

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

**IN THE MATTER OF THE APPLICATION BY SCS CARBON TRANSPORT LLC FOR
A PERMIT TO CONSTRUCT A CARBON DIOXIDE TRANSMISSION PIPELINE**

DOCKET NO. HP22-001

**Direct Testimony of Alissa Ingham
On Behalf of the Staff of the South Dakota Public Utilities Commission
June 23, 2023**

1 **Q: Please state your name and business address.**
2
3 A: Alissa N. Ingham; 1180 Eugenia Place, Suite 204, Carpinteria, California 93013.
4
5 **Q: Describe your educational background.**
6
7 A: I received a Bachelor of Science degree in 2012 from California Polytechnic State
8 University, San Luis Obispo with a major in Environmental Management and
9 Protection (concentration in Environmental Policy and Management).
10
11 **Q: By whom are you now employed?**
12
13 A: I have been employed by Environmental Resources Management, Inc. since 2012.
14 I currently hold the title of Partner, Scientist, and serve in an advisory and technical
15 oversight role.
16
17 **Q: What work experience have you had that is relevant to your involvement on
18 this project?**
19
20 A: I have over a decade of experience providing clients in the pipeline and
21 transmission line industries with environmental review services. My career
22 experience also includes obtaining necessary authorizations and securing
23 regulatory approvals from Federal, State, and Local-level authorities for
24 construction and operation of linear projects within the United States. In my current
25 role I lead the preparation of impact assessments for projects undergoing review
26 under National Environmental Policy Act or applicable state programs. In my
27 experience leading the preparation of land use impact assessments I have worked
28 on projects across the United States including two natural gas gathering systems
29 and a natural gas transmission line project in the Dakotas.
30
31 **Q: What is the purpose of your testimony?**
32
33 A: I reviewed the permit Application for the Midwest Carbon Express Project dated
34 February 7, 2022 and supplemental information dated October 13, 2022
35 (Application) Submitted Under SDCL Chapter 49-41B for completeness and
36 adequacy against requirements set out in South Dakota Administrative Rule
37 20:10:22:18 to determine whether a sufficient level of detail was provided to
38 characterize land use and routing associated with the Summit Carbon Solutions
39 Pipeline.
40
41 **Q: Please summarize what you reviewed?**
42
43 A: I assessed the information provided in Section 5.5 (Land Use and Local Land
44 Controls) of the Midwest Carbon Express Project, as well as Appendix 6C (Land
45 Use Map Book), comparing it to the requirements set forth in South Dakota
46 Administrative Rule 20:10:22:18. I also assessed the information provided in

47 Section 4.0 (Proposed Route and Alternative Routes) of the Midwest Carbon
48 Express Project, as well as Appendix 4 (Route Alternatives) and Appendix 5
49 (Alternative Avoidance Analysis Table), comparing to the requirements set forth in
50 South Dakota Administrative Rule 20:10:22:12. I also assessed the information
51 provided by comparing it to information typically provided in comparable industry-
52 standard applications for projects undergoing state and federal review.
53 Additionally, I reviewed SCS Carbon Transport LLC's (the Applicant) responses to
54 South Dakota Public Utilities Commission (SDPUC) staff's data requests where
55 the Applicant provided additional information on certain land-use and routing
56 related topics.

57

58 **Q: Did you review section 4.0 of the Applicant's Application?**

59

60 A: Yes. I reviewed Section 4.0 – Project Route and Alternative Routes of the Midwest
61 Carbon Express Project's application.

62

63 **Q: Please summarize what information was included in that section.**

64

65 A: Section 4.0 discusses the siting of the Midwest Carbon Express Project,
66 development of the preliminary route, route analysis, route variations, and
67 proposed route selection how the proposed route was chosen, alternatives
68 considered, and a description of how the proposed route minimizes the length of
69 the CO2 pipeline and impacts on the natural and built environment.

70

71 **Q: In your experience, what types of information and analysis goes into
72 determining a route for a linear facility? Please explain.**

73

74 A: In my experience, digital tools and information have been used to allow routing for
75 linear facilities to occur such that it allows for a high quality, environmentally
76 conscious, and constructable route to be selected often before field work or
77 landowner negotiations have begun. It minimizes risks and maximizes efficiency
78 by selecting a route that is the shortest distance between the beginning and end
79 point while also considering digitally available information (e.g., existing
80 infrastructure, floodplains, or recreational areas). Once a general route is selected,
81 it is optimized through consideration of various environmental factors (e.g.,
82 hydrology, listed species, community impact), constructability, availability of
83 property and landowner considerations, and safety. Through processes such as
84 negotiations with landowners, public meetings, consultations with federal, state,
85 and local agencies, routes are often adjusted to shorten the permitting and
86 environmental review process and landowner negotiations by minimizing impacts
87 as much as possible.

88

89 **Q: In your opinion, do you find that the Applicant conducted a robust route
90 analysis and optimization? Please explain.**

91

92 A: Based on a review of the application and responses to the SDPUC's Data
93 Requests, the Applicant appears to have conducted a route analysis and
94 optimization in line with industry standards and South Dakota Administrative Rule.
95

96 **Q: Is there any information missing from the route analysis completed by the**
97 **Applicant?**
98

99 A: No, route analysis conducted by the Midwest Carbon Express Project appears to
100 be complete.
101

102 **Q: Did you review Section 5.5 of the Application on Land Use and Local Land**
103 **Controls?**
104

105 A: Yes. I reviewed Section 5.5 – Land Use and Local Land Controls of the Midwest
106 Carbon Express Project's application.
107

108 **Q: In your opinion, did the Applicant properly identify the land use types to be**
109 **crossed by the pipeline?**
110

111 A: South Dakota Administrative Rule 20:10:22:18 requires applicants to provide an
112 analysis of the compatibility of the proposed facility with present land use of the
113 surrounding area, a general analysis of the effects of the proposed facility with
114 present land use of the surrounding area, as well as a map set identifying existing
115 land use according to a classification system provided in South Dakota
116 Administrative Rule 20:10:22:18(1). The Applicant identified land use types using
117 land use cover classifications from the National Land Cover Dataset (NLCD)
118 supplemented with desktop and field survey of wetlands and waterbodies. It is my
119 opinion that using the NLCD land use cover classifications as a basis for a
120 discussion on compatibility with present land uses and a general analysis of the
121 effects of the proposed facility with present land use of the surrounding area is
122 appropriate if supplemented with those categories in the SD Land Use
123 Classifications not included in the NLCD categories, such as noise sensitive land
124 uses. The Applicant provides an appropriate discussion on compatibility of the
125 proposed facility with present land use in Section 5.5.3 (Compatibility with Existing
126 Land Use), and in Section 6.5.3 (Noise Impacts) of the application. The Applicant
127 provided a map set identifying existing land uses, but not using the classification
128 system required by South Dakota Administrative Rule 20:10:22:18(1). In a written
129 response to SDPUC's third data request, the applicant provided a translation key
130 between NLCD land cover classifications and the land use classification system
131 required by South Dakota Administrative Rule 20:10:22:18(1) but did not identify
132 all land use types required by that rule (for example, noise sensitive land uses are
133 discussed in the application but not on the mapset or in the supplemental
134 translation key provided). To properly identify the land use types to be crossed by
135 the CO2 pipeline, the Applicant should update the maps in Appendix 6C to show
136 the land use types listed in South Dakota Administrative Rule 20:10:22:18(1) or
137 supplement the translation key to identify all land use types required by that rule.

138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183

Q: Are there any noise sensitive land uses crossed by the project?

A: The Application does not identify any noise sensitive land uses in the land use section (Section 5.5) and defines noise sensitive lands as being rural residences and farmsteads, and other occupied buildings. Instead, the Application only references impacts from noise in Section 6.5.3, which indicates that there will be short-term impacts related to noise during construction and operation of the Project. However, noise sensitive areas are not shown on the maps included as Appendix 6C. The Applicant should identify all noise sensitive areas as defined in Section 5.5.1 (Existing Land Use) as being rural residences and farmsteads, and other occupied buildings on the maps included as Appendix 6C.

Q: Are sound levels from project construction or operation a concern to those noise sensitive land uses?

A: In the Applicant's Responses to the SDPUC's Third Data Request (3-31 and 3-32), sound levels associated with construction and operation are provided. In the Applicant's Responses to the SDPUC's Fourth Data Request (4-17), the total number of residences within one mile of a horizontal directional drill site are provided. The noise levels provided in these data requests responses are not of concern; however, it is unclear through a review of the currently provided information if sound levels from construction is of concern as not all noise sensitive areas are identified.

Q: Did the Applicant properly quantify the potential impacts on noise sensitive land uses?

A: The Applicant properly quantifies impacts on residences within one mile of horizontal directional drill activities (Applicant's Responses to Staff's Fourth Data Request 4-17) and noise within 50 feet of typical construction equipment and construction activities (Applicant's Responses to Staff's Third Data Request 3-32). However, since the Application defines noise sensitive lands as being rural residences and farmsteads, and other occupied buildings, the Applicant should identify the locations of and quantify impacts on all noise sensitive land uses as needed.

Q: Did the Applicant identify any mitigation measures for noise sensitive land uses? If yes, please summarize what mitigation measures will be implemented.

A: The Applicant's Environmental Construction Plan (Appendix 3) includes mitigation measures for construction equipment near noise sensitive areas and commits to minimizing noise in the immediate vicinity of herds of livestock or poultry operations. In the Applicant's Responses to Staff's Third Data Request (3-32), the Applicant indicates that if construction activity extends into nighttime hours (10 PM

184 to 7 AM), construction equipment will be properly muffled and maintained,
185 temporary sound barriers may be erected, and landowners will be notified and
186 consulted with to determine other measures that would mitigate impacts for that
187 landowner. The Applicant also commits to installing shelters for equipment at pump
188 stations to minimize noise generated at pump stations during operations. The
189 mitigation measures outlined in this response are reasonable mitigation measure
190 in line with industry standards.

191

192 **Q: Do you have any recommendations for further mitigation measures to**
193 **protect noise sensitive land uses?**

194

195 A: The noise mitigation measures outlined in the Application are reasonable and in
196 line with industry standards. Noise levels associated with pump station operation
197 should be minimized such that noise levels do not exceed a day-night average
198 (Ldn) sound level of 55 dbA, with a nighttime penalty of 10 decibels at the nearest
199 noise sensitive land use to the pump station on the date the permit is issued.

200

201 **Q: Does this conclude your testimony?**

202

203 A: Yes.