**PHMSA’s Mega Rule: How New Regulations Can be Hard on Some, but Great for Midstream Overall**

On September 9th, 2010, a natural gas pipeline in San Bruno, California exploded in dramatic fashion. The explosion set the residential neighborhood that it resided under ablaze for over a dozen hours, leveling thirty-five houses and killing eight people in the process (Gonzalez, 2010). The disaster changed San Bruno forever; but even more than that, it changed the way that midstream maintenance is regulated by the federal government.

After losing close to two billion dollars of market capitalization, Pacific Gas & Electric (PG&E)—the owner of the pipeline—was forced to roll out an entirely new plan that tackled how the company would modernize pipeline safety and maintenance, so as to ensure nothing like the September 9th explosion would ever happen again (Worth, 2011). While the explosion forced PG&E into immediate action, some across the country realized that the problem expanded far greater than a single, California midstream operator: rather, there were millions of miles of potentially hazardous pipeline across the United States that needed to be examined very closely.

Because of San Bruno and other historical incidents, the Pipeline and Hazardous Materials Safety Association (PHMSA) released “the Mega Rule” in September of 2019 to achieve a greater coordination of pipeline maintenance and safety standards across the United States.

The Mega Rule was created in three parts. Part one focuses on increasing the maximum allowable operating pressure, material specification, and reporting requirements of many existing gas transmission lines in “high consequence areas.” HCAs correlate to areas that are known to have large amounts of people and infrastructure that would be significantly affected by a pipeline failure. Part two instates new repair regulations on pipelines within HCAs, including mandatory installation or upgrading of leak detection systems, and inspection of pipelines that were subjected to an extreme weather event within seventy-two hours of the event occurring (PHMSA, 2022).

Part three brings about the most changes for a pipeline operator: many more miles of once less-regulated gathering lines will now be subject to much higher regulatory compliance. This includes an estimated 426,000 miles of additional pipelines as well as over 90,000 miles of Type C gathering lines. Historically, gathering lines such as these were subject to less stringent regulations ("PHMSA Mega Rule," 2023). PHMSA addressed this in a statement where they said, "Large diameter, high-pressure gathering lines are susceptible to the same types of integrity threats as transmission pipelines. These threats include corrosion, excavation damage, and construction defects. The exemption of these pipelines from the safety requirements of the Federal Pipeline Safety Regulations failed to consider the present risks," (Federal Register, 2021).

U.S. Secretary of Transportation Pete Buttigieg said, speaking of the Mega Rule, "When pipelines leak or fail, the results can be deadly, as we saw in the 2010 San Bruno tragedy. This new rule will significantly improve safety and environmental protections for our nation's natural gas pipeline system, which will help save lives, avoid costly disruptions to gas service, and strengthen our supply chains," (PHMSA, 2022). In essence, the Mega Rule creates a much stricter regiment of rules by which pipeline operators are obligated to abide by; so what does it mean for operators moving forward?

Because of the expansion of regulatory authority given to PHMSA by the Mega Rule, tens of thousands of miles of existing (and frequently fatigued) pipelines will now need significant enhancements or otherwise full replacements. Doing so will ensure a much higher standard of safety for both operators and all those that would otherwise be affected by the next San Bruno. The cost to make such changes, however, will be high. For operators, this burden is surely the heaviest. Russel Treat, CEO of EnerACT Energy Services noted, “PHMSA estimates that compliance with this rule alone will cost the 421 hazardous liquid pipeline operators a combined $22.4 million per year, but PHMSA believes that the annual monetized benefits will outweigh the cost,” (Treat, 2015).

For others, the benefits of the new Mega Rule are high. For a contractor or pipeline inspector, jobs will be abundant with the influx of needed repairs. The same holds true for safety, inspection, and consulting companies. In a private interview, Mr. Matt Cheney, President and CEO of Applied Consultants Inc. stated that “The Mega Rule will be a great change for the oil and gas industry. I believe that in the coming years this Mega Rule will add numerous jobs to the industry. I also believe that my business will grow by twenty-five percent as the midstream companies have to make significant changes to how they build, operate and maintain these pipelines.”

Now more than ever, the midstream oil and gas industry is poised to present their safest operations yet. While the price associated with complying with PHMSA’s new Mega Rule will be lamented by some, many more, including those now living safer because of it, appreciate the rule as a wonderful advancement.

Word Count: 800, excluding in-text citations per contest rules

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