

7-1) Refer to the Applicant's response to Staff data request 6-1. The Applicant states that a setback is "not always practicable due to other routing criteria, physical limitations, as well as landowner-specific location request." If a landowner requests that the pipeline be routed closer to the residence than what Navigator's plume modeling recommends, does Navigator explain the additional risk to the landowner? Please explain.

RESPONSE: Yes, Navigator explains our preferred buffer distance and any other relevant routing factors affecting the route on the parcel (e.g. such as wetlands, slope, sensitive habitat, etc.) and works with landowners in an attempt to find a mutually acceptable placement for the pipeline.

7-2) Refer to the Applicant's response to Staff data request 2-7. Provide the Applicant's definition of gathering places and population centers as used in the response.

RESPONSE: Gathering places include areas such as parks, businesses, and municipal boundaries.

7-3) Refer to the Applicant's response to Staff data requests 6-2 and 6-3. Provide the information requested for the current route submitted on May 25, 2023.

RESPONSE: 6-2.a. Relative to the route submitted on May 25, 2023, it appears there are 2 occupied residences within the 321-foot Initial Routing Buffer for a 6 inch Pipeline (Hudson Lateral and Chancellor Lateral)

6-2.b. Relative to the route submitted on May 25, 2023, it appears there are 5 occupied residences within the 321-519-foot Design and Operations Buffer for a 6 inch Pipeline (Hudson and Chancellor).

6-3.a. Relative to the route submitted on May 25, 2023, it appears there are 4 occupied residences within the 417-foot Initial Routing Buffer for a 6 inch Pipeline (Aurora)

6-3.b. Relative to the route submitted on May 25, 2023, it appears there are 5 occupied residences within the 417-687-foot Design and Operations Buffer for a 6 inch Pipeline (Aurora).

7-4) Refer to the direct and rebuttal testimony of Applicant witness Stephen Lee. On Page 13, question 23 of Stephen Lee's direct testimony, Mr. Lee states the following about the pipeline's leak detection system: "The continuous components will consist of a variety of compensated balance, real time transient model, negative pressure wave, *fiber optic sensing cables*, and strategically placed carbon dioxide monitoring devices. ... *The quantitative fiber optic systems* will be placed externally to the pipeline and use acoustics to identify third-party activity or the acoustic signature of a CO₂ release. ... The *fiber* will also detect a drop in temperature, which is indicative of a CO₂ phase change." (*emphasis added*) On Page 10, question 14 of Stephen Lee's rebuttal testimony, Mr. Lee states "Navigator *may* install fiber optic sensing cables along the pipeline ..." (*emphasis added*)

Based on Mr. Lee's rebuttal, it appears that Navigator has withdrawn its firm commitment to install a fiber optic system that it made in Mr. Lee's direct testimony. Please confirm or deny. If confirmed, please explain why Navigator has changed its position.

RESPONSE: Navigator has not withdrawn our commitment to utilize fiber optic sensing technology. Navigator will utilize a combination of compensated balance, real time transient model, negative pressure wave, fiber optic sensing cables, and strategically placed carbon dioxide monitoring devices. Not all systems will be installed at all locations along the system, thus driving the 'may' language in Stephen Lee's rebuttal testimony.

7-5) Refer to the Applicant's response to Staff data requests 1-7 and 2-14(b). On Page 1 of the document titled "Heartland Greenway System, Plume Modeling and Buffer Overview" it is stated that {BEGIN CONFIDENTIAL} "Risk = Probability x Consequence." However, the document does not include any information on how Navigator applied this risk equation. {END CONFIDENTIAL} Please provide Navigator's Quantitative Risk Assessment (QRA) that shows, at a minimum:

- 1) the probability of a failure with a carbon dioxide release from the proposed pipeline; and
- 2) the size of the carbon dioxide release represented by the probability identified.

Please include all technical details, workpapers, supporting documentation, and references to any data sets used in the quantitative risk assessment.

RESPONSE: NHG objects to this request as irrelevant and beyond the scope of this proceeding. The design, construction, operation, and maintenance of the Heartland Greenway Pipeline System are regulated by the Pipeline and Hazardous Materials Safety Administration of the U.S. Department of Transportation ("PHMSA"), pursuant to federal laws and regulations. The requirement to conduct a quantitative risk assessment is within the exclusive jurisdiction of PHMSA. NHG also considers this information highly sensitive and confidential in that it implicates public safety concerns relating to the security of energy infrastructure and protecting such infrastructure from terrorism and other threats.

Without waiving the above objection, NHG answers as follows:

- 1) The probability of a failure with a carbon dioxide release from the proposed pipeline is 0.0011 incidents/mi/year based on information available from PHMSA.
https://portal.phmsa.dot.gov/analytics/saw.dll?Portalpages&PortalPath=%2Fshare_d%2FPDM%20Public%20Website%2F_portal%2FSC%20Incident%20Trend&Page=All%20Reported
- 2) The size of the carbon dioxide release represented by the probability identified is 6,799 barrels.

NHG objects to producing the "technical details, workpapers, supporting documentation, and references to any data sets," other than the publicly available data from PHMSA, for the reasons set forth above. Notwithstanding these objections, see the attached based on historical data from PHMSA.

7-6) Referring to the confidential document provided as an amended supplemental response to Staff Data Request 5-10, please provide a map or figure that shows the dispersion distances identified in relation to known High Consequence Areas (HCAs) for each segment of the proposed pipeline in South Dakota.

RESPONSE: We do not have this information available as requested as a map. However, the updated valve map provided in response to DR2-10a depicts direct and indirect effects (collectively 'could affect') of HCAs based on the initial routing and emergency response buffers, respectively.

Dated this 17th day of July, 2023.

WOODS, FULLER, SHULTZ & SMITH P.C.

By /s/James E. Moore
James E. Moore
P.O. Box 5027
300 South Phillips Avenue, Suite 300
Sioux Falls, SD 57117-5027
Phone (605) 336-3890
Fax (605) 339-3357
Email: James.Moore@woodsfuller.com
Attorneys for Navigator Heartland Greenway

OBJECTIONS

The objections stated to Staff's Seventh Set of Data Requests were made by James E. Moore, one of the attorneys for Navigator Heartland Greenway, for the reasons and upon the grounds stated therein.

/s/ James E. Moore
*One of the Attorneys for Navigator Heartland
Greenway*

CERTIFICATE OF SERVICE

I hereby certify that on the 17th day of July, 2023, a true and correct copy of the foregoing Applicant's Responses to Staff's Seventh Set of Data Requests was served via e-mail transmission on the following:

Ms. Kristen Edwards
Staff Attorney
South Dakota Public Utilities Commission
500 E. Capitol Ave.
Pierre, SD 57501
Kristen.edwards@state.sd.us

Mr. Jon Thurber
Staff Analyst
South Dakota Public Utilities Commission
500 E. Capitol Ave.
Pierre, SD 57501
jon.thurber@state.sd.us

Mr. Darren Kearney
Staff Analyst
South Dakota Public Utilities Commission
500 E. Capitol Ave.
Pierre, SD 57501
darren.kearney@state.sd.us

/s/ James E. Moore

*One of the Attorneys for Navigator
Heartland Greenway*