

Liquid Energy Pipeline Association
900 17th St, NW, Suite 600
Washington, DC 20006



October 25, 2022

South Dakota Public Utilities Commission
Capitol Building, 1st floor
500 E. Capitol Ave.
Pierre, SD 57501-5070

Re: Docket Number HP22-002 - In the Matter of the Application of Navigator Heartland Greenway, LLC for a Permit Under The South Dakota Energy Conversion and Transmission Facilities Act to Construct the Heartland Greenway Pipeline in South Dakota

The Liquid Energy Pipeline Association (LEPA) welcomes this opportunity to provide information to the South Dakota Public Utilities Commission (PUC) on the safe construction and operation of carbon dioxide (CO₂) pipelines, such as the Heartland Greenway pipeline currently under review by the PUC. Based on the current comprehensive regulatory framework in place and proven track record of safe CO₂ pipeline operations across the nation, it is clear that pipelines, such as the Heartland Greenway, provide a safe means of transporting CO₂ and should be approved.

LEPA promotes responsible policies, safety excellence, and public support for liquids pipelines. LEPA's member companies operate over 200,000 miles of pipeline across the United States. LEPA members range from small operators focused on a local region, to operators with multi-state systems supporting energy production, refining and carbon capture, to large midstream transmission companies. LEPA represents pipelines delivering transportation fuels like gasoline, diesel and jet fuel, agriculture and rural home heating fuels like propane, industrial feedstocks like ethane and butane, transportation fuel feedstocks like crude oil, and low carbon solutions like renewable diesel, ethanol, liquified petroleum gas and carbon dioxide.

Federal law and regulation impose comprehensive safety requirements on the construction and operation of CO₂ pipelines. Congress in the *Pipeline Safety Reauthorization Act of 1988* required the U.S. Department of Transportation to regulate CO₂ pipelines under federal pipeline safety regulations. The U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA) in 1989 expanded its federal pipeline safety regulations to cover CO₂ pipelines. Current PHMSA regulations at 49 CFR Part 195 prescribe hundreds of requirements on the construction, inspection, maintenance, monitoring and incident response for CO₂ pipelines. PHMSA inspects and enforces compliance on pipeline operators violating federal CO₂ pipeline safety requirements.

CO₂ pipeline operators, as required by federal regulations and their own safety programs, must devote significant resources to ensuring their pipelines operate safely.

CO₂ pipeline operators proactively inspect their pipelines on regular schedules to look for any issues and ensure the pipeline remains safe. Operators use diagnostic tools called “smart pigs” that travel inside pipelines scanning the walls with technology similar to an ultrasound or MRI found in a doctor’s office. Hi-tech inspection tools and regular inspections allow pipeline operators to identify and guard against pipe issues before they become a problem.

CO₂ pipeline operators perform preventative maintenance on their pipes to address potential issues before they become a problem. For example, an inspection may tell a pipeline operator a small amount of corrosion is starting to form on the pipe. It does not yet pose a problem for the pipe, but needs maintenance to remove and keep the pipe in safe condition. The pipeline operator will go out to the pipe segment with the identified issue and perform the appropriate maintenance, such as reapplying protective coating, installing a patch or sleeve around the pipe or replacing that section of pipe.

CO₂ pipeline operators monitor their pipelines from a central control center 24 hours a day, 7 days a week, 365 days a year. Specially trained controllers keep a watchful eye over systems monitoring pipeline pressure, flow and volume. Operator personnel patrol along the pipeline route and personnel in airplanes or helicopters travel overhead the length of the pipeline on a regular schedule looking for signs of leaks.

These pipeline safety programs are having their intended effect of improving pipeline safety performance. According to federal government safety data of 5,000 miles of CO₂ pipelines currently in operation, CO₂ pipeline incidents are down 56% over the last 5 years. Compared to other liquids pipelines, CO₂ pipelines are the safest. Since 2017, CO₂ pipelines have experienced 55% fewer incidents per mile than crude oil pipelines and 37% fewer incidents per mile than refined products pipelines.

Pipelines are also safer for the public and environment than other modes of transportation. Federal government analysis of a major pipeline project found a large pipeline project has 0.1% of the incidents and 62% fewer barrels released compared to shipping the same product by rail. Put another way, rejecting a major pipeline and shipping the same product by rail increases the risk of release by over 800 times and barrels released by 2.6 times. The federal government also found a pipeline emits 42% less greenhouse gas emission than transporting the same amount of energy by rail. They determined rejecting a major pipeline and shipping the same amount by rail increases GHG emissions by 1.2 million metric tons of CO₂ equivalent per year.

Sincerely,



Andrew Black
President & CEO
Liquid Energy Pipeline Association