

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF SOUTH DAKOTA

0-0

HP 22-002

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, :  
:  
:

**REBUTTAL TESTIMONY OF  
MONICA HOWARD**

0-0

**1. Please state your name and address for the record.**

Answer: My name is Monica Howard. My business address is 13333 California Street, Suite 202, Omaha, Nebraska.

**2. Have you previously provided testimony in this proceeding?**

Answer: No. I am adopting the testimony of Brandi Naughton submitted with the Application on September 26, 2022, as well as Naughton’s Supplemental Testimony on May 25, 2023.

**3. What is your position with Navigator?**

Answer: I am Vice President, Environmental and Regulatory of Navigator CO2 Ventures, LLC where I am responsible for overseeing the effort to obtain the state siting certificates, environmental permits, and other approvals necessary to construct the Heartland Greenway pipeline. I have over 23 years of experience as an environmental professional in the energy industry. The majority of my career pertains to securing environmental and regulatory

permits for large scale pipeline projects throughout much of the U.S. under various lead agencies. My CV is attached as Exhibit A.

**4. Are you qualified and able to adopt all of Brandi Naughton’s previous testimony?**

Answer: Yes. Brandi works for me in the Environmental and Regulatory Department, and I am familiar with and qualified to address all of the same issues. I will be able to answer questions about these subjects at the evidentiary hearing.

**5. Please address the several comments from Staff witnesses about an Inadvertent Return Contingency Plan.**

Answer: In response to comments raised by a few witnesses Navigator is providing a Draft Inadvertent Return Contingency Plan (Exhibit B). To minimize the potential for an inadvertent return, the Contractor will develop site specific protocols to be implemented for the protection of sensitive cultural and biological resources. The Contractor will be required to provide a project specific Inadvertent Return Contingency Plans prior to the start of respective HDD activities.

**6. To whose testimony are you responding in rebuttal?**

Answer: I am responding to the testimony of Jon Thurber, Jaclyn McGuire, Hilary Morey, Tim Cowman, Jenna Carlson Dietmeier, Adam DiAntonio, Amy Cottrell, Herbert Pirela, Brian Sterner, Sara Thronson, and Alissa Ingham.

**Testimony of Jon Thurber**

**7. What are your comments concerning Mr. Thurber’s testimony regarding surveys and route modifications?**

Answer: Mr. Thurber raised concerns regarding results from survey work completed to date. The following reports are being provided in response to his request and discovery requests as indicated below.

- Wetland delineation report submitted to the U.S. Army Corps of Engineers (USACE) on February 10, 2023, as part of the Pre-Construction Notification package (Staff DR 1-25). A supplemental report will be submitted to the USACE that will reflect survey results from the 2023 surveys; however, it is not expected to be available prior to the evidentiary hearing as a result of the timing of the report.
- Lined Snake Survey Report submitted to SDGP (Staff DR 1-29(d)).
- Memorandum regarding project impacts to protected bats in South Dakota. The project wide bat survey report was provided to and concurred with by the USFWS (Staff DR 1-29(a)).
- Dakota Skipper Survey Report (Staff DR 1-29(e)) provided to USFWS, which concurred with the findings.

Mr. Thurber also raises concerns regarding route modifications. Navigator provided updated mapping exhibits with supplemental testimony filed on May 25, 2023. These updated exhibits depicted the centerline filed with the initial application in September 2022 and an updated May 2023 centerline, which I believe addresses his request we clearly identify each shift in the route. None of the route modifications implemented impact new Landowners who did not previously receive notice of the project pursuant to SDCL § 49-41B-5-2.

**Testimony of Jaclyn McGuire**

**8. Do you agree with the testimony of Jaclyn McGuire regarding the type of remediation activities and the notification requirements if there were to be a release of CO2?**

Answer: Yes, I agree that in the unlikely event of a CO2 release that mitigation activities for impacted soil, groundwater, and/or surface water would depend on several factors, and, like Ms. McGuire, I am not aware of any long-term environmental impacts from a release. Additionally, Navigator recognizes that under ARSD 74:34:01:05 suspected discharges must be reported to DANR within 24 hours after the discharge is suspected when certain conditions exist. Required notifications will be included in the emergency response notification list.

**Testimony of Amy Cotrell**

**9. Do you have comments on Amy Cotrell's testimony where she states Navigator did not adequately address sections of the ARSD?**

Answer: Yes. Ms. Cotrell states that the Application did not adequately address 20:10:22:17 (effects on aquatic ecosystems) based on Navigator not having provided survey data for wetlands and waterbodies, or federal and state species. Surveys are still ongoing and reports only serve to validate information provided in the Application and are not material to the overall conclusion Navigator made, that effects on aquatic ecosystems will be minimal and short term based on quantitative impacts as well as the avoidance, minimization and mitigation measures discussed throughout the Application. In my twenty three years of experience evaluating environmental impacts on lines infrastructure projects, the desktop data and surveys provided in the application data adequately represent the order of magnitude of impacts from linear projects that only have a temporary impact to these resources resulting from construction based on the

“action plan to avoid, minimize, and/or mitigate negative impacts to flora, fauna, and habitats” that she states is lacking on page 4 lines 93-96 of her testimony, but is found throughout the Application and plans provided.

Ms. Cottrell also states that potential impacts to wetlands and waterbodies were not defined. Sufficient quantitative impacts are discussed in respective sections of the Application, and impacts from construction activities were generally discussed, but perhaps a more qualitative statement regarding impacts could be made. *Construction activities within the Project area, including the installation of the new pipeline and the refueling of machinery could result in impacts to surface waterbodies and wetlands. Potential impacts to aquatic resources include removal of vegetation, increased sedimentation and turbidity from in-stream/in-wetland and adjacent construction activities, decreased dissolved oxygen concentrations, compaction of soils, disruption of beds and banks, inadvertent release of chemical and nutrient pollutants from sediments, and introduction of contaminants such as fuels or lubricants.* Implementing the route development process described, obtaining respective permits for impacts, implementation of BMPs and project plans including ECG, SWPPP, SPCC, and IR all clearly demonstrate our avoidance, minimization, and mitigation measures. Compliance with all rules, regulations, permits and conditions further supports the fact that the project will not have a material impact on these resources.

While surveys and agency consultations are still ongoing, Navigator provided the following reports, plans, and memorandums in supplemental discovery responses based on surveys and agency coordination performed to date:

- The Wetland Delineation Report from the 2022 survey effort, which was provided to the USACE, which has jurisdiction over those features. This will be supplemented with the results of the 2023 survey effort.
- The reports Navigator coordinated with the USFWS and SDGF&P regarding federal and state listed species, including aquatic species. They also explain avoidance, minimization, and mitigation measures. However, a quantitative analysis of impacts to Wetlands and Waterbodies was provided as Tables 6.6-1 as well as identifying waterbodies in Tables 6.6-2, 6.6-3. Section 2.2. discusses that environmental features, including wetlands and waterbodies, were also factored into routing in an effort to avoid and minimize crossing or impacting these features. Avoidance and minimization measures were further addressed in Section 6.6.3, including affirmative statements that no high-quality fisheries are crossed and larger water resources that are crossed won't be impacted due to the implementation of Horizontal Direction Drill pipeline installation method. This information has been shared with respective state and federal regulatory agencies.

**10. Do you agree with Ms. Cottrell's testimony on p. 4 lines 122 that Navigator's mitigation measures for aquatic resources is deficient relative to construction?**

Answer: No. She states that she disagrees with the mitigation measures, which align with industry standards and are discussed in the Application (including Sections 6.5 and 6.6), and ECG (Section 5.2, 5.3, and 5.4), but only offers that instream ECDs should be deployed at HDD and open cut crossings, which appears to be a recommendation to add a mitigation measure to the existing mitigation measures discussed. Specific to HDDs, she neglects to recognize that Section 5.4.2 states that the HDD contractor will develop project specific HDD plans describing

prevention, detection, monitoring, notification, and corrective actions in the event of a release. The potential for inadvertent returns is evaluated based on the geology and surficial geology at respective HDD locations; a blanket recommendation to disturb wetland and waterbodies being crossed by or near HDDs that would otherwise not be disturbed by installing in-stream ECDs may not be warranted based on the site-specific conditions. Appropriate preventative measures will be implemented at each HDD location based on the factors at those locations. Proactive instream ECDs may be implemented as well at open cut crossings as appropriate, the ECD will be updated to reflect this.

**11. Do you have a comment on Amy Cottrell’s recommendations for additional mitigation measures for wetlands and waterbodies?**

Answer: Ms. Cottrell’s recommendations appear to be preferences on how the Application is formatted as many of her recommendations are addressed in the Application and plans provided. She suggests that a wetland crossing table 6.6-1 should include impacts to hydrology and soil compaction; however, these are addressed in respective sections of the Application Section 6.3 and 6.4. Also, she recommends Navigator ‘better describe wetland crossing methods’ in the Application; however additional information is provided on three pages of the ECG in Section 5.2 “Wetland Crossings”. She states that Navigator did not include aquatic impacts resulting from above ground facilities, but Section 6.6.2 confirms that these will be placed in upland areas and Section 6.4.1 states they will not affect hydrology.

I disagree that Navigator has not adequately addressed impacts to aquatic flora or fauna. Her statements that “an assessment of survey results will need to be performed to determine the completeness of potential impacts to aquatic fauna” and “no species-specific baseline data are provided; these are necessary to fully identify potential impacts and thus mitigation measures for

aquatic fauna.” suggests that a detailed inventory of all species in the project footprint is necessary to identify potential impacts and mitigation measures. However, species-specific assessments are done to assess sensitive species or species identified by regulatory agencies, which Navigator is doing and as she acknowledges with respect to consulting with the respective state and federal agencies for those species. To be clear, our impacts to aquatic resources, including aquatic flora and fauna, will be temporary during construction. Vegetation and aquatic animals will reestablish post-construction based on the minimization, mitigation and restoration measures discussed throughout the application; we have committed to addressing the concerns of the regulatory authorities with jurisdiction over aquatic resources and obtaining all necessary permits and abide by all permit conditions.

#### **Testimony of Sara Thronson**

**12. Sara Thronson recommends that the PUC review the results of Navigator’s geohazard analysis (Thronson testimony at p. 3-4). Do you agree?**

Answer: Yes. Navigator provided its geohazard assessment “Geological and Geohazard Desktop Study” report on April 14, 2023 and stated that a Phase II study including field verification and additional due diligence activities will be performed. The Phase II activities are planned for later this year and will not be available for review prior to the statutory deadline for a PUC decision on the docket. Navigator witness Stephen Lee discusses more details related to Navigator’s geohazard analysis in respective testimony.

**13. Do you have any comments related to the erosion concerns raised by Sara Thronson (Thronson testimony p. 4)?**

Answer: Yes. Ms. Thronson recommends that the PUC require site specific pre-construction erosion control plans and acknowledges that the SWPPP is under development and



Navigator committed to obtaining this necessary permit for construction. This SWPPP will include site specific map requirements as it is a requirement specified in Section 5 the DANR General Permit for Stormwater Construction Activities “ ... a Stormwater Pollution Prevention Plan shall include .... Site map that includes - pre-construction site conditions, site topography and drainage patterns before and after major grading activities, discharge locations, natural buffer boundaries and widths, description of all Best Management Practices to be used.” Thus, in my opinion a PUC condition specific to a compliant SWPPP would be duplicative and unnecessary.

**14. Is there any additional information Navigator can provide related to saline soils potentially crossed by the Project in response to Sara Thronson’s testimony (Thronson testimony p. 6 line 203)?**

Answer: Yes. There is one soil map unit classified as saline, Salmo silty clay, very wet (Sa), for 0.15 mile at MP 17.3 on the POET Hudson Lateral. Soils in the Salmo series are very deep, moderately permeable, poorly drained soils with slopes of less than one percent. Salmo soils are typically used for pasture and hay, with native grasses including cordgrass, switchgrass, western wheatgrass, and sedges. Navigator will have an Agricultural Inspector delineate any saline soils in and around the mapped soil unit prior to construction so that if present, this soil type can be properly managed during construction and restoration, such as stockpiling and managing saline soils in a manner in which they will not mix with non-saline and replace in the same location during backfill and adding soil amendments post-construction (like Gypsum) to mitigate compaction and promote revegetation. Also if saline shallow groundwater is present, manage the discharge so that it does not reach non-saline areas, which may include pit-to-pit dewatering or the use of frac tanks. .

**15. Do agree with Sara Thronson’s testimony advising Navigator to include references for inspectors by mile post identifying potential problem areas (p. 5 lines 158-162, p.6 lines 187-191, p. 6 lines 216-220)?**

Answer: Yes, Navigator agrees with this practice and includes such references in its agricultural/environmental inspection manuals for construction.

**Testimony of Alissa Ingham**

**16. Do you agree with Alissa Ingham that Navigator did not properly analyze the compatibility of the proposed facility regarding its effect on row and non-row crops, irrigated lands, rural life, and farming; and that no mitigation measures for impacts to these land uses are included in the application (Ingham testimony pp. 4-5)?**

Answer. No. She states that addressing row and non-row crops and irrigated lands collectively as cultivated lands or agricultural lands is deficient and neglects to address farming. However, in addition to the impacts and mitigation measures discussed for ‘cultivated crops’ in Section 6.8 Land Use, Section 6.5.2 Vegetation includes impacts and mitigation of crops, pasture, rural residences and farms. Additionally, Section 7.10 Agriculture further addresses impacts and mitigation relative to agricultural lands, farmsteads, and rural residences. The Application acknowledges the short-term disturbance from construction on all affected lands including rural residences and agricultural practices. Mitigation, restoration and compensation measures are discussed throughout the application and supplemental plans (Agricultural Protection Plan, Weed Management Plans, and Environmental Construction Guidance). Based on the siting, design, construction methods, and operations measures detailed in the Application and submitted plans, the pipeline is compatible with all land uses crossed; all affected areas can revert to pre-construction land uses outside of the nominal acreage needed for above ground

facilities and the only notable impact to potential future land use along the project would be the restriction for permanent structures over the 50-foot permanent easement.

**17. Do you have any comments on Alissa Ingham’s testimony regarding noise sensitive land uses (Ingham’s testimony p. 5)?**

Answer: Yes. Noise impacts from pipeline construction are temporary and largely mobile, and as she acknowledges we have committed to mitigate by compensation and/or accommodations when needed, which is in line with industry practices. Ms. Ingham’s recommendation to identify each rural residence and business building along the route in Navigator’s Application Exhibit As, which are clearly depicted in the aerial imagery provided in Exhibit A to the Application, is not warranted in my opinion.

**Testimony of Hebert Pirela**

**18. Do you have any comments on Mr. Pirela’s testimony regarding Navigator’s Agricultural Protection Plan, Weed Mitigation Plan, or Inadvertent return plan (Pirela’s testimony pp. 4-5)?**

Answer. Yes, these plans were provided with Navigator’s supplemental testimony and thus not available prior to his testimony. I want to add that we provided the Agricultural Protection Plan to Brenda Sievers, Plant Industry Program Manager with the South Dakota Department of Agriculture and Natural Resources for review and comment and addressed comments prior to submittal to the PUC. Further we coordinated with the DANR and county weed managers on development of the Weed Mitigation Plan.

**Testimony of Hilary Morey.**

**19. Do you have any comments on the recommendations provided in Hilary Morey’s testimony?**

Navigator completed another season of line snake surveys for which a survey report is being provided for Game, Fish & Parks to review. Navigator agrees to adhere to the recommendations to minimize potential impacts to the line snake where its presence is known or assumed and confirm that there are no, and will not be, any above ground facilities in habitat known or assumed to be occupied by the line snake.

Navigator completed bat surveys on accessible parcels per the approved 2022 bat survey plan and provided a survey report to USFWS that USFWS concurred with. Navigator is assuming presence of protected bats at unsurveyed locations for purposes of consultation and is accounted for in the Biological Opinion. A memo addressing bat impacts in South Dakota was provided through supplemental discovery (Staff DR 1-29(a)).

Navigator did not submit a survey plan for the Topeka Shiner because we did not perform any presence/absence surveys for the species. We are assuming it is present at all locations identified as known or potential habitat by the DANR and USFWS and will use the HDD pipeline installation method at each of those locations to avoid direct impacts to the species.

We acknowledge and will honor the request for 60-days' notice prior to construction to coordinate public access to any walk-in areas that may be temporarily disrupted due to construction activities.

Lastly, we will continue to consult with the DANR in the event there are any additional route changes that may affect different resources or habitat areas.

### **Testimony of Jenna Carlson**

**20. Do you have any comments regarding concerns and recommendations in Jenna Carlson's testimony?**

In response to addressing the comments provided to Navigator in the March 2023 letter from the SHPO office, the updated report included the requested revisions to the Unanticipated Discovery Plan (UDP), specifically adding Dustin Lloyd and the point of contact for the Archeological Research Center (ARC), and the ARC was added throughout the document regarding a party to be contacted. Also, language was revised in Step 4 to clarify her question related to tribes; as this is a draft UDP awaiting comments from the USACE Archeologist and interested tribes, the contact list for tribes has not been populated as the tribes are still reviewing and commenting. We acknowledge the recommendation to include adequate buffers beneath 39MH0196 based on materials at 92 centimeters, and the pipeline will be installed via HDD at this location as depicted in the project electronic mapping. The pipeline will be no less than 10 feet deep in the area, which we feel is adequate, but are awaiting the final HDD design to confirm or modify the design appropriately.

In response to the request for a hard copy of the report, we misunderstood and sent the report to the ARC; we have since corrected the error and mailed a copy directly to the SHPO office.

As discussed in our meeting in November 2022, Navigator has made and is continuing to make efforts to meaningfully engage with interested tribes, which to date has included offers for tribal participation in surveys (or performing independent surveys), including a Tribal workforce development plan in our agreement with the unions, hosting monthly project status update meetings, providing the draft 2022 cultural resource survey reports for review and comment, and communicating sensitive sites identified during survey for their review and feedback on avoidance measures.

### Testimony of Adam DiAntonio

**21. Do you agree with the recommendations in Adam DiAntonio’s testimony at p. 3, lines 80-90?**

Answer: We agree with these recommendations and will update the ECG to add:

- Check that all construction equipment is properly tuned and maintained.
- Minimize idling of construction equipment and vehicles.
- Covers should be utilized on equipment (e.g., dump trucks, roll-off boxes, etc.) when transporting materials with significant dust content for the project.

### Testimony of Brian Sterner

**22. Mr. Sterner states that Navigator’s Application is deficient because it does not address the capture facilities (Sterner Testimony at p. 4). Do you agree?**

Answer: No. As stated in section 1.3 of our Application “The carbon capture facilities are not part of the HGPS CO<sub>2</sub> pipeline for which a permit is being requested in this proceeding.” For these reasons, we did not include respective information in our application for our pipeline system.

**23. Please respond to Mr. Sterner’s testimony that Navigator has not adequately addressed certain sections of South Dakota’s administrative rules (Sterner Testimony at pp. 5-6).**

Answer: Mr. Sterner states that we did not adequately address hydrology in part based on lack of pre- and post-drainage patterns on maps, but this issue is addressed in Section 6.4.1 of the Application, “*The pipeline is a below ground facility and therefore is not expected to interrupt drainage patterns within the Project area. The above ground capture facilities are being installed at developed industrial facilities, and the MLVs represent individually minor footprints*

*of 30-feet wide by 70-feet long (less than 0.05 acres each) and are not expected to have an impact on drainage patterns. The approximately 2 to 4-acre L/R site is currently sited in an essentially flat, upland field and will be constructed as to not interfere with drainage patterns.”*

With respect to the effects of construction on drainage patterns, the Application states that lands disturbed during construction will be restored to preconstruction contours and conditions, and will revert to existing land uses. Temporary impacts to hydrology from construction are also addressed in our discussion of best management practices (including in the ECG), through permitting under the jurisdiction of the U.S. Army Corps of Engineers where we are required to restore wetland and waterbody hydrology, and through NPDES permitting with the DANR.

Mr. Sterner also states that we did not adequately address ARSD 20:10:22:20 (Water Quality) (Sterner Testimony at p. 6) because we did not provide a Stormwater Pollution Prevention Plan (SWPPP) as an exhibit in the Application. The regulation states: “The applicant shall provide evidence that the proposed facility will comply with all water quality standards and regulations of any federal or state agency having jurisdiction and any variances permitted.” The Application does identify the need for, and commits to obtaining, the Construction Stormwater Permit from the DANR, for which a SWPPP must be completed prior to submitting a Notice of Intent (i.e. the application for a Construction Stormwater Permit). As stated in the updated permitting table filed with supplemental testimony, we anticipate applying for that permit in the fourth quarter of 2024 and the SWPPP will be finalized accordingly and made available to the DANR for review as required.

Mr. Sterner states that we did not adequately address ARSD: 20:10:22:16 (effect on Terrestrial Ecosystems) (Sterner Testimony at p. 8) because we did not cite the ecosystem classification system we addressed and should have used the EPA's ecosystem classification

system. We used the USDA's classification system as cited in Section 6.5 (USDA, 2022) and a link was provided in the reference section ([https://www.fs.usda.gov/land/ecosysmgmt/colorimagemap/ecoreg1\\_provinces.html](https://www.fs.usda.gov/land/ecosysmgmt/colorimagemap/ecoreg1_provinces.html)). I am not aware of a requirement to use one ecoregion system classification over another. Navigator's consultants have routinely used the USDA's ecosystem system in assessing environmental impacts in other NEPA and state level environmental analyses. This was not a concerns raised in discovery. Regardless of the classification system we used, the Application does identify and discuss biotic and abiotic factors in the project area as well as potential impacts including avoidance, minimization, and mitigation measures to address ARSD: 20:10:22:16.

**24. Mr. Sterner suggests a potential inconsistency in Table 1.8-1 regarding the NPDES permits Navigator intends to secure for construction (Sterner Testimony at p 4). Please respond.**

Answer: The stated inconsistency in Table 1.8-1 is about the NPDES permits we intend to secure for construction. Upon review, I noted a typographical error in a reference to "waters of the U.S" that should have read "waters of the State." We have updated the language in the Agency Action column to offer more clarity to avoid a perceived discrepancy. A copy is attached as Exhibit C. We understand that an applicant can add a request for coverage of Temporary Discharge Activities to a Construction Stormwater Permit (after the Construction Stormwater Permit has been issued) thus possibly avoiding the need to obtain separate permits. Navigator will coordinate with the DANR for necessary approvals and obtain the necessary authorization prior to any discharges taking place, whether under a construction stormwater permit or a separate temporary discharge activities permit.



**25. Mr. Sterner states that in Section 6.4.3, there should be an active vegetation restoration process to stabilize soils (Sterner Testimony at p. 5). Please respond.**

Answer: The Application addresses reseeding practices in sections 6.5.2 and 6.8.5, in our Weed Management Plans (which were provided in discovery after the date of Mr. Sterner's testimony), and in sections 4.9 and 5.3.8 of the ECG. Further the ECG addresses post-construction monitoring for revegetation success, which is also a requirement of the DANR construction stormwater permit.

**26. Mr. Sterner states that neither the Application nor the ECG discuss the potential impacts of operating heavy equipment on wet soils and does not address mitigation measures (Sterner Testimony at pp. 5-6). Please respond.**

Answer: Operating heavy equipment on wet soils can cause rutting, surface and/or subsoil compaction negatively affecting soil structure. Sections 6.7 and 6.8 of the ECG discuss methods for avoiding and minimizing impacts (i.e. mitigation) to soils when soils are wet and Section 4.7.1 discusses decompaction practices.

**27. Mr. Sterner states that we did not mention whether jurisdictional and non-jurisdictional wetlands were delineated. Please respond.**

Answer: On page 39 of the Application this issue is addressed in Table 6.6.1 and the statement that "*Table 6.6-1 summarizes all wetlands within the Project area; this includes USACE jurisdictional wetlands and non-jurisdictional wetlands.*" In addition, we provided the wetland delineation report that was submitted to the USACE with our Pre-Construction Notification in February 2022 that captures features delineated during 2022 survey activities. A copy was provided in a supplemental discovery response (Staff DR 1-25). An updated report will also be provided to the USACE after completion of the 2023 survey season.

### Testimony of Tim Cowan

**28. Do you have comments on Tim Cowman’s testimony that Sections 6.2 and 6.4 of the Application do not properly summarize the geologic formations crossed by the project (Cowman Testimony at p. 2)?**

Answer: Mr. Cowman states that we did not adequately address geologic formations because the map we provided depicting geologic hazards show geology at a substantial depth, not the surface geology, but he also states that there are no geologic formations that may pose a risk to the pipeline. In Section 2.2 of the Application, Navigator addresses geology as a factor used in the Pivvot routing tool, including surficial geological conditions such as slope, topography, landslide potential, and peak ground acceleration. Also, a description of surficial deposits is discussed in Section 6.2. Navigator also discussed its geohazard assessments, provided the initial assessment report, and included a discussion of (Section 6.2.1) and table (Table 6.2-2) detailing geohazards. Navigator also created two additional maps, Bedrock Geology Map and State Geologic Map provided in a supplemental response to DR 1-17. Navigator witness Stephen Lee further addresses Navigator’s geohazard assessments.

Mr. Cowman also states that hydrology was not adequately addressed in the Application because surface water resources were not addressed in Section 6.4 (Cowman Testimony at 2-3). However, surface water resources are addressed in Section 6.6 “Aquatic Wildlife and Ecosystems” and Table C-2. In addition, impacts and mitigation measures to surface waters are addressed in Section 6.6.3. Navigator also identified the agencies with jurisdiction over surface waters in permit table 1.8-1 and committed to obtaining all permits necessary for construction and operation of the project. Section 6.6.2 of the Application states that there will be no loss of

wetlands as a result of the project, and Section 6.6.5 states that all streams crossed will be restored; thus, there is no long term or permanent impact to surface waters.

**Testimony of Loren Staroba**

**29. What are your comments regarding Mr. Staroba’s testimony regarding the impacts to his fields from pipelines installed in 1975 and 1998?**

Answer: I acknowledge the long-term yield losses he explains and supports with the yield maps. I am also aware that pipeline construction practices have evolved and improved over time and especially since the 2-4 decades when those pipelines were installed. This is supported by the Ohio State Study he provided as Attachment 3. Best management practices regarding construction in agricultural areas are commonly accepted and Navigator’s commitment to implementing those as demonstrated in the Agricultural Protection Plan that was submitted to the PUC after being reviewed and comments addressed by SD DANR.

**30. Do you have any other comments on the article summarizing the Ohio State University Study he included as Attachment 3?**

Answer: Yes. Mr. Staroba highlighted the statement that the study’s subject pipeline projects implemented best management practices, but the study didn’t have any information on what those practices were or if they were monitored and enforced on the subject parcels. Navigator has a robust monitoring plan that includes Agricultural Inspectors to ensure that our plans are properly implemented. The study stated that compaction was higher in the affected area post-construction. In our Agricultural Protection Plan, Navigator addresses decompaction regarding ways to avoid, minimize, and remediate compaction.

The study shows that crop yields may be reduced for several years on agricultural properties where pipeline installation work has occurred. It is widely recognized that property

on which pipeline construction is performed experiences crop yield losses for some period of time after the pipeline is installed and the land is restored. This is why Navigator, like other developers of linear infrastructure (pipelines and transmission lines), offers compensation for crop losses and yield reductions as part of our overall easement compensation package. While Mr. Staroba also highlighted that “three underground pipelines were evaluated within 5 years of installation in Ohio” in the study, construction of all the study’s subject pipelines was completed in 2018, so the crop yields measured in 2020 and 2021 represent losses at 2- and 3-years post-construction.

The Ohio State Study acknowledges this compensation and suggests that it is insufficient because industry pays for losses for only 3-4 years post-construction. However, the study doesn’t explain that the respective percentages paid for those years are well above what is experienced in the field. Specifically, Navigator is offering payments for crop losses of 250%, which is being calculated for compensation purposes at 100% in the first year (year of installation when construction activity is present and harvest is not likely practical), 70% in the second year (first year post-restoration), 40% in the third year (second year post-construction), 25% in the fourth year (third year post-construction), and 15% in the fifth year. These payments total 250% of crop yields over a five-year period. The five-year period is used to calculate values for compensation and does not directly correlate to expected yield loss in each respective year and the calculation is conservative in that crop loss compensation calculations are expected to exceed actual experienced losses. Payment for year 1 losses is 100% based on active construction taking place. Actual yield losses in years 2, 3, 4, 5 collectively do not add up to another 150% as is supported by both the Ohio State and Tekeste studies that showed crop losses declined in subsequent years. The Ohio State Study states corn losses were 23.8% and 19.5% for

years 2 and 3 and soybean losses were 7.4% and 12.6% for years 2 and 3; the respective crop loss payment from by Navigator if correlated directly would be 40% and 25%, well above experienced crop losses. Thus, if yields take another year or two to fully recover, the concept is that the landowner is at least made whole.

### **Testimony Regarding County Ordinances**

**31. In his direct testimony, Jon Thurber states that Navigator has not yet provided the Commission with any information necessary to make a finding under SDCL § 49-41B-28 that local land use regulation is unreasonably restrictive. Have any counties affected by the proposed route taken legislative action since the deadline for Staff’s testimony and Navigator’s supplemental testimony?**

Answer: Yes. Both Minnehaha County and Moody County have acted since the deadline. On June 6, 2023, Minnehaha County approved Ordinance MC16-179-23. A copy is attached as Exhibit D. The Ordinance requires that any person who has filed an application with the Public Utilities Commission must submit written notice to Minnehaha County of the PUC filing; must provide certain information to Minnehaha County, including route information, a copy of the permit application filed with the PUC, a map identifying entry into the County’s right of way and affected county road crossings, a map and list of all affected property owners in the County, a set of plans and specifications for the pipeline, and copies of the emergency response and hazard mitigation plans as required by PHMSA. The Ordinance provides that the applicant will be notified of a determination of its project as a special permitted use or the need to apply for a conditional use permit as soon as practicable, but in no event more than 30 days after receiving approval of its permit by the PUC. The Ordinance also sets forth minimum separation criteria, including 330 feet for dwellings, churches, and businesses, measured “from

the center line of the proposed pipeline to the closest parcel boundary of a use.” The Ordinance provides that a property owner may grant a waiver of the minimum setback distance. If the County requires the applicant to seek a conditional use permit, the applicant must submit a fee of \$25,000. If a conditional use is granted, the applicant must pay an annual fee to the county of \$300 per linear mile of pipeline within the County.

At its meeting on June 12, 2023, the Moody County Commission had a first reading of Ordinance No. 2023-01. A copy of the Ordinance is attached as Exhibit E. The Ordinance was amended for further consideration by the County Commission at its meeting on June 26, 2023. As amended, the Ordinance requires any pipeline facility requiring a permit from the Public Utilities Commission to obtain a conditional use permit from Moody County. A conditional use permit cannot be granted unless the pipeline meets a number of standards, including a minimum setback of 1,500 feet from cautionary uses, including schools, daycares, churches, dwellings, manufactured homes, and all permitted Concentrated Animal Feeding Operations. The separation distance is the minimum horizontal distance measured from the wall line of the neighboring cautionary use to the centerline of the proposed pipeline. Affected property owners may grant a waiver, which provides the County Board of Adjustment discretion to allow the separation distance to be less than that established by the Ordinance. The Ordinance also requires that an applicant provide information to the Board of Adjustment before it can act on an application for a conditional use permit, including an affidavit attesting that necessary easement agreements with landowners have been obtained, proof of notice by certified mail to all landowners within one mile of the proposed pipeline, and a set of plans and specification for the pipeline. The Ordinance requires that a pipeline must be bored under all existing tile line or

utility lines it crosses. Moody County passed its Ordinance with one amendment at its meeting on June 26, 2023.

**32. Can Navigator comply with the setback distances in the Minnehaha County Ordinance?**

Answer: Navigator understands the provision that the separation distance is to be “measured from the center line of the proposed pipeline to the closest parcel boundary of a use” to mean that the pipeline cannot cross within 330 feet any parcel on which there is a dwelling, church, or business. Navigator’s current route through Minnehaha County would violate this provision. Navigator further understands that based on its route violating this provision, it would need to seek waivers from as many or more landowners that it seeks easements on in the county. Additionally, a re-route through the County to satisfy the minimum setbacks is not possible based on the abundance of overlapping exclusion zones. Minnehaha County produced a map detailing the exclusion zones in blue and Navigator added its current pipeline route to it and it is provided as Exhibit F. Based on our customer being located in Brookings County and needing to route the pipeline south-southwest to Iowa, there is no available route that avoids the exclusion zones. Navigator explained in Section 2.0 of its Application the number of factors taken into account in routing the pipeline. Navigator has regulatory obligations to avoid and minimize impacts on a number of factors, which it must demonstrate to obtain other state and federal permits. I am confident that our proposed route effectively and responsibly balances those criteria.

**33. Do you think that the setback distances are unreasonably restrictive within the meaning of SDCL § 49-41B-28?**

Answer: Yes. When developing a pipeline project, we identify risks and appropriate measures to avoid, minimize, and mitigate those risks. This is also a requirement for pipeline companies under PHMSAs regulations and Navigator is subject to 44 C.F.R. Part 195 and has taken extensive and conservative measures to comply with and exceed those regulations.

**34. Are there other provisions of Minnehaha County’s Ordinance that you think are unreasonably restrictive?**

Answer: Yes, Navigator believes there are multiple provisions of the Minnehaha County Ordinance that are unreasonably restrictive, including the following: The Ordinance requires that Navigator submit some of the same information to the County that it must submit to the Public Utilities Commission, which is unnecessary given that the PUC filings are a matter of public record and the County is entitled to party status before the Commission and the applicant is required by SDCLL § 49-41B-5.2 to provide a hard copy of its PUC application to the County Auditor in each county affected. In addition, the Ordinance fails to specify when Navigator must obtain a conditional use permit or what the criteria are for the County to determine whether a conditional use permit is appropriate. The requirement that Navigator pay a fee of \$25,000 in connection with its application for a conditional use permit is arbitrary and not reasonably related to any costs that Minnehaha County may incur in connection with an application for a conditional use permit. Further, an annual fee based on mileage is arbitrary as other linear infrastructure in the county is not subject to a similar requirement and I understand that the project, once installed will be subject to taxes that are centrally assessed and portions remitted back to the local taxing authorities, which should address the matters for which the annual assessment would be used. The timing of this ordinance is unreasonably restrictive due to the



burdensome routing requirements imposed after years of project development, planning, routing, surveys, engineering, and permitting.

**35. Can Navigator comply with the setback distances in the Moody County Zoning Ordinance?**

Answer: No. Based on a 1,500-foot separation distance, Navigator's current route would violate the proposed ordinance. Navigator could not find a feasible route through Moody County based on a 1,500-foot separation distance.

**36. Do you think that setback provisions of the Moody County Ordinance are unreasonably restrictive?**

Answer: Yes. Based on Navigator's pipeline design, plume dispersion modeling, and integrity management plan a setback of 1,500 feet from any occupied structure is not warranted. Moody County did not discuss adopting that separation distance with Navigator despite repeated requests and offers Navigator made to meet with the County and discuss their concerns. Navigator was allowed three minutes to provide public comment at one public meeting on May 23, 2023, but no public comment was allowed at the meeting on June 12, 2023, and we understand none is planned for the meeting on June 26, 2023. Navigator is unaware of any research supporting a setback of 1,500 feet as reasonably necessary to protect public health, safety, and welfare. It appears that Moody County increased the setback to 1,500 feet because that is the setback adopted by Brown County. Navigator has served written discovery on Moody County to determine the basis for the setback and may provide additional evidence at the hearing based on the discovery answers, but a response has not been provided as of the date of this testimony.

**37. Are there other provisions of Moody County's Ordinance that you think are unreasonably restrictive?**

Answer: Yes, there are multiple provisions of the Moody County Ordinance that are unreasonably restrictive, including the following: The Ordinance requires that Navigator submit some of the same information to the County that it must submit to the Public Utilities Commission, which is unnecessary given that the PUC filings are a matter of public record and the County has party status before the Commission, and applicants are required by SDCL § 49-41B-5.2 to send a copy of the Application to the County Auditor's office. The requirement that a conditional use permit can be issued only after Navigator has filed an affidavit attesting that necessary easement agreements with landowners have been obtained is not reasonably related to public health, safety, and welfare. The requirement that a pipeline must be bored under all existing tile lines and utility lines it crosses is not reasonably related to public health, safety, and welfare, and is not based on sound engineering and construction practice. The requirement that Navigator abandon the pipeline in place may be contrary to federal regulation on abandonment at the time and is not reasonably related to public health, safety, and welfare. The requirement that Navigator pay a fee of \$25,000 in connection with its application for a conditional use permit appears to be based on Minnehaha County's proposed ordinance, is arbitrary, and is not reasonably related to any costs that Moody County may incur in connection with an application for a conditional use permit. The fact that the county *may* allow for a lesser setback option *if* Navigator obtains a waiver from a landowner is unclear as there are no stated criteria the county will use to approve the reduced setback. Additionally, these waivers will inherently include landowners that are not otherwise affected by the pipeline posing an undue burden on Navigator to identify, contact, negotiate a waiver when a permit application with these waivers may not

ultimately be approved. The transferability section is unreasonably restrictive as it requires a new owner to apply for a new permit with no explanation of criteria the county will use to approve or deny the permit and no timeline for a county decision to approve or deny. This effectively gives the county authority over pipeline operations for which PHMSA has exclusive jurisdiction. The timing of this ordinance is unreasonably restrictive due to the burdensome routing requirements imposed after years of project development, planning, routing, surveys, engineering, and permitting has been performed.

**38. Is Navigator requesting that the PUC declare that these Ordinances as applied to Navigator's proposed pipeline are unreasonably restrictive under SDCL § 49-41B-28 and therefore preempted by the PUC's order and decision in this proceeding?**

Answer: Yes. Navigator has separately filed a motion with the Commission to address this issue based on evidence to be heard at the hearing beginning on July 25, 2023, and based on briefing to be submitted after the hearing as ordered by the Commission.

**39. Do you have any comments on Jon Thurber's testimony referencing local government participation and the applicant's burden or proof under SDCL § 49-41B-22(4) to establish the facility will not unduly interfere with the orderly development of the region?**

Answer: Yes. The Heartland Greenway pipeline was routed to avoid developed and developing areas as described in Section 2.2 of the Application. And like other linear, belowground pipeline infrastructure, this pipeline does not inherently interfere with orderly development of any region because the only development precluded, which is documented in its easements, is permanent structures over the 50-foot permanent easement we are seeking.

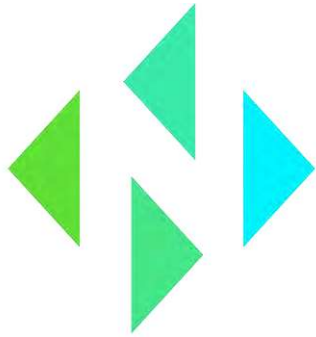
**40. Does this conclude your testimony?**

Answer: Yes.

Dated this 26th day of June, 2023.

/s/ Monica Howard

Monica Howard



## Navigator CO<sub>2</sub>

### PROFILE

Monica has twenty-two years of experience as a proven environmental professional supporting the energy industry.

### CONTACT

WEBSITE:  
navigatorco2.com

EMAIL:  
MHoward@navco2.com

# MONICA HOWARD

VICE PRESIDENT, ENVIRONMENTAL AND  
REGULATORY

### WORK EXPERIENCE

---

Navigator CO<sub>2</sub>, **VP of Environmental and Regulatory**  
[2021-current]

Responsible for leading the effort in pursuing the state siting certificates and environmental permits necessary to construct and operate the Heartland Greenway System

Phillips 66 Pipeline Company, **Contract Project Consultant**  
[2019-2020]

Respected as an environmental and regulatory subject matter expert; retained to oversee the effort to secure permits on an approximate 800 miles crude oil pipeline and terminal project. Regularly collaborated with ESG, Public Relations, Government Affairs and Legal for communications to Executive Management on risks and opportunities

Crestwood Midstream, **Senior Director, Land and Environmental Permitting**  
[2017-2019]

Established and developed the Environmental Permitting Department, strategic hiring of key personnel, and restructuring of the Land Department

Energy Transfer Partners, **Director of Environmental Science**  
[2006-2017]

Led and developed the environmental and permitting department supporting the company's major capital projects on FERC regulated and non-regulated assets.

### EDUCATION

---

**University of Wisconsin - Platteville**

Bachelor of Science, Land Reclamation and Environmental Science

### CAREER HIGHLIGHTS

---

- Successfully permitted approximately 4,000 miles of pipeline infrastructure
- Over twenty years of experience permitting pipelines of various commodities under a multitude of lead agencies

**EXHIBIT  
B**



## **HEARTLAND GREENWAY PIPELINE SYSTEM**

### **Inadvertent Return Contingency Plan for Horizontal Directional Drilling**

**January 2023**

**EXHIBIT  
N15**



**TABLE OF CONTENTS**

General .....1

Drilling Fluid.....1

Best Management Practices .....2

Inadvertent Release Response & Control .....3

Communication Plan .....4

DRAFT



### General

Inadvertent return of drilling fluid is a potential concern when the Horizontal Directional Drill (HDD) is used under sensitive habitats, waterways, and areas of concern for cultural resources. The HDD method uses bentonite slurry, which is a fine clay material as a drilling lubricant.

The purpose of a Contingency Plan is to:

- Minimize the potential for and timely detection of an inadvertent return associated with horizontal directional drilling activities.
- Protect areas that are considered environmentally sensitive (streams, wetlands, other biological resources, cultural resources).
- Ensure an organized and efficient response in the event of a release of drilling fluid.

To minimize the potential for an inadvertent return, the Contractor shall develop protocols to be implemented for the protection of sensitive cultural and biological resources. The Contractor shall implement proactive instream erosion control devices at each HDD location based on the factors at those locations. The Contractor shall be required to provide a final Inadvertent Return Contingency Plan prior to the start of HDD activities.

### Drilling Fluid

The selection and proper utilization of drilling fluid is key to a successful HDD process. Drilling fluid is made up of primarily water and bentonite (de-hydrated clay) having pH values between 8 and 10. Bentonite is a naturally occurring, non-toxic, inert substance that meets NSF/ANSI-60 Drinking Water Additive Standards and is frequently used for drilling potable water wells.

Therefore, the ecological and environmental impacts of an inadvertent release of drilling fluid into a water body is a temporary increase in local turbidity until the drilling fluid dissipates with the water current or settles out.

Bentonite serves many notable purposes in the HDD process, which includes but is not limited to:

- Cleans the drilled cuttings from the bore hole and cools the drilling tools,
- Transports cuttings to the surface for recycling,
- Aids in stabilizing formations by supplying a cohesive nature to the surrounding geological formation and preventing fluid loss from the bore hole,
- Provides lubrication for the drill string and downhole assembly, which reduces friction forces at the formation,
- Drives a down-hole drill motor for rock drilling,
- Provides hydrostatic fluid pressure in the bore hole to offset ground formation pressures.

Drilling fluid is composed of a carrier fluid and solids. The selected carrier fluid for this crossing





consists of water (approximately 96%) and an inorganic, bentonite clay (approximately 4%).

The selection of which brand to use is typically based on price, availability, and proximity to the proposed drill site.

### **Best Management Practices**

Best management practices are utilized for prevention, containment, and control of drilling fluid. Containment of drilling fluids will be attained through various precautions implemented prior to positioning the major pieces of equipment on the proposed sites. Configuration considerations are made for site geology, topography, storm water management and erosion control.

Contractor personnel shall be required to undergo pre- construction training to discuss preemptive measures and early response procedures and techniques specific to this project as identified below. This training will introduce Contractor personnel to the appropriate chain of communication leading up to suspending of drilling operations should that action become necessary.

The following topics shall be addressed during the training session:

- Preventative Methods to Invoke Prior to and During Construction;
- Details of the Spill Plan and Inadvertent Return Contingency Plan;
- Environmental Protection;
- Mitigative Resources Available at the site for Environmental Protection;
- Site Specific Permit Conditions;
- Monitoring of HDD operations (Recognize the Potential Areas of Inadvertent Release/Spill);
- Chain of Authority and Responsibility;
- Chain of Communication;
- List of Contact names and phone numbers of governing agencies to be posted;
- Incidents that must be reported and the person to report them to,

Contractor drilling personnel shall be trained in the safe handling and use of drill fluids and materials associated with directional drilling. Every drill project has a designated supervisory person responsible for implementation and execution of environmental policy, safety monitoring and reports, and implementation of mitigation plans. The Project Supervisor shall be well-versed in the written procedures and policy maintained and is responsible for carrying them out.

At the entrance site, typically a pit is excavated to the approximate dimensions of 6'L x 6'W x 4'D for containment and processing of drilling returns. The exit sump pit will also be excavated to the approximate dimensions of 6'L x 6'W x 4'D to contain drilling fluids for re-cycle and re-circulation into the mud system.



### Inadvertent Release Response & Control

Typically, lost circulation has the highest probability of occurring while the pilot hole is being drilled due to the smaller bore-hole annulus and the relatively large volume of solids being displaced and carried out in the drilling fluid. In the course of drilling the pilot hole, circulation will often be temporarily lost as the pilot bit is advanced through more permeable or less competent sections of the ground formation when fluid pressures are at a maximum. As the pilot bit advances beyond these sections of the bore-hole fluid pressure will fall and circulation within the bore-hole will naturally be re-established. Much of the fluid lost to the formation under the greater pressures will return back to the bore-hole as the pressures fall, in which case the drilling fluid is not likely to migrate to the surface or the river. It is also possible for the drilling fluid to leave the bore-hole and migrate in a direction other than the ground surface or the wetland, in which case it may never be observed even if circulation is lost for long periods of time.

The use of an environmentally safe drilling fluid ensures that even in the unlikely event of fluid loss at sensitive areas, there will be no adverse environmental impact other than a temporary minor increase in turbidity until the drilling fluid dissipates. It is important to note that any temporary increase in turbidity as a result of inadvertent drilling fluid loss while directional drilling the crossing will be several orders of magnitude less than that of an open-cut crossing.

Should the driller believe that circulation is being completely lost the following procedures shall be implemented:

- Temporarily cease drilling operations, including pump shut down;
- Dispatch experienced observers as required to monitor the area in the vicinity of the crossing, for inadvertent returns of drilling fluid at the surface or in an environmentally sensitive area;
- Identify the position of the drill head in relation to the point of entry
- Re-start the pump and stroke the bore-hole up and down in stroke in an effort to size the bore-hole annulus and re-open the circulation pathway.

Observers will continuously monitor for inadvertent fluid returns as long as the pump remains on.

If circulation is re-established, drilling will proceed as usual and monitoring for inadvertent fluid will take place once again if the rate of drilling returns progressively decreases at the fluid entry pit. If circulation is not re-established, monitoring for inadvertent fluid returns to the ground surface and river will continue and drilling will proceed.

The Contractor shall observe the amount of inadvertent return and determine appropriate collection method. If the amount of inadvertent return is not great enough to allow practical collection, the affected area shall be diluted with fresh water and allowed to dry and dissipate naturally back into the earth.

If inadvertent drilling fluid returns are observed to be surfacing above-ground at a location that is inaccessible, i.e., along the bed of a water body, or, into the water, the following procedures will be followed:



- Ensure that all reasonable measures within the limitations of the technology have been taken to re-establish circulation;
- Upon approval from company or company representative, continue drilling with the minimum amount of drilling fluid required to penetrate the formation and successfully install the product line.

If inadvertent drilling fluid returns are observed to be continuously surfacing above ground at an accessible location, the Contractor shall implement procedures that may include the following:

- Cease pumping of drilling fluid;
- Contain the location such that the drilling fluid cannot migrate across the ground surface;
- Identify appropriate materials and equipment used for containment;
- Excavate a small sump pit at the location and provide a means for the fluid to be returned to either the drilling operations or a disposal site (i.e., pump through hose or into tanker);
- Notify on-site contractor supervisor and Owner representative as required by the communication plan;
- Continue drilling operations after company/company representative approval
- Clean-up once inadvertent returns are contained/controlled;
- Fluid pumped to a secure containment vessel;
- Area is diluted with water;
- Area is restored to original condition.

### Communication Plan

(To be determined by Contractor) Project contacts are as follows:

Contacts	Phone No.	Affiliation
<b>Drilling Contractor</b> <i>On-Site Representative</i> TBD Project Manager	<b>TBD</b>	<b>TBD</b>
<b>Drilling Contractor</b> <i>On-Site Representative</i> TBD Drill Superintendent-HDD RIG#1	<b>TBD</b>	<b>TBD</b>



<b>Drilling Contractor</b> <i>On-Site Representative</i> TBD Drill Superintendent-HDD RIG#2 (If Needed)	<b>TBD</b>	<b>TBD</b>
<b>Drilling Contractor</b> <i>Off-Site Representative</i> TBD Assist. Operations Manger	<b>TBD</b>	<b>TBD</b>

In case of emergency, the following shall be notify by the on-site inspector who will invoke the communication plan in the following manner: The representative chain of communication is as follows;

<b>Contacts</b>	<b>Phone No.</b>	<b>Affiliation</b>
TBD	TBD	TBD
<i>After Hours Contact</i>		

The Company Representative will contact the following Organizations as needed;

<b>Contacts</b>	<b>Phone No.</b>	<b>Affiliation</b>
TBD	TBD	TBD

<b>Table 1.8-1 Anticipated Permits for South Dakota Segment of the Heartland Greenway Pipeline System</b>			
<b>Agency</b>	<b>Permit/Consultation/ Notification</b>	<b>Agency Action</b>	<b>Estimated Application Date</b>
<b>Federal</b>			
U.S. Army Corps of Engineers, Omaha District – South Dakota Regulatory Office	Sections 404/401 Clean Water Act Nationwide Permit 58 with PCN	Authorization of discharge of fill material into waters of the U.S., including wetlands	Submit Pre-Construction Notification December 2022
	Section 106 Archaeological Resources Protection Act	Section 106 consultation through the Nationwide Permit 58 process	December 2022
U.S. Fish and Wildlife Service, South Dakota Ecological Services Field Office	Endangered Species Act Section 7 Consultation	Consider lead agency findings of impacts on federally listed; provide Biological Opinion if the Project is likely to adversely affect federally listed or proposed species or their habitats	Submit Biological Application February 2023
Farm Service Agency	Conservation Reserve Program	Authorization of crossing areas enrolled in the Conservation Reserve Program	Second quarter of 2023
Pipeline Hazardous Materials Safety Administration (PHSMA)	Operator ID	Issue Operator Identification Number	Received November 2021
	Notification Type F – Construction or Rehabilitation of Gas or Liquid Facilities	Filed February 2022	
<b>State</b>			
South Dakota Department of Agriculture and Natural Resources	NPDES (General Permit SDR100000) Authorizing Stormwater Discharges Associated with Construction Activities under the South Dakota Surface Water Discharge System	Covers discharges from construction activities. May also request coverage for hydrostatic test water discharges.	Fourth Quarter 2023
	NPDES (General Permit SDR070000) Authorizing Temporary Discharges Activities under the South Dakota Surface Water Discharge System	Covers non-stormwater construction dewatering, hydrostatic testing discharges. Coverage can be requested to be added to construction stormwater permit.	Prior to Construction for trench dewatering at least 15 days prior to each hydrostatic discharge
	Permit to Appropriate Water	Consider issuance of water withdrawal permit for temporary use	Prior to Construction
South Dakota Game, Fish, and Parks	State Listed Threatened and Endangered Species	Consultation on natural resources	November 2022, September 2022, March 2023, April 2023 (ongoing)
South Dakota State Historical Society, State Historic Preservation Office	Section 106 of National Historic Preservation Act	Review and comment on activities regarding jurisdictional cultural resources	February 2023
<b>Local</b>			

**Table 1.8-1  
Anticipated Permits for South Dakota Segment of the Heartland Greenway Pipeline System**

<b>Agency</b>	<b>Permit/Consultation/ Notification</b>	<b>Agency Action</b>	<b>Estimated Application Date</b>
County Road Departments	Crossing Permits	Issuance of permits for crossing of county roads	Fourth quarter of 2023/First quarter of 2024
County and Local Authorities	Floodplain, Conditional Use, Weed Control, Dust Control, Noise Control, and Building permits where required	Review under county approval process	Third and fourth quarter of 2023 through first quarter of 2024

ORDINANCE MC16-179-23

AN ORDINANCE OF MINNEHAHA COUNTY, SD, AMENDING THE 1990 REVISED ZONING ORDINANCE FOR MINNEHAHA COUNTY BY AMENDING ARTICLE 3.00, A-1 AGRICULTURE DISTRICT, ARTICLE 4.00, RR RURAL RESIDENTIAL DISTRICT, ARTICLE 5.00, R-1 RESIDENTIAL DISTRICT, ARTICLE 6.00, C COMMERCIAL DISTRICT, ARTICLE 7.00, I-1 LIGHT INDUSTRIAL DISTRICT, ARTICLE 8.00, I-2 GENERAL INDUSTRIAL DISTRICT, ARTICLE 9.00, RC RECREATION/CONSERVATION DISTRICT, ARTICLE 12.00, ADDITIONAL USE REGULATIONS, ARTICLE 24, FEES; AND ARTICLE 26.00, DEFINITIONS.

WHEREAS, pursuant to SDCL Chpt 11-2, the Minnehaha County Board of County Commissioners has the authority to adopt for Minnehaha County a comprehensive county plan and zoning ordinance: to protect and guide the physical, social, economic, and environmental development of the county; to protect the tax base; to encourage a distribution of population or mode of land utilization that will facilitate the economical and adequate provisions of transportation, roads, water supply, drainage, sanitation, education, recreation, or other public requirements; to lessen governmental expenditure; and to conserve and develop natural resources; and

WHEREAS, pursuant to SDCL Chpt 11-2, the Minnehaha County Board of County Commissioners has the authority to amend, supplement, change, modify, or repeal the comprehensive plan and existing zoning ordinances to further the comprehensive plan's goals and objectives and in furtherance of the best interests of the County; and

WHEREAS, the traditional and predominant land uses within the unincorporated portions of Minnehaha County have been agricultural, residential, recreational, and above ground light and general industrial uses; and

WHEREAS, the proposed establishment of the bulk transportation of toxic, hazardous and regulated substances and gases by Transmission Pipeline (as defined below) through the County would constitute a new land use, which has never been a traditional land use within the County, and which will significantly impact future development of the County's land-use planning vision; and

WHEREAS, new and expanded land use and facilities for the bulk transportation of toxic, hazardous and regulated substance and gases through Minnehaha County would adversely impact the traditional and predominant mixed-uses throughout Minnehaha County; and

WHEREAS, the establishment, development and expansion of Transmission Pipelines for the bulk transportation of toxic, hazardous and regulated substances and gases in Minnehaha County would be inconsistent with the 1990 Revised Zoning Ordinance for Minnehaha County ("Comprehensive Plan") which provisions are a vital part of the County's policies and goals for future economic development; and

WHEREAS, the purpose of this ordinance is to implement Article 12.18 in a manner that (a) is not inconsistent with federal or state law, (b) treats all Transmission Pipelines in a similar manner, to the extent they are similarly situated, and (c) utilizes to the greatest extent feasible the land use and zoning regulations and processes already utilized in Minnehaha County.

NOW THEREFORE, BE IT ORDAINED BY MINNEHAHA COUNTY, SOUTH DAKOTA:

That Ordinance MC16-09, the 1990 Revised Zoning Ordinance for Minnehaha County is hereby amended as follows:

**Section 1. That Article 3.03 of the 1990 Revised Zoning Ordinance for Minnehaha County, is hereby amended by adding a new use as follows:**

(O) Transmission Pipeline in accordance with Article 12.18.

**Section 2: That Article 4.03 of the 1990 Revised Zoning Ordinance for Minnehaha County, is hereby amended by adding a new use as follows:**

(E) Transmission Pipeline in accordance with Article 12.18.

**Section 3: That Article 5.03 of the 1990 Revised Zoning Ordinance for Minnehaha County, is hereby amended by adding a new use as follows:**

(E) Transmission Pipeline in accordance with Article 12.18.

**Section 4: That Article 6.03 of the 1990 Revised Zoning Ordinance for Minnehaha County, is hereby amended by adding a new use as follows:**

(I) Transmission Pipeline in accordance with Article 12.18.

**Section 5: That Article 7.03 of the 1990 Revised Zoning Ordinance for Minnehaha County, is hereby amended by adding a new use as follows:**

(G) Transmission Pipeline in accordance with Article 12.18.

**Section 6: That Article 8.03 of the 1990 Revised Zoning Ordinance for Minnehaha County, is hereby amended by adding a new use as follows:**

(D) Transmission Pipeline in accordance with Article 12.18.

**Section 7: That Article 9.03 of the 1990 Revised Zoning Ordinance for Minnehaha County, is hereby amended by adding a new use as follows:**

(G) Transmission Pipeline in accordance with Article 12.18.



**Section 8: That Article 12 of the 1990 Revised Zoning Ordinance for Minnehaha County, is hereby amended by adding a new subsection (12.18) as follows:**

**12.18 TRANSMISSION PIPELINES.** Transmission Pipelines in accordance with the following:

- (A). Application Required.
  - (1). Any person who has filed an application (“Applicant”) with the South Dakota Public Utilities Commission (PUC) for a permit to construct, maintain, and operate a new Transmission Pipeline along, over, or across land in the jurisdiction of Minnehaha County shall apply to the Office of Planning and Zoning to permit the Planning Director to verify Applicant’s conformance with the conditions prescribed in this Article. The Applicant shall submit a written notice of such application to the Office of Planning and Zoning within thirty (30) days of filing the application with the PUC, unless the application was filed with the PUC prior to the effective date of this Article in which case the Applicant shall submit written notice under this Article within thirty (30) days of the effective date of this Article.
  - (2). Upon receiving a written notice set forth in Article 12.18(A)(1), the Planning Director shall and request sufficient documentation to evaluate the project according to requirements set forth in this Article 12.18.
- (B). Application Requirements for Pipeline Companies. Every Transmission Pipeline application pursuant to this Article shall submit the following documents and information to the Office of Planning and Zoning at the request of the Planning Director:
  - (1). All required forms prescribed by the Planning Director, in addition to all proposed surveyed route information prepared by a professional land surveyor licensed in South Dakota clearly indicating the center line of the Transmission Pipeline.
  - (2). A complete copy of the application for a permit filed with the PUC pursuant to or within applicable statutory provisions, and as the application for the PUC permit is amended or changed, the Applicant shall simultaneously provide updated information and documents to the County.
  - (3). A map identifying each entry into the County’s right-of-way, and each proposed crossing of a County road or other County property.
  - (4). A map and a list containing the names and addresses of all Affected Property Owners in the County.
  - (5). A set of plans and specifications showing the dimensions and locations of the Transmission Pipeline, including plans and specifications for all related facilities, and above-ground structures, including without limitation: pumps, valve sites and shutoff valves.
  - (6). A copy of Applicant’s emergency response and hazard mitigation plan as may be required pursuant regulations adopted by PHMSA emergency preparedness, emergency response, and hazard mitigation.
  - (7). A statement identifying any confidential information in the application and a request, if any, to withhold such information from public examination or disclosure. Any request to withhold such information

from public examination or disclosure shall include the statutory basis for such claimed exemption. A failure to identify confidential information in the application may result in the County treating such information as a public record.

- (8). Applicant will be notified of a determination of its project as a special permitted use or the need to apply for a conditional use permit as soon as practicable but in no event more than 30 days after receiving approval of its permit by the PUC.
  - (9). Should Applicant’s application to the PUC for a permit to construct, maintain, and operate a new Transmission Pipeline along, over, or across land in the jurisdiction of Minnehaha County be denied, Applicant’s application pursuant to this Article will be denied as moot.
- (C). Separation Criteria. The minimum separation criteria in Table 1 shall be used in the routing and siting of a Transmission Pipeline. For the purposes of Article 12.18, a “dwelling” shall include any structure that includes residential living quarters within it.

<b>TABLE 1: TRANSMISSION PIPELINE MINIMUM SEPARATION CRITERIA</b>	
Dwellings, Churches, and Businesses	330 ft
Public Parks and Schools	1,000 ft
Municipal Boundaries By the Following Municipal Classifications as of the most recent Census Data	
First Class (Population of 5,000 and over)	5,280 ft (1 mile)
Second Class (Population between 500 and 5,000)	3,960 ft (3/4 mile)
Third Class (Population of less than 500)	2,640 ft (1/2 mile)

- (D). Measurement of separation. The separation distance set forth in Table 1 is to be measured from the center line of the proposed pipeline to the closest parcel boundary of a use or municipal boundary set forth in Table 1.
- (E). Reduction of Separation Criteria for Dwellings and Businesses.
  - (1). A property owner may grant a waiver of the minimum setback distance from the Transmission Pipeline in the same manner and with the same effect as a conveyance of an interest in real property.
  - (2). A waiver under this section shall be created in writing, and the waiver or a memorandum thereof shall be filed, duly recorded, and indexed in the office of the Minnehaha County Register of Deeds. Any such waiver runs with the land or lands benefited and burdened and terminates upon the conditions stated in the waiver.
  - (3). Any such waiver is void if the Transmission Pipeline fails to obtain the necessary permit(s) and authorization from the South Dakota Public Utilities Commission or other applicable federal agency for the construction of such Transmission Pipeline within five years after the effective date of the waiver.
- (F). Setback Reduction for Municipalities. In accordance with municipal extraterritorial jurisdiction (e.g. SDCL 9-29-1), a waiver from the minimum setback requirements may be obtained in the form of a signed resolution from the affected municipality’s elected body.

- (G). Contact Information. Applicant shall provide to the Minnehaha County Office of Emergency Management:
- (1). The exact content and all known dangers of the Regulated Substance, the flammable, toxic or corrosive gas or substance being transported in the Transmission Pipeline; and
  - (2). A copy of Applicant's emergency response and hazard mitigation plan as may be required pursuant regulations adopted by PHMSA emergency preparedness, emergency response, and hazard mitigation.
  - (3). The names, phone numbers, and contact information of the Applicant's emergency response personnel and personnel authorized by the Applicant to receive service and respond to all notices, demands, complaints, concerns or other requests; and
  - (4). Applicant shall notify the Minnehaha County Office of Emergency Management within ten (10) days if any of the information required under this Section changes.
- The requirements of this Section shall be binding upon Applicant's heirs, successors, assigns and agents.
- (H). Any term used in Article 12 which is not defined in Article 26.02 shall have the same meaning and definition as set forth in SDCL 49-41B-2, as in effect on July 1, 2023, and ARSD 20:10:22:01 as in effect on July 1, 2023.

**Section 9: That Article 24 of the 1990 Revised Zoning Ordinance for Minnehaha County, is hereby amended by amending and adding the following terms as follows:**

24.05 CONDITIONAL USE.

- (A). Except as required in Section 24.05(b) below, Aa fee of \$250.00 shall be charged for filing an application for a conditional use permit in any district.
- (B). Transmission Pipeline:
- (1). A fee of \$25,000.00 shall be charged for filing an application for a conditional use permit for a Transmission Pipeline.
  - (2). If a conditional use is granted for a Transmission Pipeline, the Applicant or actual operator or their successors, assigns and agents shall pay to the County an annual fee of \$300 per linear mile of pipeline within the County. The fee shall be used to defray the direct and indirect costs associated with general administration and enforcement of this section. The fee shall be payable by January 20th of each year and deposited in the general fund of the County.
- (C). If any use, for which a conditional use permit is required, is commenced prior to the application for a conditional use permit, the application fee shall be double the regular fee.

**Section 10: That Article 26.02 of the 1990 Revised Zoning Ordinance for Minnehaha County, is hereby amended by amending and adding the following terms and definitions in alphabetical order:**

306. GAS PIPELINE FACILITY. A pipeline, a right of way, a facility, a building, or equipment used in transporting gas or a Regulated Substance or for treating such gas or Regulated Substance during its transportation. This term does not include gas pipeline facilities used to transport “natural gas” as defined by the Natural Gas Act, 15 U.S.C. §717 et seq, as in effect on July 1, 2023.
327. HAZARDOUS LIQUID PIPELINE FACILITY. A pipeline, a right of way, a facility, a building or equipment used or intended to be used in transporting a hazardous liquid or a Regulated Substance.
575. REGULATED SUBSTANCE. A regulated substance shall include:
- a. ~~pesticides and fertilizers, All toxic and hazardous and toxic substances as defined designated by the United States Environmental Agency (EPA) pursuant to thru~~ any of the following: Clean Water Act (CWA), Toxic Substances Control Act (TSCA), Resource Conservation and Recovery Act (RCRA), Clean Air Act (CAA) or Comprehensive Environmental Response Compensation and Liability Act (CERCLA);
  - b. All petroleum and petroleum substances, kerosene, fuel oil, oil sludge, oil refuse, oil mixed with other wastes, crude oils, additives used in refining oils and gasoline;
  - c. Hazardous materials as defined by the United States Department of Transportation (DOT) and/or the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to the Pipeline Safety Act, 49 U.S.C. §60101 et seq, and as defined by 49 C.F.R. Subtitle B, et seq, as in effect on July 1, 2023;
  - d. This term does not include sewage and sewage sludge or “natural gas” as defined by the Natural Gas Act, 15 U.S.C. §717a(5), as in effect on July1, 2023.
672. TRANSMISSION PIPELINE. A transmission pipeline shall include:
- a. A Hazardous Liquid Pipeline Facility;
  - b. A Gas Pipeline Facility;
  - c. A “transmission facility” as defined by SDCL 49-41B-2.1, as in effect on July 1, 2023, used exclusively for the distribution, transportation or gathering of a hazardous liquid or a Regulated Substance;
  - d. A “modified facility” as defined by SDCL 49-41B-2.2, used exclusively for the distribution, transportation or gathering of a hazardous liquid or a Regulated Substance; and,
  - e. This term also includes a pipeline that transports hazardous liquid or Regulated Substance within a storage field or transports hazardous liquid or Regulated Substance from an interstate pipeline or storage facility to a distribution main.

**Section 11: Severability Clause.**

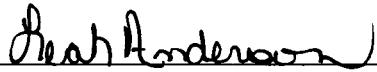
The provisions of this Ordinance are severable. If any provision of this Ordinance or the application thereof to any person or circumstance is held to be invalid, such invalidity shall not affect other provisions or applications of this Ordinance that can be given effect without the invalid provision or application.

Adopted this 6 day of June, 2023.  
Effective: July 13, 2023

MINNEHAHA COUNTY

By: Jean Bender  
Chair, Board of County Commissioners

ATTEST:

  
\_\_\_\_\_  
County Auditor

1 <sup>st</sup> Reading	May 2, 2023
Legal Ad. – Argus Leader, Brandon Valley Journal, Garretson Gazette, Minnehaha Messenger	May 9, 2023 May 10, 2023 May 11, 2023 May 12, 2023
2 <sup>nd</sup> Reading & Final Adoption	June 6, 2023
Fact of Adoption – Argus Leader, Brandon Valley Journal, Garretson Gazette, and Minnehaha Messenger	June 13+20, 2023 June 14+21, 2023 June 15+22, 2023 June 16+23, 2023
Effective Date	July 13, 2023

**ORDINANCE NO. 2023-01**

**AN ORDINANCE ENTITLED, AN ORDINANCE TO AMEND ARTICLE II “DISTRICT REGULATIONS”, ARTICLE IV “SUPPLEMENTAL REQUIREMENTS”, AND ARTICLE V “DEFINITIONS”, ADOPTED BY ORDINANCE 2020-02, AS AMENDED, OF THE ZONING ORDINANCE OF MOODY COUNTY.**

BE IT ORDAINED by the Board of County Commissioners of Moody County, South Dakota: that Article II, “DISTRICT REGULATIONS” Chapter 2.04 “Agricultural District” Section 2.04.05 “Conditional Uses”, adopted by Ordinance 2020-02, as amended, of the Zoning Ordinance of the Moody County be amended by adding language in bold and underline:

**#42. Pipeline Facility provided they meet the requirements of Chapter 4.36.**

BE IT FURTHER ORDAINED by the Board of County Commissioners of Moody County, South Dakota: that Article IV, “SUPPLEMENTAL REQUIREMENTS” Chapter 4.36. Pipelines, adopted by Ordinance 2020-02, as amended, of the Zoning Ordinance of the Moody County be amended by deleting the strikeout language and adding language in bold and underline:

**CHAPTER 4.36. PIPELINES FACILITY.**

**1.** Any pipeline **facility** requiring South Dakota Public Utilities Commission approval shall also require a conditional use permit. A conditional use permit shall be issued by the Board of Adjustment if the applicant adheres to all requirements of the South Dakota Public Utilities Commission which may include various Moody County recommendations regarding such issues such as but not limited to **setback/separation requirements**, right-of-way, haul roads, building permits, etc. **A pipeline facility cannot be approved until it meets the following standards:**

**2. Setbacks.**

a. **Minimum setback shall be one thousand five hundred (1,500) feet from cautionary uses. Exception: Municipal Corporation boundaries shall be five thousand two hundred eighty (5,280) feet. Setback shall be the minimum horizontal distance measured from the closest municipal parcel boundary to the center line of the proposed pipeline.**

b. **The setback shall be the minimum horizontal distance measured from the wall line of the structure of the neighboring “cautionary use” to the center line of the proposed pipeline or wall line of the structure of any above ground pipeline facility structure.**

i. **Exception: The Board of Adjustment may allow setback/separation distances to be less than the established distance identified if the applicant obtains waiver(s) from owners of property where the “cautionary use” is within the required separation/setback distance. If approved, such agreement is to be recorded and filed with the County Register of Deeds. Said agreement shall be binding upon the heirs, successors, and assigns of the title holder and shall pass with the land.**

3. Transferability. If a Pipeline Facility, which has a previously issued county permit, changes ownership, the new owner has sixty (60) calendar days in which to apply for a transfer of ownership in order to keep the current permit valid. The new owner will be required to abide by the permit requirements and letter of assurances that were issued under the permit application. If no transfer is completed within sixty (60) calendar days, the new owner will be required to submit a new application for approval.
  
4. The following required information is to be submitted and reviewed by the Board of Adjustment prior to the issuance, or as a condition to the issuance, of a conditional use permit for any pipeline facility:
  - a. Owner's/Applicant(s) name, address, and telephone number.
  - b. Final route of proposed pipeline facility;
  - c. Site map related to any above-ground pipeline facility structures;
  - d. Map of easements for pipeline facilities;
  - e. Affidavit attesting that necessary easement agreements with landowners have been obtained;
  - f. Map showing any "cautionary uses" within one (1) mile of the project area and ability to meet required setback/separation requirements;
  - g. Preliminary map of sites for which haul road agreements will need to be secured;
  - h. Location of other pipeline facilities within one (1) mile of proposed pipeline facility;
  - i. Project schedule.
  - j. Documentation of notification, by certified mail, of all landowners within one (1) mile of proposed pipeline facility.
  - k. Documentation of notification, by certified mail, of all Road Authorities (municipal, township and State) where pipeline facility will traverse said Road Authority's right-of-way and submit proof of all approved permits;
  - l. As a condition of approval for any pipeline facility by the Board of Adjustment, the documentation of an approved permit from the South Dakota Public Utilities Commission (SDPUC) is required. A conditional use permit may be issued by the Board of Adjustment prior to and conditioned upon SDPUC approval;
  - m. Any other information as contained in the application and requested by the Administrative Official or Board of Adjustment;
  - n. Final haul road agreements are to be submitted prior to construction;
  - o. Proof of right-of-way easement for pipeline facility to be submitted prior to construction.



- p. A set of plans and specifications showing the dimensions and locations of the pipeline facility, including plans and specifications for all related facilities, and above-ground structures, including without limitation: pump, valve sites and shutoff valves.
- q. All pipelines shall be bored and shall not bisect or disrupt or damage any existing tile lines or utility lines

5. Abandonment

- a. Each pipeline abandoned in place must be disconnected from all sources and supplies of hazardous liquids; purged of the hazardous liquids, and sealed at the ends. However, the pipeline need not be purged when the amount of hazardous liquid is so small that there is no potential hazard.
  - i. If air is used for purging, the operator shall insure that a combustible mixture is not present after purging.

BE IT FURTHER ORDAINED by the Board of County Commissioners of Moody County, South Dakota: that ARTICLE V "Definitions", adopted by Ordinance 2020-02 as amended, of the Zoning Ordinance of the Moody County be amended by adding language in bold and underline:

Abandoned: means to permanently remove from service.

Cautionary Uses (In reference to a pipeline facility): means schools, daycares, churches, dwellings, manufactured homes and all permitted Concentrated Animal Feeding Operations.

Gas: means any flammable, toxic or corrosive gas not subject to the Natural Gas Act (15. U.S.C. 717 et seq.).

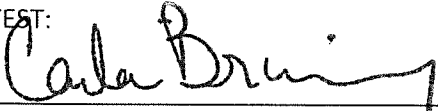
Hazardous liquids: means petroleum or a petroleum product, nonpetroleum fuel, including biofuel, that is flammable, toxic, or corrosive; or would be harmful to the environment if released in significant quantities; carbon dioxide transported by a hazardous liquid pipeline facility; and any substance the Secretary of Transportation decides may pose an unreasonable risk to life or property when transported by a hazardous liquid pipeline facility in a liquid state; not subject to the Natural Gas Act (15. U.S.C. 717 et seq.).

Pipeline: A line of pipe with pumps, valves, and control devices for conveying liquids, gases, or finely divided solids.

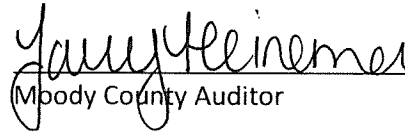
Pipeline Facility: means a pipeline, facility, or building used in transporting or treating hazardous liquid, gas, or carbon dioxide not subject to the Natural Gas Act (15. U.S.C. 717 et seq.).

Adopted this 26<sup>th</sup> day of June, 2023.

ATTEST:



Chairperson  
Moody County Board of County Commissioners



Moody County Auditor



Lake County

Moody County

EXHIBIT F

Pipestone County, MN

MINNEHAHA COUNTY

T104N

T103N

T102N

T101N

Rock County, MN



Minnehaha County GIS

Map Date: 5/31/2023

McCook County

R52W Turner County

R51W

R50W

R49W

R48W

R47W

Lincoln County

Lyon County, IA

Disclaimer: This Data is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. Minnehaha County makes no warranties, express or implied, as to the use of the Data. The requester acknowledges and accepts the limitations of the Data, including the fact that the Data is dynamic and is in a constant state of maintenance, correction and update. If errors are found, please contact the Planning and Zoning Department of Minnehaha County.

- Legend**
- Parks and Schools
  - Residential Properties 330'
  - First Class Setback
  - Second Class Setback
  - Third Class Setback

South Dakota Game Fish and Parks, Est. HIRE, Garmin, iGraph, Geotechnologies, Inc. MET/NASA, USGS, EPA, NPS, USDA, Est. NASA, NGA, USGS, FEMA