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 Trish Kindt On Behalf of the Staff of the South Dakota Public Utilities Commission June 23, 2023

- 1 Q. State your full name.
- 2 A. Trish Kindt
- 3 Q. State your employer.
- 4 A. South Dakota Department of Agriculture and Natural Resources (DANR)
- 5 Q. Explain the specific program for which you work.
- 6 A. I work in the Inspection, Compliance, and Remediation Program.
- 7 Q. State what you do for this program.

8 I am a Scientist Manager I and team leader for the Spills Cleanup section in the Α. 9 Inspection, Compliance, and Remediation Program. I oversee the enforcement of 10 South Dakota's laws and rules related to spill and release reporting, assessment, and 11 cleanup of regulated substance releases. I am the state designated alternate to the 12 Region VIII Regional Response Team with responsibilities to coordinate with Federal 13 agencies in the event of a hazardous material incident or disaster that threatens human health or the environment. Finally, I also coordinate with the Office of 14 15 Emergency Management and other state agencies in the event of a disaster. A copy 16 of my CV is attached as 'Exhibit TK-1'.

17 Q. Explain the range of activities and duties your program covers and what you
 18 specifically do for the program.

A. The Inspection, Compliance, and Remediation Program covers a wide range of
 activities including the regulation of underground and aboveground storage tanks; the
 regulation of industrial hemp; the regulation of pesticides, animal feed and remedy;
 fertilizer labeling, storage, and use; the state's Emergency Planning and Community
 Right to Know Act (EPCRA) program; the State's Brownfields program and the
 state's spill cleanup program. I work in the Spills Cleanup Team. When a release

occurs, I evaluate information about the release to identify and name a responsible
 person. I direct environmental contractors and the responsible person to perform
 emergency response activities, assessment, and cleanup activities associated with
 spills, releases, and un-permitted discharges. I am responsible for the evaluation of
 information and data on spills and releases to ensure that the cleanup meets state
 requirements.

31 Q. On whose behalf was this testimony prepared?

A. This testimony was prepared on behalf of the Staff of the South Dakota PublicUtilities Commission (Staff).

Q. Are there any state environmental laws and rules that would apply to a release from a carbon dioxide pipeline?

- A. Yes, SDCL ch. 34A-12, Regulated Substance Discharges, and ARSD art. 74:34,
- 37 Regulated Substance Discharges, would apply. Depending on the location of the
- 38 release, SDCL ch. 34A-2 Water Pollution Control, ARSD art. 74:51 Surface Water
- 39 Quality, ARSD art. 74:52 Surface Water Discharge Permits, and/or ARSD art. 74:54
- 40 Groundwater Quality may also apply.

41 Q. Which of those laws or rules do you personally work with?

42 A. All of the above. In the event of water pollution, I also work with staff in the43 department's Water Quality Program.

44 Q. Would DANR be involved in the event of a release from the carbon dioxide

- 45 pipeline? Please explain.
- 46 A. Yes, carbon dioxide is considered a regulated substance under SDCL 34A-12-1(8),
- 47 constituting as a solid waste as defined by SDCL 34A-6-1.3(17). Any release of a
- 48 regulated substance falls under the authority of DANR.

49 Q. Are there any thresholds for remediation of carbon dioxide from soil,

50 groundwater, or water? Please explain.

A. DANR does not have specific thresholds for carbon dioxide. The State does have
standards for other parameters in groundwater such as pH, heavy metals, total
dissolved solids, dissolved oxygen, and more. These parameters are detailed in the
State's groundwater quality standards. See ARSD art. 74:54, Groundwater Quality.
DANR also has drinking water standards and surface water quality standards that
must be met. See ARSD ch. 74:04:12 and ARSD art. 74:51, respectively. In addition

57 to those standards, typically cleanup is conducted to meet federal guidance.

Q. What kind of remediation activities are conducted in response to a carbon dioxide release into soil?

60 A. The remediation activities depend on the soil type, previous conditions of the soil,

61 and the amount of carbon dioxide released. Remediation activities could include

- 62 tilling the soil to release trapped carbon dioxide or applying a lime additive or sodium
- 63 bicarbonate to increase the pH in the soil. Remediation is also risk-based and
- 64 dependent on the presence of nearby receptors.

Q. What kind of remediation activities are conducted in response to a carbon
 dioxide release into groundwater?

A. The remediation activities would be risk-based and would depend on the presence of
 nearby receptors. Contaminated groundwater can be treated to adjust the pH or may
 be filtered to remove contaminants.

Q. What kind of remediation activities are conducted in response to a carbon
 dioxide release into surface water?

- A. The remediation activities would depend upon the attainable beneficial uses of the
 water. Contaminated water can be treated to adjust the pH and aerators can be
- 74 installed to increase oxygen inputs into the system.

75 Q. What are the leak size requirements for a reportable spill or release from a
 76 carbon dioxide pipeline?

A. According to SDCL 34A-12-9, any discharge of a regulated substance must be
 reported to DANR immediately, regardless of quantity.

Q. Are there requirements for reporting a suspected discharge from a carbon
 dioxide pipeline?

- A. Yes. Suspected discharges must be reported to DANR within 24 hours after the
 discharge is suspected when certain conditions exist. See ARSD § 74:34:01:05.
- Q. Are you aware of any carbon dioxide releases that cannot be remediated and/or
 had long-term environmental impacts?
- 85 A. No.

86 Q. Who is obligated to remediate a release from a carbon dioxide pipeline?

A. The responsible person for the release is obligated to perform remediation. If the
person responsible for the discharge cannot be determined, the owner of the
property or the operator of the tank at the time of the discharge is designated as the
responsible person under SDCL 34A-12-16. In typical pipeline releases, the owner of
the pipeline is responsible for the remediation of the release. However, if a landowner
causes a release from the pipeline, they could be considered the responsible person
under SDCL 34A-12-1(10).

Q. Is there the potential for carbon dioxide to enter wells? If yes, what types of
 remediation methods would be used to remove carbon dioxide from impacted
 wells?

97 A. Yes. The greater water quality concern following a carbon dioxide release is the
98 possible lowering of the pH of the water and the potential for mobilization of heavy
99 metals or other contaminants already present. Remediation activities may be based
100 instead on treating the pH or removing other contaminants instead of removing
101 carbon dioxide, which is highly soluble in water. Options include treating the

102 groundwater to adjust the pH or filtering the well water to remove contaminants.

103 Q. What if you can't achieve remediation of a well?

A. If remediation is not feasible, the responsible person may be required to supply the
well owner/user with an alternate source of drinking water. The well can be plugged
and a new well can be drilled in a different location, deeper in a different formation.
Or the responsible person can get the well user on a rural or city water supply.

108 Q. What is the extent of landowner involvement in remediation?

109 Α. This depends on the specific situation. Some landowners choose to be involved in 110 the cleanup, but most allow the department to work with the responsible person to 111 get the cleanup work performed to state standards. If requested by the landowner, 112 the department may copy the landowner on all written correspondence with the 113 responsible person. If the landowner wishes to be involved with the cleanup, 114 meetings may be held to address the concerns of landowners or other interested 115 parties. DANR will provide copies of all public documents to the landowner if the 116 landowner wishes to receive them.

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117 Q. Does DANR have the resources to deal with a release from a carbon dioxide 118 pipeline such as the one Navigator proposes?

- 119 A. Yes. DANR has the resources necessary to oversee the assessment and clean up
- 120 for a carbon dioxide release from the Navigator pipeline, should one occur and
- 121 require a cleanup. DANR manages the State's regulated substance response fund
- 122 with sufficient resources to initiate corrective actions if a release occurs and the
- 123 pipeline company is unable or unwilling to perform the required response activities.

124 Q. Does Navigator's proposed carbon dioxide pipeline place any additional

125 burden on your program?

- A. Navigator's proposed carbon dioxide pipeline does not place any additional burden
 on the Inspection, Compliance, and Remediation Program.
- 128 Q. Please explain the State's Regulated Substance Response Fund that may be
- 129 available to help fund a remediation project if the responsible person is unable

130 or unwilling to perform the work.

- A. An explanation of the South Dakota Regulated Response Fund is attached as'Exhibit TK-2'.
- 133 Q. Do you have any other information you believe the Commission and the public
- 134 will find useful?
- 135 A. The Inspection, Compliance, and Remediation Program has extensive staff
- 136 experience overseeing the assessment and remediation of a variety of spill incidents
- in soil, surface water, and groundwater mediums.
- 138 Q. Does this conclude your testimony?
- 139 A. Yes.
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