



June 9, 2015

Congresswoman Lois Capps
301 E. Carrillo St., Suite A
Santa Barbara, CA 93101

Re: Recommendations for Oil Pipeline Safety Improvements

Dear Congresswoman Capps:

This letter is submitted by the Environmental Defense Center (“EDC”) in strong support of the recent steps you have taken to urge federal regulators to finalize enhanced safety rules for oil pipelines as part of the FY 2016 Transportation and Housing and Urban Development appropriations bill. The EDC is a non-profit public interest environmental law firm headquartered in Santa Barbara that protects and enhances the environment through education, advocacy, and legal action. The EDC was founded as a result of the 1969 Santa Barbara oil spill and has been focusing our efforts lately in response to the recent devastating spill from the Plains All American Pipeline (“Plains”) Line 901 near Refugio Beach in Santa Barbara County. Like many others, we believe that this latest spill should never have happened, and that it would not have happened if adequate safeguards were in place to monitor, inspect, maintain and operate oil pipelines.

As such, we encourage you to continue to push for stronger pipeline safety measures to help prevent and mitigate future spills like the tragic Refugio Spill that occurred on May 19, 2015. Specifically, we recommend an increased frequency of inspections, a requirement for automatic shutoff valves and leak detection technology, increased transparency and oversight for pipeline inspections, an increase in fines and penalties for malfeasance, as well as additional resources and staffing to ensure adequate inspections.

The following recommendations are based on EDC’s review of the requirements of the Pipeline Safety, Regulatory Certainty, and Job Creation Act (P.L. 112-90) and U.S. Department of Transportation (“DOT”) Pipeline and Hazardous Materials Safety Administration (“PHMSA”) regulations (49 C.F.R. § 195 *et seq.*).

1. The Frequency of Inspections should be Increased.

PHMSA should have clear criteria triggering increased frequency of inspections. Although anomalies currently trigger increased inspections, this frequency should be even greater. Line 901 was inspected at a more frequent rate than required due to anomalies (three instead of five years), but this interval was still insufficient to catch the fact that the line had a metal loss of over 45% of its original width.

Additionally, PHMSA should require inspections in high consequence areas (“HCAs”) on an even more frequent basis. Pursuant to PHMSA regulations, inspections only occur every 5 years in HCAs. To prevent accidents like the Refugio Oil Spill, inspections should occur at least yearly. Lastly, EDC communication with a PHMSA representative revealed that PHMSA has internal “risk ranking” criteria and “tries” to get at pipes that have had issues more frequently, every “couple of years” or ideally every year. PHMSA should disclose more information about how such “risk ranking” or “risk assessment” is conducted. Moreover, oversight and transparency for this process should be provided, and the process should be amended to clearly provide for more inspections for at-risk pipelines.

2. Automatic Shutoff Valves and Leak Detection Technology should be Required.

PHMSA should require automatic shutoff valves (“ASVs”) on hazardous liquids pipelines. A PHMSA study already found ASVs can be cost effective.¹ PHMSA should further ensure ASV requirements are based on sound science/engineering, not operator preference. For example, the Keystone XL operator Transcanada places ASVs at an interval it claims is shorter than most pipelines in the U.S.: they are placed at twenty-mile intervals and at higher concentrations near water crossings and HCAs. It is unclear whether placement at this interval is based on sound science and engineering principles or at Transcanada’s preference. PHMSA should ensure that automatic shutoff valves are placed at shorter intervals in instances where pipelines are transporting hazardous liquids, where there are increased public health risks, and where the pipeline is near environmentally sensitive areas.

PHMSA should also require advanced leak detection systems such as Supervisory Control and Data Acquisition on all pipelines. For example, current permits for Santa Barbara County-regulated pipes require advanced leak detection equipment and automatic shutdown:

[P]ipelines would be monitored 24 hours/day by an automated Supervisory Control and Data Acquisition (SCADA) leak detection system.... All safety and operational features would be maintained by a state-of-the-art SCADA system that would gather data from points throughout the pipeline route. Data gathered via the SCADA system includes flow rate, temperature, and pressure. Such data would be continuously monitored to identify deviations indicative of a leak or rupture. The SCADA system would be designed to initiate a pipeline shut down when conditions vary beyond pre-set pressure and flow

¹ <http://bitly.com/1cjjZDL>

conditions. Alarms would sound alerting operators to abnormal conditions and trigger automatic shut-down operations as needed.²

3. Increased Transparency Concerning Pipeline Inspections is Necessary.

We strongly support the proposed National Pipeline Information Exchange (“NPIX”). Following the Refugio Spill the history of recent inspections of the faulty Line 901 have been difficult to obtain, and even the regulating agency PHMSA does not always have access to all inspections from all the pipelines under its jurisdiction. There needs to be greater transparency and public access to information about pipelines safety.

- a. Require operators to make inspection information available via NPIX, which should be online.
- b. Require operators to make Integrity Management Plans available to the public via NPIX online.
- c. Require operators to make inspection information available to the public and PHMSA more quickly.
- d. Require PHMSA to respond to and publish operator inspection reports more quickly, regardless of inspection results, and to make such reports available to the public online.
- e. If an accident occurs, prioritize publication of information related to inspection history of the affected pipeline.
- f. Require operators and PHMSA to make plain language versions of reports available to the public via NPIX, i.e., short, easy to understand reports, in a standardize format.

4. PHMSA Involvement or Oversight of Inspections should be Increased.

PHMSA should clarify requirements for the qualifications of those who conduct inspections to ensure the inspectors do not have a vested interest in the outcome of inspection. For example, Plains reported that the May 5, 2015 in-line inspection (“ILI”) of Line 901 revealed approximately 45% metal loss, but the 3rd party pipeline inspector found a much greater than 45% metal loss in the pipeline, indicating in some places the metal was worn to 1/16th of an inch (*see* PHMSA, 1st Amended Corrective Action Order, 1 – 2, (Jun. 3, 2015)). A neutral inspector would ensure that data provided to PHMSA is accurate and reliable.

² ERG Foxen pipeline, Santa Barbara County Conditions of Approval.

5. Additional Priority Issues – Issues Flagged in Congressional Research Service (“CRS”) Report

Several issues were highlighted in a recent CRS report, “Keeping America’s Pipelines Safe and Secure: Key Issues for Congress.”³ Suggestions in this report can provide guidance to Congress for addressing additional pipeline safety concerns.

a. Staffing Resources for Pipeline Safety

- i. Congress should provide resources to staff PHMSA’s pipeline safety division adequately. Particularly, funds should be provided to retain more pipeline inspectors. Pipeline inspector turnover is high because of their high value to private pipeline companies because of their extensive training provided by PHMSA. Steps should be taken to retain these individuals.
- ii. Congress should ensure that funding for grants to states for pipeline inspectors is adequate. PHMSA has failed to provide the promised 80% funding level for state inspectors, and state budget deficits have resulted in unstable work for state pipeline inspectors. PHMSA has stated that these state inspectors are important to the regulatory structure, which prioritizes state inspectors over federal. If funding is unavailable for state inspectors, states may choose to end roles as agents for the federal pipeline safety program, an undesirable outcome for PHMSA.

b. PHMSA Penalties and Pipeline Safety Enforcement

Congress should evaluate how PHMSA’s authorities to set standards, assess penalties, and directly affect pipeline operations may reinforce one another to improve pipeline safety. In many cases, pipeline safety enforcement penalties pale in comparison to overall costs to operators in the event of a pipeline release. Congress should consider these discrepancies and determine if enforcement methods are sufficient.

c. Accuracy and Completeness of Pipeline System Records

Congress should ensure that operators and PHMSA are collecting necessary and accurate pipeline system data to fully evaluate safety and compliance with federal regulations. Additionally, Congress should evaluate whether sufficient means for determining information provided to the National Pipeline Mapping System is accurate.

³ PAUL W. PARFOMAK, CONG. RESEARCH SERV., R41536, KEEPING AMERICA’S PIPELINES SAFE AND SECURE: KEY ISSUES FOR CONGRESS 20 (2013) (“CRS Study”), *available at*: <https://fas.org/sgp/crs/homesec/R41536.pdf>.

d. Mandatory Internal Inspection or Hydrostatic Testing

Congress should consider many techniques for pipeline inspection because smart pig and hydrostatic testing are not always practicable or the best testing methods for operators in determining pipeline integrity.

e. Emergency Response Plan Disclosure

Congress should require disclosure of emergency response plans to the public via NPIX. PL 112-90 already requires PHMSA to collect and maintain copies of pipeline emergency plans, excluding any proprietary or security-sensitive information. NPIX should provide an easy place to disseminate this information to the public.

f. Pipeline Water Crossings

Congress should ensure that research conducted and regulations regarding hazardous liquids pipeline accidents at major water crossings are accurate and sufficient.

6. Additional Possible Regulations to Update

Congress should mandate that the DOT update its regulatory scheme to increase public transparency and awareness, provide more federal oversight, and less operator discretion. For example, several provisions below are offered as suggestions to update and improve 49 C.F.R. § 195.452, pertaining to “Pipeline integrity management in high consequence areas.”

- a. Generally: Clarify location and criteria for HCAs. Provide the public information on NPIX about where HCAs are located and how PHMSA communicates this information to operators.
- b. Several provisions provide that the operator may use other methods for assessment methods, baseline assessment, and for having a variance from the 5-year assessment interval if demonstrated to be acceptable as long as it is disclosed to Office of Pipeline Safety (“OPS”). How does OPS confirm this method is acceptable? Is this information disclosed to the public? For example, § 195.452(c)(1)(i)(D) allows operators to assess the integrity of the pipeline with “other technology that the operator demonstrates can provide an equivalent understanding of the condition of the line pipe.” The text does not explain how OPS will evaluate this information or ensure that the other technology is supported by science and engineering.

- c. § 195.452 (h)(4)(i)(A) provides that 80% corrosion is necessary to trigger immediate repair of a pipeline. The most recent ILI survey of Line 901 revealed a metal loss of approximately 45% of the original wall thickness in the affected area and on the entire run of the pipeline Plains' contractors found a range of 54-74% of the original pipeline thickness. Clearly a lower threshold than 80% corrosion is necessary to trigger repairs.
- d. § 195.452(h)(4)(i) (C) & (D) provide for immediate repair when the *top* of the pipeline is dented. Ensure the designation of top only is supported by science and engineering, since the rupture of Line 901 occurred at the bottom quadrant of the pipe, or require repair if *any* part of the pipeline is dented.
- e. § 195.452(h)(4)(iii)(B) & (C) provide for immediate repair when the *top and bottom* of the pipeline is dented. Ensure the designation of top and bottom and not side is supported by science and engineering or require repair if *any* part of the pipeline is dented.
- f. § 195.452(h)(4)(iii)(F) provides that a predicted metal loss greater than 50% of nominal wall results in a 180 day repair time. The most recent ILI survey of Line 901 revealed a metal loss of approximately 45% of the original wall thickness in the affected area and on the entire run of the pipeline Plains' contractors found a range of 54-74% of the original pipeline thickness. Clearly a faster repair time is necessary.
- g. §195.452(i)(3) should have more specific leak detection requirements, especially for areas that are not HCAs.
- h. §195.452(i)(4) should require emergency flow restricting devices ("EFRDs") as required by PHMSA, not as determined by the operator.

Conclusion

The recent Plains pipeline rupture in Santa Barbara County has reminded us that current federal requirements for pipeline inspection, maintenance and oversight are woefully inadequate. Had the Plains Line 901 been subject to more frequent and comprehensive inspections, monitored more closely, and built with safer technology, the spill would not have happened. Almost 100 miles of our precious coast would not have been damaged, public beaches would not have been closed, and hundreds of birds and marine mammals would not have been killed or harmed.

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We are thankful that you are demanding prompt action in response to this tragic incident. We hope that these recommendations will be useful to your efforts, and we look forward to working with you in the days, weeks, and months ahead. Please do not hesitate to contact me if you have any questions regarding these suggestions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Nicole Di Camillo".

Nicole Di Camillo,
Staff Attorney

cc: U.S. Senator Barbara Boxer
U.S. Senator Dianne Feinstein
State Senator Hannah-Beth Jackson
State Assembly Member Das Williams
County of Santa Barbara