

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Denbury Green Pipeline – North Dakota, LLC
12-inch Cedar Hills Pipeline Pjct – Slope & Bowman
Siting Application

Case No. PU-19-294

AFFIDAVIT OF SERVICE BY CERTIFIED MAIL

STATE OF NORTH DAKOTA
COUNTY OF BURLEIGH

Geralyn R. Schmaltz deposes and says that:

she is over the age of 18 years and not a party to this action and, on the **19th day of November 2021** she deposited in the United States Mail at Bismarck, North Dakota, **one** envelope with certified postage, return receipt requested, fully prepaid, securely sealed and containing a photocopy of:

- **Amended Findings of Fact, Conclusions of Law and Order**

And Original of:

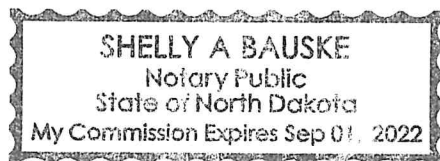
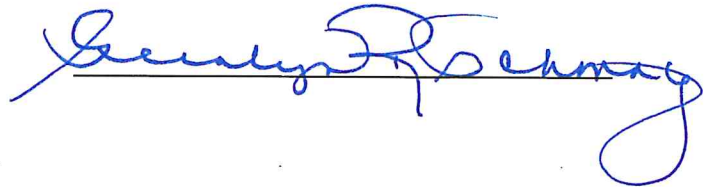
- **First Amended Certificate of Corridor Compatibility Number 215**

The envelope was addressed as follows:

Wade Mann
Crowley Fleck PLLP
PO Box 2798
Bismarck, ND 58502-2798
Cert. No. 7020 1290 0000 1334 3898

Each address shown is the respective addressee's last reasonably ascertainable post office mail address.

Subscribed and sworn to before me
this **19th day of November 2021**.



SEAL


Notary Public

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

**Denbury Green Pipeline – North Dakota, LLC
12-inch Cedar Hills Pipeline Pjct - Slope & Bowman
Siting Application**

Case No. PU-19-294

AMENDED FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

November 17, 2021

Appearances

Commissioners Julie Fedorchak, Randy Christmann and Brian Kroshus

Wade Mann, Attorney at Law, Crowley Fleck PLLP, 100 West Broadway, Suite 250, Bismarck, North Dakota 58501, on behalf of Denbury Green Pipeline – North Dakota, LLC and Denbury Green Pipeline – Montana, LLC.

Mitchell D. Armstrong, Special Assistant Attorney General, 122 East Broadway Avenue, Bismarck, ND 58502, as Counsel for the North Dakota Public Service Commission.

Timothy Dawson, Office of Administrative Hearings, 2911 North 14th Street, Suite 303, Bismarck, North Dakota 58503, as Procedural Hearing Officer.

Preliminary Statement

On August 8, 2019, Denbury Green Pipeline – Montana LLC, filed with the North Dakota Public Service Commission (Commission), a consolidated application for a certificate of corridor compatibility and a route permit concerning a 12-inch carbon dioxide (CO₂) transmission pipeline, and associated facilities in Slope and Bowman Counties, North Dakota (Project).

On August 15, 2019, the Commission provided notification of the application to the townships with retained zoning authority, cities, and counties in which any part of the proposed pipeline corridor would be located.

On August 19, 2019, Denbury Green Pipeline – Montana, LLC and Denbury Green Pipeline – North Dakota, LLC (Denbury), filed an Amendment and Joinder of Denbury

Green Pipeline – North Dakota, LLC in application for a certificate of corridor compatibility and a route permit.

On November 15, 2019, and December 3, 2019, Denbury filed information supplementing its consolidated application.

On December 18, 2019, the Commission deemed Denbury's consolidated application (Application) complete and issued a Notice of Filing and Public Hearing (Notice) scheduling a hearing for February 6, 2020, at 10:00 a.m. central time at Bowman Lodge & Convention Center, 207 West Highway 12, Bowman, North Dakota 58623. The Notice identified the following issues:

1. Will construction, operation, and maintenance of the facility at the proposed location produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota?
2. Is the proposed facility compatible with the environmental preservation and the efficient use of resources?
3. Will construction, operation, and maintenance of the facility at the proposed location minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

On February 6, 2020, the hearing was held as scheduled. Hearing Exhibits 1 through 6 were admitted at the hearing.

On March 10, 2020, Denbury filed Late-filed Exhibits 7 and 8, and on March 11, 2020, Denbury filed a Supplement to Late-filed Exhibit 8.

On April 1, 2020, the Commission adopted its Findings of Fact, Conclusions of Law and Order, and issued Certificate of Corridor Compatibility Number 215 and Route Permit Number 225 to Denbury for the Project.

On October 8, 2021, Denbury filed an Application for Amendment of Certificate of Corridor Compatibility, notifying the Commission of its proposal to add five additional workspaces outside the designated corridor (expanded corridor).

Having allowed all interested persons an opportunity to be heard and having heard, reviewed, and considered all testimony and evidence presented, the Commission makes its:

Findings of Fact

1. Denbury Green Pipeline – North Dakota, LLC and Denbury Green Pipeline – Montana, LLC are both Delaware limited liability companies. Both Denbury entities have been authorized to do business in the State of North Dakota, as evidenced by the Certificate of Authority for each entity filed with the Commission on September 5, 2019.

Size, Type, and Preferred Location of Facility

2. The Project consists of approximately 17.77 miles of 12-inch inside diameter (12.75-inch outside diameter) welded steel pipeline with 9.23 miles located in North Dakota. The Project will originate with a connection point to Denbury's Cedar Creek Anticline CO₂ pipeline in Fallon County, Montana, and terminate at Denbury's Miller Production Tank Battery Enhanced Oil Recovery Development Site located in the Northeast 1/4, Southwest 1/4 of Section 33, Township 132 North, Range 106 West in Bowman County, North Dakota. The Project includes metering stations, block valves, PIG launchers/receivers, and associated equipment at the receiving facility.

3. The Project utilizes 12-inch diameter steel pipe with a 0.469-inch to 0.562-inch wall thickness. The pipeline has a maximum operating pressure of 3,702 pounds per square inch gauge and a maximum operating temperature of 100 degrees Fahrenheit. The Project is capable of transporting up to 180 million standard cubic feet per day of CO₂.

4. The proposed facility corridor and pipeline route is identified in the Survey Corridor map set in Appendix A of Hearing Exhibit 1. The proposed expanded corridor locations are depicted on the Proposed Corridor Addition Location Maps contained in Exhibit A to the October 8, 2021 application.

5. The proposed expanded corridor locations total approximately 0.9 acres outside the originally designated corridor and were expanded to accommodate areas for additional construction workspace.

6. The estimated cost of the Project is \$9.2 million dollars.

7. The estimated in-service date was originally November 2020. Project construction was completed in October 2021.

Study of Preferred Location

8. Denbury conducted a Class I cultural resource literature review, and a desktop analysis for wetlands, waterbodies, woodlands, and other sensitive environmental resources, across a one-mile wide area centered on the pipeline route (Study Area). The five expanded corridor areas were within the Study Area.

9. Denbury conducted a habitat assessment across a 200-foot-wide area centered on the pipeline route (Survey Area). Denbury conducted a natural resources survey across the Survey Area, which included wetland and waterbody surveys, a noxious weed survey, a wildlife survey, a general habitat assessment for state- and federally-listed species, a tree/sapling/shrub survey, and a vegetative survey. Denbury also conducted a 0.5-mile line-of-sight binocular survey centered on the pipeline route for raptor nests.

10. Denbury conducted a Class III cultural resource inventory across the Survey Area. The Class III report was submitted to the North Dakota State Historic Preservation Office (NDSHPO). NDSHPO concurred with a “No Significant Sites Affected” determination provided the Project takes place in the location and in the manner described in the documentation.

11. Denbury also conducted a Class III cultural resource inventory across the expanded corridor locations, and the NDSHPO concurred with a “no significant sites affected” determination in its August 16, 2021 letter.

12. Section 49-22.1-13(4) of the North Dakota Century Code provides that a site shall not be designated that violates the rules of any state agency, and that compliance with an agency’s rules shall be presumed if the agency fails to present its position with respect to the proposed facility at the public hearing.

13. Denbury initiated correspondence with federal, state and local departments, agencies and entities as follows:

- a. Federal: (1) U.S. Fish and Wildlife Service; (2) U.S. Army Corps of Engineers; (3) U.S. Department of Defense (Minot Air Force Base); (4) U.S. Federal Aviation Administration; (5) U.S. National Park Service; and (6) U.S. Bureau of Reclamation;
- b. State: (1) North Dakota State Historic Preservation; (2) North Dakota Parks and Recreation Department; (3) North Dakota Department of Trust Lands; (4) North Dakota Department of Health; (5) North Dakota Geological Survey; (6) North Dakota State Water Commission; (7) North Dakota Game and Fish Department; (8) North Dakota Aeronautics Commission; (9) North Dakota Attorney General; (10) North Dakota Department of Agriculture; (11) North Dakota Department of Human Services; (12) North Dakota Department of Labor; (13) North Dakota Department of Career and Technical Education; (14) North Dakota Department of Commerce; (15) North Dakota Energy Infrastructure and Impact Office; (16) North Dakota Industrial Commission; (17) North Dakota Governor’s Office; (18) North Dakota Department of Transportation; (19) North Dakota Indian Affairs Commission; (20) Job Service of North Dakota; (21) North Dakota State Soil Conservation Committee; (22) North Dakota Transmission Authority; (23)

North Dakota Pipeline Authority; and (24) North Dakota Department of Environmental Quality;

- c. Local: (1) Slope County Board of County Commissioners; and (2) Bowman County Board of County Commissioners

Siting Criteria

14. The Commission has developed criteria pursuant to North Dakota Century Code section 49-22.1-03 to guide the site, corridor, and route suitability evaluation and designation process. The criteria as set forth in North Dakota Administrative Code 69-06-08-02 are classified as Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria.

15. Denbury evaluated the Survey Area and route regarding the Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria.

16. An Exclusion Area is a geographic area that must be excluded in the consideration of a route for a transmission facility. An Exclusion Area may be located within a corridor, but at no given point may such an area or areas encompass more than fifty percent of the corridor unless there is no reasonable alternative. A transmission facility route must not be sited within an Exclusion Area.

17. Denbury's studies and surveys did not record any Exclusion Areas within the Survey Area.

18. An Avoidance Area is a geographical area that may not be considered in the routing of a transmission facility unless the applicant demonstrates that under the circumstances, there is no reasonable alternative. In determining whether an Avoidance Area should be designated for a facility, the Commission may consider, among other things, the proposed management of adverse impacts, the orderly siting of facilities, system reliability and integrity, the efficient use of resources, and alternative routes. Economic considerations alone will not justify approval of these areas.

19. Denbury's studies and surveys did not record any Avoidance Areas within the Survey Area. The Commission's Selection Criteria is set forth in North Dakota Administrative Code section 69-06-08-02(3). A corridor or route shall be approved only if it is determined that any significant adverse effects that will result from the location, construction and operation of the facility as they relate to the selection criteria will be at an acceptable minimum, or will be managed and maintained at an acceptable minimum. Denbury analyzed the effects that may result from the location, construction, and operation of the Project. No significant adverse impacts will result from the location, construction and operation of the Project.

20. Wetlands are a Selection Criteria. Five palustrine emergent wetlands totaling approximately 0.42 acres are located in the Project corridor. Temporary workspaces will be located within the Project right-of-way at upland areas a minimum of 50 feet from the edge of a wetland. Sediment barriers, such as a silt fence, will be installed to prevent spoil and sediment-laden water from entering the wetland. Once construction is complete, wetland edges will be stabilized, and permanent erosion-control measures will be installed as directed by Denbury's environmental inspector. No permanent impacts to any wetlands are anticipated.

21. Agricultural production, family farms, and ranches are Selection Criteria. The proposed Project will affect 168.2 acres of land in North Dakota, of which approximately 10.3 acres consist of farmland of statewide importance. Once construction is complete, Denbury will restore the right-of-way to pre-construction contours, and the restoration will allow farming and ranching operations to continue over the operational right-of-way.

Additional Measures to Minimize Impact

22. Denbury has agreed to a number of measures to mitigate potential Project impacts, as indicated by the attached Certification Relating to Order Provisions – Transmission Facility Siting along with the attached Tree and Shrub Mitigation Specifications.

23. The Tree and Shrub Mitigation Specifications require that the maximum width of tree and shrub removal is no more than 50 feet, unless approved by the Commission. Denbury requests the Commission approve clearing shrubs to 75 feet in the areas identified on the map set in Late-Filed Exhibit 8. Denbury states that additional clearance of shrubs in these areas of rough terrain will facilitate safe construction and travel operations.

24. NDSHPO reviewed Denbury's Unanticipated Discovery Plan, which provides response measures to be followed in the event of a discovery of cultural resources or human remains and found the Plan acceptable.

25. Little Beaver Creek will be crossed using the horizontal directional drilling construction method.

26. Construction and operation of the pipeline will be guided by the following plans: Emergency Response Plan, Integrity Management Plan, Environmental Mitigation Plan, Ecozone Reclamation Plan, Noxious Weed Management Plan, and Stormwater Pollution Prevention Plan.

27. Denbury will participate in the North Dakota One-Call Excavation Notice System.

28. The Project will be designed, constructed, maintained, inspected and operated to meet or exceed the U.S. Department of Transportation, Pipeline Hazardous Materials

Safety Administration regulations, which include regular pipeline monitoring and periodic pipeline inspections.

29. A Supervisory Control and Data Acquisition (SCADA) system will allow Denbury to monitor the pipeline 24 hours a day, 7 days a week, and 365 days a year by trained controls personnel. The system will monitor the flow and pressure of the system, and the system will allow Denbury to identify and respond to situations outside normal operating conditions.

30. Denbury will coordinate with local authorities and emergency managers regarding emergency response measures.

31. Denbury will follow the recommendations in the January 10, 2019 letter from the North Dakota Game and Fish Department.

32. Denbury will inspect and clean equipment upon entry and exit from the job site to limit the spread of noxious weeds.

From the foregoing Findings of Fact, the Commission now makes its:

Conclusions of Law

1. The Commission has jurisdiction over Denbury and over the subject matter of the Application under North Dakota Century Code chapter 49-22.1.

2. Denbury is a utility as defined in North Dakota Century Code section 49-22.1-01(12).

3. The Project is a transmission facility as defined in North Dakota Century Code section 49-22.1-01(7).

4. The construction, operation, and maintenance of the Project will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.

5. The Project is compatible with the environmental preservation and the efficient use of resources.

6. The construction, operation, and maintenance of the Project minimizes adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.

From the foregoing Findings of Fact and Conclusions of Law, the Commission makes the following order:

Order

The Commission orders:

1. Denbury shall construct, operate, and maintain the Project in accordance with the Commission's Findings of Fact.
2. First Amended Certificate of Corridor Compatibility No. 215 is issued to Denbury Green Pipeline – North Dakota, LLC and Denbury Green Pipeline – Montana, LLC, designating a corridor for the construction, operation, and maintenance of approximately 9.23 miles of 12-inch diameter CO2 pipeline and associated facilities in Slope and Bowman Counties, North Dakota. For purposes of this Amended Certificate, the designated corridor consists of a 200-foot wide area centered on the designated route and the five expanded corridor locations. The expanded corridor locations are depicted on the Proposed Corridor Addition Location Maps contained in Exhibit A to the October 8, 2021 application.
3. Route Permit No. 225 is issued to Denbury Green Pipeline – North Dakota, LLC and Denbury Green Pipeline – Montana, LLC, designating a route for the construction, operation, and maintenance of approximately 9.23 miles of 12-inch diameter CO2 pipeline and associated facilities in Slope and Bowman Counties, North Dakota. For purposes of this Permit, the designated route is the route of the Project as depicted on the Survey Corridor map set in Appendix A of Hearing Exhibit 1.
4. The Certification Relating to Order Provisions – Transmission Facility Siting with accompanying Tree and Shrub Mitigation Specifications executed February 3, 2020 is incorporated by reference and attached to this Order. The Tree and Shrub Mitigation Specifications are modified to allow shrubs to be cleared up to a width of 75 feet in the areas identified on the map set in Late-Filed Hearing Exhibit 8.
5. To the extent there are any conflicts or inconsistencies between Denbury's Application and the Certification, the Certification provisions control.
6. Denbury shall file with the Commission its Noxious Weed Management Plan developed to reflect the conditions in Slope and Bowman Counties prior to construction.
7. Denbury shall obtain all other necessary licenses and permits prior to commencing construction on such portion of the Project for which the license and/or permit is required, and shall provide copies to the Commission prior to construction.
8. Denbury is required to comply with all applicable laws, rules, and regulations in the

event it desires to construct another or a different transmission pipeline facility than was specified in the Application within the corridor designated in this proceeding.

PUBLIC SERVICE COMMISSION



Randy Christmann
Commissioner



Julie Fedorchak
Chair



Brian Kroshus
Commissioner

**PUBLIC SERVICE COMMISSION
STATE OF NORTH DAKOTA**

**First Amended
Certificate of Corridor Compatibility Number 215**

This is to certify that the Commission has designated a transmission facility corridor for Denbury Green Pipeline - North Dakota, LLC and Denbury Green Pipeline – Montana, LLC for the construction, operation, and maintenance of approximately 9.23 miles of 12-inch diameter carbon dioxide pipeline and associated facilities in Slope and Bowman Counties, North Dakota.

This certificate is issued in accordance with the Commission's April 1, 2020 Findings of Fact, Conclusions of Law and Order, and the Commission's November 17, 2021 Amended Findings of Fact, Conclusions of Law and Order, in Case No. PU-19-294 and is subject to the conditions and limitations noted in the Orders.


Bismarck, North Dakota, November 17, 2021.

ATTEST:

PUBLIC SERVICE COMMISSION



Executive Director



Commissioner