles will be inspected during the baseline assessment period (2001-2008). This is more than twice the mileage that the Office of

¹ Testimony of Richard Adams, Enbridge, before the House Subcommittee on Railroads, Pipelines and Hazardous Materials, July 15, 2010
Pipeline Safety anticipated would be covered when the rule was originally published in 2000.\textsuperscript{2}

“While only 40% of our system could affect an HCA, nearly 100% of the mileage has been inspected (often a number of times) with internal inspection devices.”\textsuperscript{3}

With the majority of miles of pipeline already being inspected, and thousands of repairs outside of the required areas already being made based on those inspections, the expense to just ensure through inclusion in the regulations that those inspections and repairs are being done up to the IM standards that the industry helped draft can not be too great and seems well worth the cost.

For the reason stated above we think that expanding the IM Program to all miles of hazardous liquid pipelines is preferable to trying to just expand the definitions of HCAs to take in more miles under the IM Program. The current definitions in the liquid rules are confusing, arbitrary, and leave considerable numbers of citizens and fragile environments at needless risk. The definitions of “high population area” and “other populated area” are particularly troubling since they are based on fairly arbitrary determinations by the Census Bureau that have no relationship to the potential risk from pipeline failure.

Since the boundaries of determined HCAs are kept from the public it is hard for the public to comments on the adequacy of these parts of the regulations. We suspect that these definitions allow significant numbers of residential developments to go without the added protection that inclusion in an IM Program could provide. One example that illustrates this point can be seen in figure 2 and 3, which are photographs from the recently released report from the Pipelines and Informed Planning Alliance (PIPA).\textsuperscript{4} These photographs are used in the report as an example of how better actions by local government and the property owners may have lead to greater safety regarding this pipeline.

\textsuperscript{2} Letter from API & AOPL to Congress, 1/25/2005
\textsuperscript{3} Testimony of Richard Adams, Enbridge, before the House Subcommittee on Railroads, Pipelines and Hazardous Materials, July 15, 2010
\textsuperscript{4} Page 56 and 57 of the final PIPA Report
Figure 4 is a picture of this same development taken from the National Pipeline Mapping System. The brown shading is the “high population area” in the vicinity, and the green shading is the “other populated area.” So you can see that this rather dense area of development, (which is already slated for additional development), does not fall within a HCA. So while all the stakeholders in the PIPA process agreed that local government and the property owners should be expending time and money to ensure greater safety in such an area, even this well documented development falls outside of current HCA definitions so is not mandated to have the added protections that an integrity management program would afford it.

If the first place we looked in our area has residential development of this type outside of the Integrity Management program, how many similar areas across the nation are also not granted the protection of an Integrity Management program because of the fairly arbitrary definitions used to define populations within HCAs? While we do not recommend this, in the natural gas regulations the definitions of class locations used to determine HCAs is a much more adaptable system if in the end a way to expand HCAs based on population density is desired.

The definitions of Unusually Sensitive Areas (USAs) are equally problematic and even more difficult for the public to comment on since they are not even shown on the public map viewer of the National Pipeline Mapping System.

As stated above we favor expanding the Integrity Management program to all hazardous liquid pipelines, but if PHMSA chooses to try to only expand the Integrity Management requirements by expanding the definition of HCAs we are in favor of including:

- major roadways
- railroad crossings
- “Waters of the United States” as defined in the Clean Water Act
- all populated areas as defined for Class 2 locations under 49 CFR 192.5
- State and Federal Wildlife refuges
- National parks, monuments, and recreation areas
- National forests

If the intent is to expand the definition of HCAs than we ask that all associated HCA populated areas and USAs be clearly defined and shown on the public viewer of the National Pipeline Mapping System with an electronic feedback system so potentially affected local governments and citizens can report areas they believe have been incorrectly categorized.
Shut-off Valves:
In 1992, 1996, 2002, and 2006, Congress required the Office of Pipeline Safety (OPS) to “survey and assess the effectiveness of emergency flow restricting devices...to detect and locate hazardous liquid pipeline ruptures and minimize product releases” with the first such requirement having a deadline in 1994 (17 years ago!). Following this analysis, Congress required OPS to “prescribe regulations on the circumstances under which an operator of a hazardous liquid pipeline facility must use an emergency flow restricting device.”

OPS/PHMSA never issued a formal analysis on emergency flow restricting device (EFRD) effectiveness. Instead, in its hazardous liquid pipeline integrity management rule, OPS rejected the comments of the NTSB, the U.S. Environmental Protection Agency, the Lower Colorado River Authority, the City of Austin, and Environmental Defense and chose to leave EFRD decisions up to pipeline operators after listing in the rule various criteria for operators to consider. Such an approach to EFRD use does not appear to meet Congressional intent, partly because the approach is essentially unenforceable. We ask that a clear standard for the use of EFRDs now be promulgated.

Leak Detection Systems:
In its hazardous liquid transmission pipeline integrity management rule, PHMSA requires that operators have a means to detect leaks, but there are no performance standards for such a system. This is in contrast to the State of Alaska, for example, which requires that all crude oil transmission pipelines have a leak detection system capable of promptly detecting a leak of no more than 1% of daily throughput. The State of Washington also requires that “leak detection systems must be capable of detecting an eight percent of maximum flow leak within fifteen minutes or less.” Similar to the situation for EFRD use, PHMSA listed in the integrity management rule various criteria for operators to consider when selecting such a device. Again, such an approach is virtually unenforceable and should now be corrected by promulgating clear minimum standards.

Exempt, Unregulated, and under-regulated pipelines

Produced Water Lines:
Following separation of oil, gas, and water during crude oil production, produced water lines typically carry briny water contaminated with oil to injection wells for disposal. These produced water lines can and do fail in manners similar to other pipelines that PHMSA regulates. For example, on Christmas Day in 2008 at the ConocoPhillips Kuparuk oil field on Alaska’s North Slope, a corroded pipeline released nearly 100,000 gallons of produced water, which can be toxic to plants and wildlife.

Drilling for natural gas in shale and coal formations has grown enormously in recent years and results in large quantities of produced water. Some of this drilling occurs in populated areas, for example in Fort Worth, Texas there are already more than 1,000 gas wells within the city limits with many more planned. Produced water pipelines carry briny, contaminated water - which many would consider a hazardous liquid - to wells or surface disposal facilities including evaporation ponds. Because these pipelines follow multi-phase separation operations, the Trust believes that PHMSA can regulate these lines under current federal law, and should do so.

Rural Gathering Lines and Flowlines:
We believe that as much as is statutorily possible PHMSA should change definitions to capture under its regulations any pipeline that is leaving a well pad.
Raw Tar Sands Crude and Dilbit Pipelines
Many of the relatively new products being transported from the Canadian tar sands are potentially more corrosive (because of the chemical makeup and the heat generated in their transport), contain more solids than traditional crudes, and may be more difficult to contain and clean up if a spill occurs. For these reasons we ask that PHMSA undertake a study to ensure that current regulations are adequate to prevent releases of these products. Any deficiency found in current regulations should be addressed by new rules.

Thank you again for this opportunity to comment. If you have any questions about our comments please contact Carl Weimer at the above numbers.